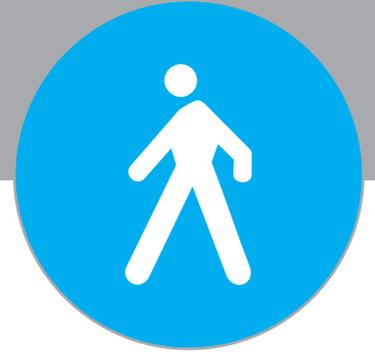


# LANE COUNTY TRANSPORTATION SYSTEM PLAN

SEPTEMBER 2017

*VOLUME 1*



# ACKNOWLEDGMENTS



## **ODOT**

Terry Cole, Region 2 Planning and Policy Unit Manager  
Bill Johnston, AICP, Transportation Planner



## **Lane County**

Lydia McKinney, Land Management Division Manager  
David Reeser, Transportation Planning Manager  
Becky Taylor, Senior Transportation Planner

## **Lane County Board of Commissioners**

Jay Bozievich, District 1: West Lane  
Sid Leiken, District 2: Springfield  
Pete Sorenson, District 3: South Eugene  
Pat Farr, District 4: North Eugene  
Gary Williams, District 5: East Lane

## **Lane County Planning Commissioners**

Randy Hledik, Chair  
Gary Rose, Vice-Chair  
Dwight Coon  
Charlcie Kaylor  
Ryan Sisson  
Jason Thiefeld  
Larry Thorp  
Robert Weeks



## **DKS Associates**

Scott Mansur, PE, PTOE, Project Manager  
Jordin Kelly, EIT, Transportation Engineering Associate  
Kevin Chewuk, PE, Transportation Planning Associate

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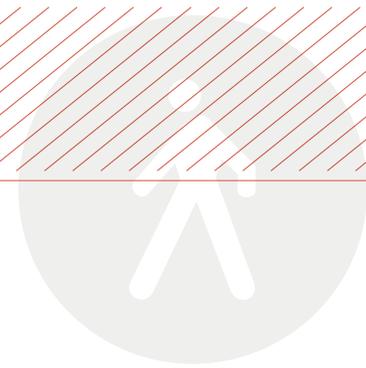
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 WELCOME TO  
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County

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# WELCOME!

This Transportation System Plan updates and replaces the prior TSP adopted in 2004. TSPs are periodically updated, every five to eight years on average, to reflect changes in the assumptions used to forecast the transportation needs over a 20-year period and to comply with new regulations. The TSP is adopted as part of the Lane County Rural Comprehensive Plan and complies with applicable transportation and planning requirements. This TSP update was a major update, spanning several years and involving extensive stakeholder input, to define a shared vision and strategy for investing in Lane County's transportation system over the next 20 years.

As a 20-year policy and investment guide, the TSP addresses major roadways (arterials and collectors, but not local roads). The TSP does not include ongoing operations and maintenance activities, although the Tool Box section highlights several best practices and techniques. There are additional transportation needs outside the scope of the TSP, for example programs like Transportation Options and Safe Routes to Schools. This TSP includes a policy and project for Lane County to develop a Bicycle and Pedestrian Master Plan with a Safe Routes to Schools emphasis to look more closely at needed bicycle and walking connections and networks.

Lane County's transportation system is a significant public asset, providing mobility and accessibility to essential employment, goods, and service to business, residents, and visitors alike. This TSP is multi-modal, addressing the needs of many modes, such as cars, trucks, buses, motorcycles, farm equipment, bicycles, and people walking or using wheelchairs. The County's transportation system is also intended to support rural land uses and resource lands. These multiple functions are intended to be balanced throughout this TSP.

## Lane County TSP Chapters

### 1. Lane County Today

Sets the stage with Lane County's existing context and outlines the transportation system, the County's commitment to safety, and current funding constraints.

### 2. Lane County in 2036

Identifies the importance of a safe, resilient, and sustainable transportation system and outlines the anticipated population and transportation demand growth.

### 3. The TSP Process

Outlines the process used to engage with the public and the project advisory committees in developing the TSP and identifies the goals and guiding principles that drove this process.

### 4. Guiding Framework

Details the goals and policies forming the guiding principle, system design, and implementation frameworks that are the basis of the TSP's project lists.

### 5. The Investments

Provides an understanding of the TSP's approach to meeting transportation needs within the context of existing and anticipated funding gaps. List and maps currently funded, financially constrained, and illustrative projects.

### 6. Standards

Establishes standards to guide the design, operations, and management of the transportation system consistent with the County's overall goals and objectives.

### 7. The Planning Horizon...And Beyond

Discusses the funding, design, and jurisdictional considerations to be taken as the transportation system is improved and the expected outcomes of that improvement.



# 1. LANE COUNTY TODAY

## Diverse Natural Beauty

Lane County, Oregon covers 4,620 square miles of great natural beauty. The County spans from the spectacular Oregon coast to the snow-capped peaks of the Cascade Mountains. Along the county's center axis, the Willamette River, flanked on both sides by towering forests, runs through the Willamette Valley. The bustling Eugene-Springfield metropolitan area—the 3rd largest in the state—provides a thriving urban center for residents and visitors alike. Small towns and rural communities across the county offer home-town charm and amenities away from the city lights.

*Lane County is home to 73 parks, 20 historic covered bridges, world class wineries, the largest region of coastal sand dunes, and the largest sea lion cave in the world.*

## A Growing Region

Lane County faces the challenge of accommodating population and employment growth while maintaining the transportation network. The transportation system must accommodate highway through-traffic, residents' day-to-day travel, and the tourist influx during the summer and over holiday weekends. With limited funding for transportation improvements, as well as built and natural environment challenges, the County must balance their investments to ensure that the transportation system can be developed and maintained to adequately serve everyone who travels in the county.

## Rural & Urban Settings

The County includes many incorporated cities as well as numerous unincorporated rural communities. All of the diversified travel needs of residents throughout the County must be addressed.

### Urban Areas

Areas of concentrated development that have more pedestrian activity and better access to public transportation.

The TSP emphasizes consistency with city transportation plans.

### Rural Communities

Areas of development, typically sprinkled along major roadways and highways, in rural parts of the county.

The TSP emphasizes safe multi-modal transportation options and connections to urban areas.

### Rural Areas

Areas of resource farm and forest land, interspersed with some development.

The TSP emphasizes protecting roads for farm and forest uses.

## Transportation System

Roadway facilities, particularly arterial and collector roads, serve as the backbone of Lane County’s transportation system. While the automobile is the predominant mode of transportation, the road right-of-way must accommodate multiple transportation modes—including trucks, tractors, cars, buses, bicycles, and pedestrians.

### Roadway Facilities

Agencies responsible for roads within Lane County include the Oregon Department of Transportation, Lane County, incorporated cities, the U.S. Forest Service, and the U.S. Bureau of Land Management. Each jurisdiction sets the standards and maintenance policies associated with the transportation facilities within its jurisdiction. Figure 6-1 shows the State Highways (in blue) and County-maintained roads (colored by functional classification). City streets are not included and are not evaluated in the TSP because they are addressed in each city’s own transportation system plan.

ODOT has jurisdiction over most of the major roadways in Lane County—listed below in Table 1-1 along with the corresponding functional classification. While there is no solid rule for determining functional class based on the State classification, the table indicates the general relationship between the County and State classification systems. These highways accommodate freight and other higher-speed, higher-volume travel, and interface with many County-maintained roads. They are used for daily commutes and local trips as well as cross-state movements.

**Table 1-1: State Highway Facilities and Miles in Lane County**

Roadway Facility	State Highway Classification	Functional Classification	Miles
Interstate 5	Interstate	Interstate	35.5
I-105 Eugene-Springfield	Interstate	Interstate	3.5
OR 126 Eugene-Springfield	Statewide, Expressway	Principal Arterial	10
US 101 Oregon Coast Highway	Statewide	Principal Arterial	31
OR 58 Willamette Highway	Statewide	Principal Arterial	62
OR 69 Beltline Highway	Statewide	Principal Arterial	13
OR 126 Florence-Eugene	Statewide	Principal Arterial	53
OR 126 McKenzie Highway	Statewide	Principal Arterial	77
OR 126 Clear Lake-Belknap Springs	Statewide	Principal Arterial	7
OR 99W Pacific Highway West	Statewide, Regional	Principal Arterial, Minor Arterial	22
OR 99E Albany-Junction City	Regional	Minor Arterial	3
McVay Highway	District	Minor Arterial or Major/Minor Collector	2.5
OR 36 Mapleton-Junction City	District	Minor Arterial or Major/Minor Collector	52
OR 99 Goshen-Divide	District	Minor Arterial or Major/Minor Collector	20
Springfield-Creswell Highway	District	Minor Arterial or Major/Minor Collector	10
Springfield Highway	District	Minor Arterial or Major/Minor Collector	1
Territorial Highway	District	Minor Arterial or Major/Minor Collector	40
		<b>Total</b>	<b>442.5</b>

Lane County has jurisdiction over the majority of the other roadways located throughout the unincorporated areas of the County. These roadways provide improved access to cities and communities in Lane County as well as to scenic recreational areas.

There are approximately 1,436 miles of roadway maintained in Lane County’s road system, and new roads are only added after undergoing a formal process of dedication and acceptance by the Board of County Commissioners. The County rarely accepts new roads into the County Road system unless there is a clear public benefit and justification for expenditures on maintenance.

**Table 1-2: Lane County Functional Class and Miles**

Functional Class	Miles
Urban Principal Arterial	7
Urban Minor Arterial	21
Urban Major Collector	26
Urban Minor Collector	15
Urban Local	119
Rural Minor Arterial	17
Rural Major Collector (Federal Aid)	182
Rural Major Collector	148
Rural Minor Collector	363
Rural Local	538
<b>Total</b>	<b>1,436</b>

### **Pedestrian and Bicycle Facilities**

The combination of an extensive rural roadway system and relatively low traffic volumes encourages recreational cycling in Lane County. Lane County’s rural bikeway and pedestrian system includes bike lanes, paved shoulders, and shared roadways. The County has also experienced a growth in both off-street recreational (mountain) and street bicycle activity and interest.

Within Urban Growth Boundaries, sidewalks and bicycle lanes are routinely installed on all new or reconstructed arterial and collector County roads. In these areas, City standards apply to local roads. In the absence of City standards, County standards apply.

### **Transit System (Lane Transit District)**

Lane Transit District (LTD) operates 34 fixed bus routes throughout the Eugene-Springfield Metro Area and provides rural service to and from the Eugene-Springfield area for the communities of McKenzie Bridge, Veneta, Junction City, Coburg, Cottage Grove, and Lowell.

Multiple special transportation services are available for elderly, disabled, and other residents with specialized transportation needs in the more populated areas of Lane County. South Lane Wheels and the Ride-Source Call Center coordinate all human services transportation within the county. Special transportation services include:

- » RideSource: curb-to-curb transit service for eligible riders traveling within Eugene-Springfield and the River Road area.
- » South Lane Wheels: a private non-profit organization providing dial-a-ride service and a fixed route service to residents of Cottage Grove, Creswell, and nearby rural communities and transporting the elderly and people with disabilities to and from medical appointments in Eugene-Springfield.
- » Diamond Express: weekday commuter inter-city bus service between Oakridge and Eugene.
- » Rhody Express: a local fixed route bus service operated by River Cities Taxi that serves Florence.
- » Friends of Florence Van: operated by volunteers to transport cancer patients between Florence and the Eugene Cancer Center.

## Safety

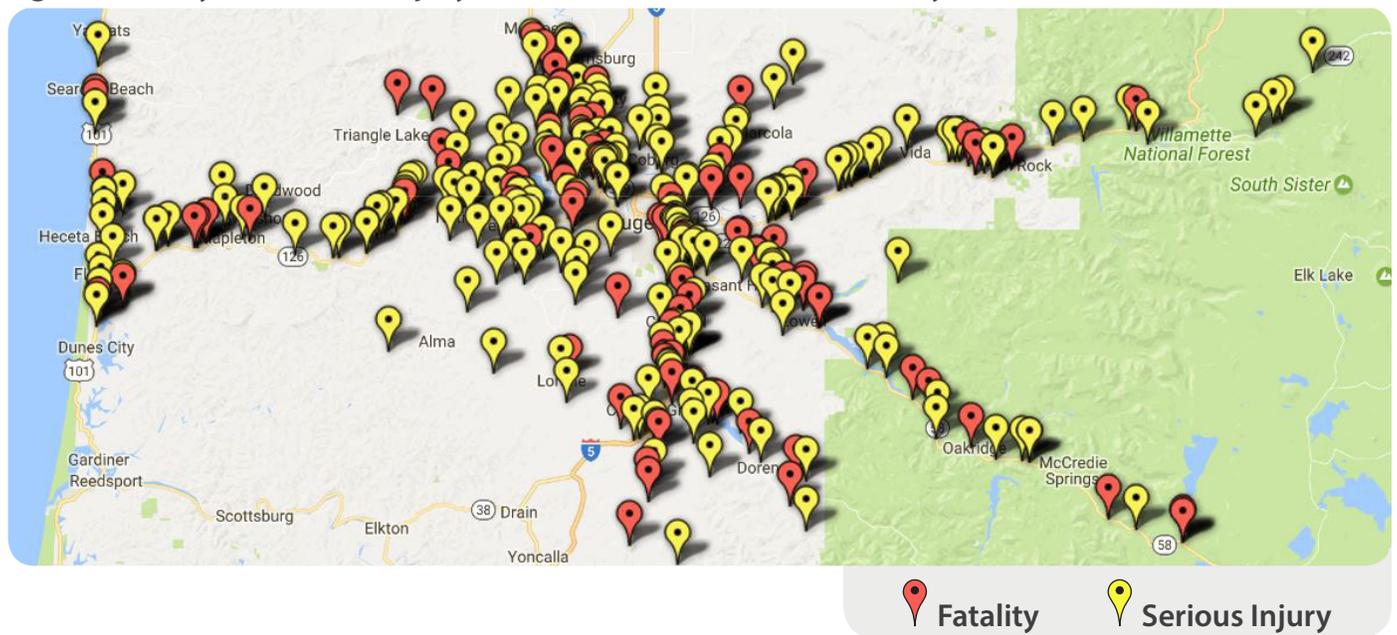
Lane County is committed to improving transportation safety and has joined the National Strategy on Highway Safety, Toward Zero Deaths, to develop a safety culture in which society sees someone being unsafe as unacceptable. In 2017, Lane County adopted its first-ever Transportation Safety Action Plan (TSAP), which complements the TSP with crash data specific to fatal and severe-injury collisions and recommended countermeasures to address systemic issues with engineering, education, and enforcement.

As the transportation policy document for Lane County, this TSP establishes safety policies (beginning on page 10) that support the TSAP and Towards Zero Deaths. At the time of the TSP update, the available crash data included in the safety analysis was between 2008 and 2012.

Safety was a key component of the TSP roadway health assessment and resulted in safety scores based on a comparison of historical crash rates to state averages for similar facilities. Roadway segments and intersections with higher-than-average critical crash rates were then evaluated for safety improvement needs, which informed the development of the TSP project list. The TSP project list recommends engineering treatments to improve safety, particularly at locations with documented concerns.

The ultimate goal of both the TSP and the TSAP is to reduce the number of fatality and serious injury collisions throughout Lane County.

**Fig 1-1. Fatality and Serious Injury Collision Locations in Lane County (2008-2012)**



## Funding Constraints

Lane County currently faces a significant funding challenge, affecting the ability to construct needed transportation improvements and to maintain the existing transportation system. Since the County lost federal funding from Secure Rural Schools (SRS) and Timber Receipts, the Oregon Highway Fund has become the County's main revenue source and is expected to account for around two-thirds of yearly operating revenue. To compensate for lower revenues, the County Capital Improvement Program (CIP) has aggressively scaled back capital construction projects to predominantly maintenance projects, with a modest reservation of funds dedicated for safety improvements. However, with the recent passage of HB2017, Lane County has been able to add some dollars back into the CIP for capital projects.

Additional transportation funding sources will necessitate public support. This Transportation System Plan plays a pivotal role in building public support by defining the transportation improvements and funding needed to improve safety and system operations. This TSP also positions the County to successfully compete for additional state and federal transportation funds and grants. The assumed funding sources for the "Financially Constrained" projects (those that have a reasonable chance of being built within the next 20 years) are predominantly state and federal sources in which the County must apply in a competitive process. As such, there is uncertainty about future funding. The project needs greatly outweigh the available or known funding sources today. To capture the needs in the event of funding changes in the future, the investment plan also includes an "Illustrative List" which contains the projects for which there is currently no known funding source within the next 20 years.

For more information on funding and the investment plan, refer to Chapter 5.





Photo Credit: Eugene, Cascades & Coast



## 2. LANE COUNTY IN 2036

### A Resilient Transportation System

A resilient transportation system accommodates variable and unexpected conditions without catastrophic failure. Since the future is unpredictable, it is necessary to plan for a wide range of possible conditions, including conditions that may be unlikely but which could result in significant impact. Of particular concern is the anticipated Cascadia Subduction Zone Earthquake. While the timing cannot be forecasted precisely, great subduction zone earthquakes are inevitable.

Planning for the ability of residents to move away from adverse conditions or towards areas of greater need, is an important strategy for increasing resilience. Having alternate transportation routes increases the likelihood of maintaining system connectivity following disruptive events. A properly designated and connected transportation system is an important part of Lane County's overall resilience.

Lane County has an Emergency Management Plan that addresses a wide range of risks, including natural disasters such as earthquakes, flooding, landslides, and tsunamis. In coordination with the Oregon Department of Transportation (ODOT), Lane County reviewed the state's lifeline routes to identify alternate routes on Lane County roads where there were either fewer seismically vulnerable bridges or lower rehabilitation/replacement costs. Included in this TSP is a map of existing and proposed emergency routes, with more details described in Chapter 7.

### A Safe and Sustainable Transportation System

Lane County is committed to reducing severe-injury and fatal collisions, working towards zero deaths as a goal for the future. By 2036, implementation of the 2017 TSAP should be complete. Providing access to safe, affordable, accessible and sustainable transportation for all – particularly vulnerable users, such as children, the elderly, and disabled – improves the overall safety, quality, and sustainability of the system.

This TSP recommends a Bike and Pedestrian Plan to be developed within the 20-year planning horizon to identify strategic locations for investing in bicycle and pedestrian infrastructure improvements. Walking and cycling may be the two most basic modes of transportation and also the most promising for a sustainable future. This will enable people to meet more of their needs without driving, reducing greenhouse gas emissions and the use of fossil fuels. Enhancing active transportation is a necessary step toward improving overall mobility.



## Transportation Growth

With more jobs, residents, tourists, and through travel anticipated by 2036, Lane County must accommodate more motor vehicle trips on key highways such as US 101, OR 36, OR 56, OR 99, and OR 126. The estimated population growth, transportation demand growth, and key intersections within the County that are projected to fail to meet mobility standards in the year 2036 are discussed in the following sections.

### Population Growth

Population forecasts between the years 2008 and 2036 predict an annual population growth rate of around 1% for Lane County as a whole<sup>1</sup>. The Eugene UGB and the Springfield UGB (Eugene/Springfield UGBs) areas constitute the majority of the County's population and are projected to experience 1.0% growth annually.

Smaller cities surrounding the Eugene/Springfield UGBs to the north, west, and south are projected to experience growth rates around and over 3.5% per year. These cities include Coburg, Creswell, Junction City, Lowell, and Veneta. Moderate annual growth rates ranging between 0.9% and 1.9% are projected for smaller cities that are further away from the Eugene/Springfield UGBs including Cottage Grove, Dunes City, Florence, Oakridge, and Westfir. However, the unincorporated areas of Lane County are projected to experience an annual decrease of 0.6% annually.

### Transportation Demand Growth

While growth in population is based on trends and knowledge of the County and region, future travel patterns are more difficult to predict as the community's investment decisions and the economy can have significant effect on choice of modes and routes. Therefore, complex traffic demand models have been prepared for the Eugene/Springfield and Florence areas, as well as for ODOT facilities across the state.

Two travel demand models were utilized to determine the estimated transportation demand growth in the year 2016: the Eugene-Springfield regional travel demand model<sup>2</sup> and the Florence travel demand model.<sup>3</sup> For the study intersections located outside the range of these two travel demand models, future traffic growth was estimated based on ODOT's 2032 future volume tables. The growth rates provided by these sources were then used to estimate the 2036 motor vehicle volumes for each study intersection.



1 *Population Forecasts for Lane County, its Cities and Unincorporated Area (2008-2035)*, Population Research Center College of Urban and Public Affairs, Portland State University, May 2009.

2 The Eugene-Springfield regional travel demand model is managed by the Lane County Council of Governments (LCOG).

3 The Florence travel demand model is managed by the Lane County Council of Governments (LCOG).

The bulk of the transportation growth is projected to take place near the Eugene/Springfield UBGs area and along OR 126 to the east of Springfield. The Goshen area to the south of the Eugene/Springfield UBGs is also anticipated to experience significant growth as this location continues to develop. Furthermore, County facilities near Florence and Cottage Grove are also expected to experience a fair amount of growth while other areas within Lane County are expected to grow in moderate proportions (around 1% per year).

2036 motor vehicle volumes for peak conditions were utilized to determine areas that will be congested and may require future investments to accommodate forecasted growth. Two intersections are projected to fail to meet the mobility standards during the Average Weekday Peak Hour:

- » McVay Highway/30th Avenue (currently signalized)
- » OR 99/Goshen Avenue (currently unsignalized)

Along with McVay Highway/30th Avenue and OR 99/Goshen Avenue, the following two intersections are projected to fail to meet mobility standards during the 30th Highest Hour Peak Hour<sup>4</sup>:

- » Territorial Highway/Highway 126W (currently signalized)
- » Greenhill Road/Clear Lake Road (currently signalized)



4 The 30th Highest Hour Peak Hour Volumes are the 30th highest hourly volumes expected during an entire year. These volumes are used in analysis to represent the traffic that is expected to use the roadway in any designated year.

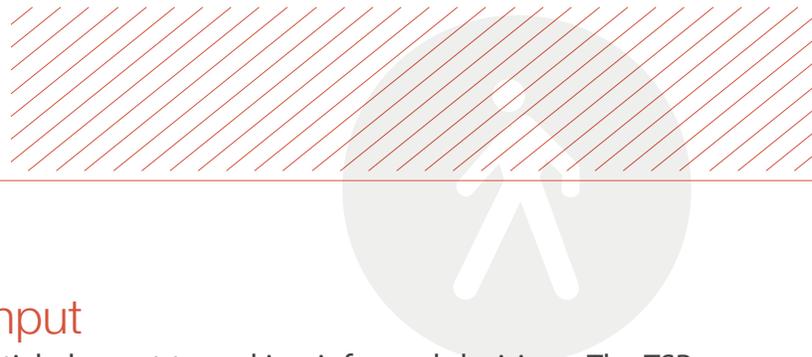


MOSBY CR BRIDGE  
BUILT IN 1920



Photo Credit: Eugene, Cascades & Coast

# 3. THE TSP PROCESS



## Public Engagement and Agency Input

Lane County values public involvement as an essential element to making informed decisions. The TSP process was built around a strong public involvement structure, with intentional opportunities created at each stage of product development to integrate community values and needs. Public participation was a continuous process, consisting of a series of activities and actions, such as an interactive web map and community workshops, to both inform and obtain input from the public and stakeholders. The process was intended to achieve the following goals and guiding principles:

### Goals

- » Broad participation
- » Confidence in process integrity
- » Timely, authentic, and useful public input
- » Thoughtful responses to individual comments, concerns, questions
- » Public education on project process, regulatory framework, and technical issues that will facilitate meaningful feedback

### Guiding Principles

- » Respect the intelligence of the public
- » Seek out and facilitate the involvement of those potentially affected
- » Identify issues and concerns early and throughout the process
- » Widely disseminate complete information in a timely manner
- » Include the public's contribution in decisions
- » Report how input was considered & reasons for decisions in each phase
- » Encourage open and honest communication



The TSP Public Engagement Process (shown in Figure 3-1) was broken into six stages. Each stage was supported by a series of Technical Memorandum, which discussed specific topic areas and key findings ranging from existing transportation conditions to funding assumptions and recommended transportation solutions. Each memorandum was posted to the project website, providing the community an opportunity to provide feedback and keep up to date with the project.

Project advisory committees, comprised of agency (local and state) technical staff and citizen representation, local residents, and business representatives, were also formed. These groups reviewed and commented on each memorandum and met with the project team at key stages during the project.

In addition, the project team hosted open houses at multiple locations throughout the county as a forum to inform the public about the status of the project and to gather input. The project team also held work sessions with the Planning Commission and Board of Commissioners at significant milestones of the project.

Based on the feedback received from all of these inputs, the Project Team revised the draft memoranda and the documents were reposted to the TSP website. These revised memoranda were used to create the Draft TSP.

Subsequent public hearings with the Planning Commission and Board of Commissioners on the Draft TSP ultimately led to the adoption of the 2018 Lane County Transportation System Plan.

**Fig 3-1. TSP Public Engagement Process**

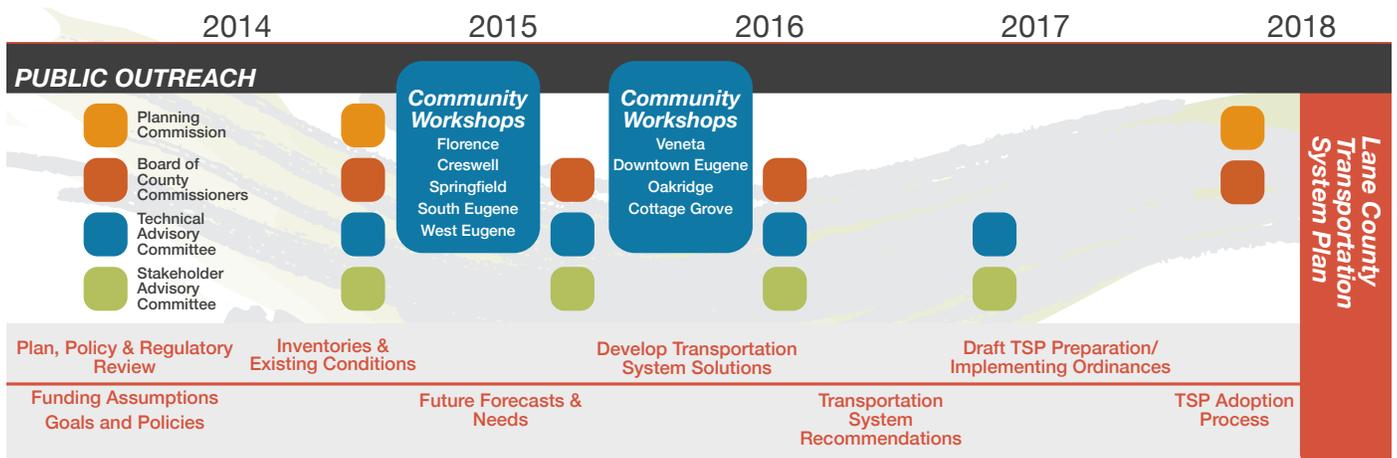






Photo Credit: Mike Shaw

## 4. GUIDING FRAMEWORK

The TSP guides Lane County's transportation system by articulating policies, priorities, and projects to meet the needs and aspirations of the community over a 20-year period. It must also conform to state laws governing TSPs and serves as the transportation element of the Lane County Rural Comprehensive Plan.

Transportation planning considers a diversity of transportation needs while integrating economic, social, and public health aspirations. In addition to providing guidance on how to build, operate, and maintain Lane County's major roadway network, the TSP addresses complementary elements of the larger transportation system such as transit, multi-use trails, state highways and freight railroads.

The framework of goals and policies to support these multiple objectives is integrated into the following overarching topics.

### GUIDING PRINCIPLES

*Goals & Policies relating to:*

1. Safety
2. Economic Vitality
3. Natural Environment
4. Equity
5. Accessibility

### SYSTEM DESIGN

*Goals & Policies relating to:*

6. Mobility
7. Active Transportation
8. Public Health

### IMPLEMENTATION

*Goals & Policies relating to:*

9. Coordination
10. Funding
11. Maintenance
12. Preservation

Goals are broad statements of philosophy that describe aspirations for the future of the community, although they may not be fully attained within the 20-year planning horizon of this Plan. Policies are statements adopted to provide a consistent course of action and move the community toward attainment of its goals. These goals and policies, which are all weighted the same, informed the development of the Financially Constrained and Illustrative Project lists (See Figure 5-1 for more detail). These goals and policies will guide Lane County in future transportation decisions, such as formulating the Capital Improvement Program and developing code language.

# Guiding Principles

safety, economic vitality, natural environment, equity and accessibility

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## 1 GOAL 1: SAFETY

### Eliminate fatalities and reduce severe-injury collisions on Lane County's transportation system.

- Policy 1-a: Participate in the National Strategy on Highway Safety – Towards Zero Deaths (TZD) program.
- Policy 1-b: Ensure safety is a top priority in making decisions for the Capital Improvement Program and for transportation facility operations, maintenance, and repair.
- Policy 1-c: Align County departments, external safety groups, and other public agencies toward common transportation safety goals.

## 2 GOAL 2: ECONOMIC VITALITY

### Provide a reliable transportation system that enhances the economic health of Lane County.

- Policy 2-a: Support specifically targeted transportation investments, industries and employment sectors.
- Policy 2-b: Realize the economic benefits that walking, biking, public transportation, and other active transportation investments can provide to Lane County.
- Policy 2-c: Recognize the importance of resource-related uses such as agriculture and forestry to the local economy, and the need to maintain a transportation system that provides opportunities for the harvesting and marketing of agriculture and forest products.

## 3 GOAL 3: NATURAL ENVIRONMENT

### Create and maintain a transportation system that first avoids, then minimizes, and finally mitigates impacts to the natural environment.

- Policy 3-a: Support strategies in the Oregon Sustainable Transportation Initiative (OSTI) to encourage the reduction of greenhouse gases (GHG) such as building infrastructure that facilitates and supports bicycling or walking, supporting increased public transportation services, deploying intelligent transportation systems, and planning for efficient freight traffic movement.
- Policy 3-b: Identify, avoid, and or mitigate potential adverse ecological, scenic, historic, cultural, economic, social, and health impacts of transportation improvement projects.
- Policy 3-c: Explore opportunities to protect and enhance the local environment and conserve resources as part of transportation improvement projects.

## 4 GOAL 4: EQUITY & ACCESSIBILITY

### Provide safe and efficient access to destinations and populations within Lane County.

- Policy 4-a: Consider transportation improvement projects that accommodate all transportation users by including shoulders, sidewalks, bike lanes, and bus stop turnouts, consistent with adopted road design standards.
- Policy 4-b: Provide a multi-modal transportation system that is accessible to all users, improves access to basic needs (e.g., education, employment, food, housing, and medical care) and complies with the American with Disabilities Act (ADA).
- Policy 4-c: Encourage the provision of transportation services to the meet the needs of the transportation disadvantaged such as such as low-income persons, children, older persons, alter-abled persons, racial and ethnic minorities, and those with limited English proficiency.

# System design

## mobility, active transportation and public health

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### **5 GOAL 5: MOBILITY**

#### **Promote the efficient and cost-effective movement of people, goods and services by all modes.**

- Policy 5-a: Maintain and improve roads consistent with their functional classification. Reclassify roads as appropriate to reflect function and use. Make access decisions in a manner consistent with the functional classification of the roadway.
- Policy 5-b: Provide an adequate motor vehicle system that serves commercial vehicle/truck traffic to and from the land uses they serve, including freight access to the regional transportation network.
- Policy 5-c: Consider the requirements for truck movement when designing all improvements in the public right of way on designated truck routes. Requirements include turn radii, sight distance, lane widths, turn pocket lengths, pavement design, and improvements that reduce freight vehicle impacts to bicyclists and pedestrians.

### **6 GOAL 6: CONNECTIVITY**

#### **Provide improved and new transportation connections within and between developed and developing areas.**

- Policy 6-a: Encourage safe and convenient pedestrian and bicycle connections between residential uses and adjacent activity centers, including transit facilities and commercial, employment, civic/institutional, and recreation uses.
- Policy 6-b: Consider opportunities to purchase land for extensions of right-of-way where connectivity is needed.
- Policy 6-c: Encourage the off-street trail networks to be integrated with on-street pedestrian and bicycle facilities.

### **7 GOAL 7: ACTIVE TRANSPORTATION AND PUBLIC HEALTH**

#### **Create a built environment that encourages healthy, safe, comfortable and convenient active transportation options that are viable for all users.**

- Policy 7-a: Develop a Bicycle and Pedestrian Master Plan to guide bicycle and pedestrian projects and programs to promote and support bicycle and pedestrian travel in unincorporated areas of Lane County.
- Policy 7-b: Support creation of regional bicycle and pedestrian corridors to facilitate safe travel between and within urban and rural communities in Lane County.
- Policy 7-c: Coordinate with Lane County Department of Health and Human Services to recognize, promote, and track the public health benefits of active transportation.

# Implementation

coordination, funding, maintenance and preservation

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## 8 GOAL 8: COORDINATION

**Implement the Transportation System Plan by working with the public, community groups, transit providers, cities and other government agencies.**

Policy 8-a: Ensure the following guidelines are used in making decisions about transportation improvements and services where inconsistencies exist between jurisdictional plans and standards:

- (i) Improvements to a state highway, state transportation system plans and design standards will apply;
- (ii) Improvements to a transportation facility outside of an urban growth boundary, the County TSP and design standards will apply;
- (iii) Improvements to a transportation facility within an urban growth boundary, the City TSP and applicable road design standards will apply.
- (iv) Improvements to an intersection or roads in more than one jurisdiction's ownership or control, the TSP goals and road design standards of the agency having ultimate maintenance responsibility will apply.

Decisions about road improvements may follow different guidelines than those above upon agreement of the elected officials of the involved jurisdictions or their designees, or if other recorded inter-jurisdictional agreements exist that supersede the above guidelines.

Policy 8-b: Develop criteria with cities and ODOT to resolve conflicts and transfer roads to the appropriate jurisdiction, particularly as urban unincorporated areas are annexed and urban expansion occurs.

Policy 8-c: Participate in regional and state technical and policy decision making processes, such as the Central Lane Area Commission on Transportation.

## 9 GOAL 9: FUNDING

### Seek adequate and reliable funding for transportation.

- Policy 9-a: Prioritize improvements within statutory road fund limitations, to access ways, paths, or trails where trail or route improvements help complete a regional planned facility or make connections to an existing or planned facility within an incorporated city within the County.
- Policy 9-b: Strive to distribute funding so that it is proportionally balanced between the various needs of the community including modal and geographic considerations.
- Policy 9-c: Seek funding sources, such as the following:
- (i) Facilitate the formation of Local Improvement (special assessment) Districts to address transportation improvement needs on sub-standard transportation facilities.
  - (ii) Consider additional sources and strategies, such as a local option gas tax or vehicle registration fee, to ensure necessary funding is available to meet County transportation needs.
  - (iii) Work with local, regional, and state agencies and elected officials to leverage and increase state funding for transportation improvement projects in Lane County.
  - (iv) Evaluate existing transportation related funding agreements with incorporated cities, and make necessary amendments to allocate an appropriate share of system development charges (SDCs) to the County.

## 10 GOAL 10: MAINTENANCE AND PRESERVATION

### Adequately maintain and preserve Lane County's transportation facilities.

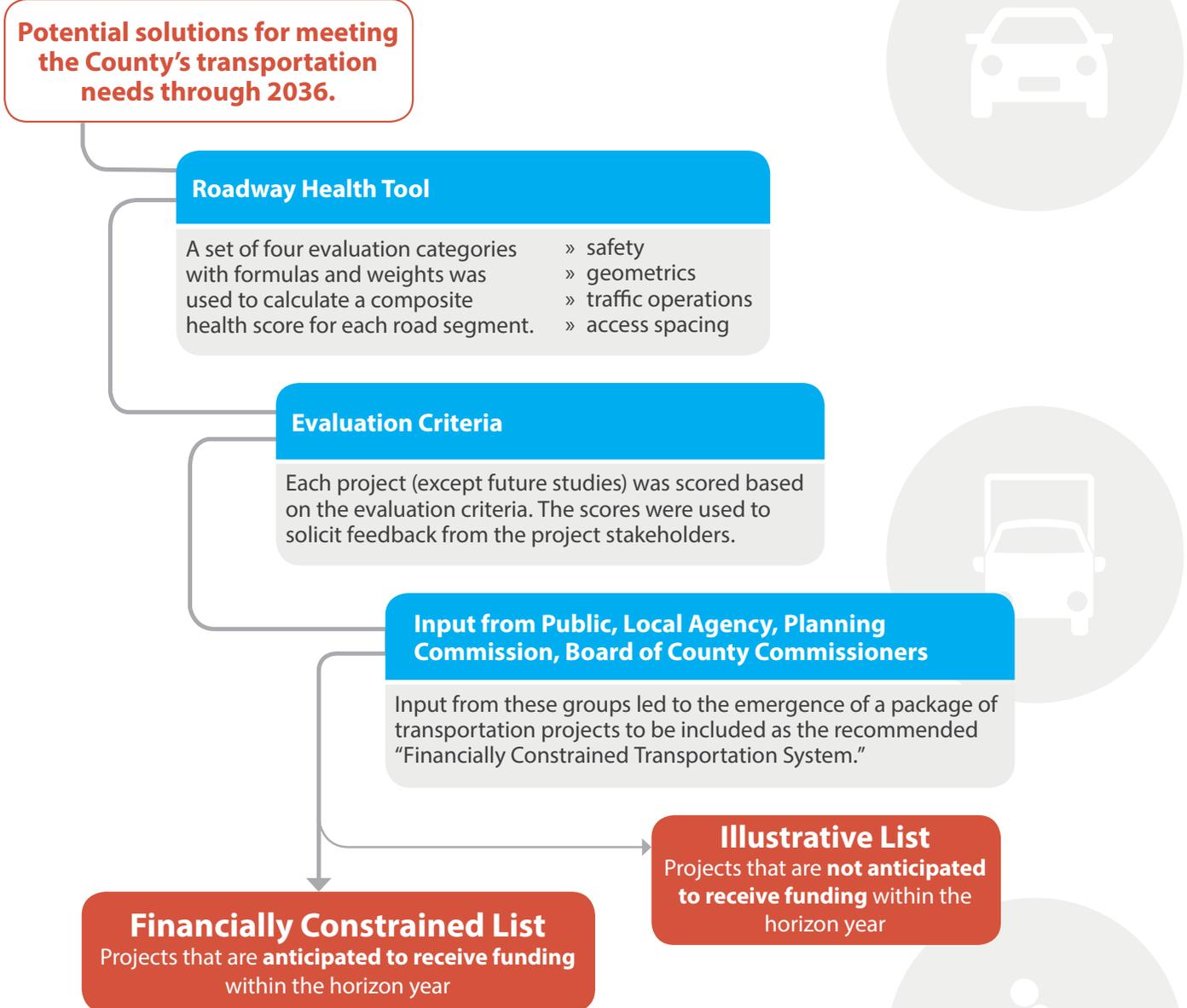
- Policy 10-a: Ensure operations, maintenance, repair, and preservation of County transportation facilities, which include roads, bridges, sidewalks, and bike facilities, are the priority of the Road Fund and are routinely carried out to protect the public investment in, and to ensure adequate functioning of the County transportation system.
- Policy 10-b: Balance the need for controlling long-term pavement maintenance costs with consideration for providing improved road surfaces for bicycling in road maintenance decisions.
- Policy 10-c: Look for opportunities to reduce maintenance costs through cooperative partnerships with other agencies and private enterprises.



# 5. THE INVESTMENTS

Developing an investment plan was a multi-step process, as shown in Figure 5-1. The transportation investments needed over the next 20 years were identified through technical analyses, such as the Roadway Health Tool, and community input. The projects developed considered the needs of all modes and people, as well as fiscal and environmental constraints, to maximize use of available funds, minimize impacts to the natural and built environments, and balance investments across all modes of travel. Funding assumptions for projects that were also identified in city TSPs are consistent with the funding assumptions in this plan (i.e. if a City assumed the project was going to be funded before the horizon year, it was placed on the Financially Constrained List. If not, it was placed in the Illustrative List).

Figure 5-1: Solutions for Meeting Transportation Needs



## Funding Gaps

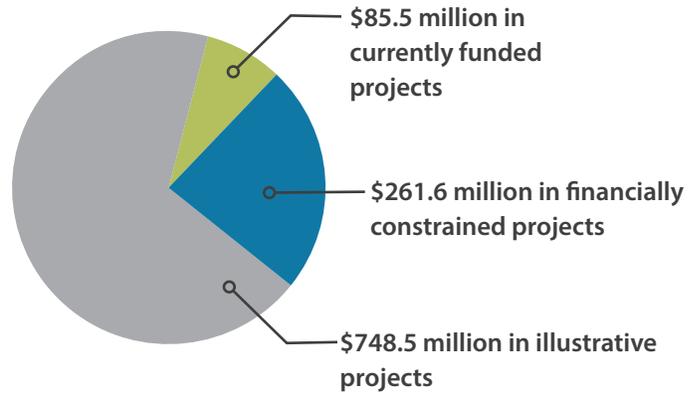
The transportation investment needed over the next 20 years is greater than projected funding. With nearly all of the current revenue (i.e. Lane County's share of the state gas tax) being utilized for maintenance of the transportation system, and with these costs continuing to rise through 2036, the County is expected to have insufficient funds for basic maintenance, let alone transportation improvements.

Funding the transportation improvements identified in this Plan is assumed to be a result of Lane County successfully competing for State and Federal revenue sources. Based on assumptions about project eligibility for known funding sources, \$67.5 million is a reasonable estimate of what Lane County may secure from state and federal funding sources over the next 20 years. The County expects approximately \$192.5 million in additional funds from other sources (City-designated funds, private development, additional federal grants, etc). This leaves a \$750 million funding gap.

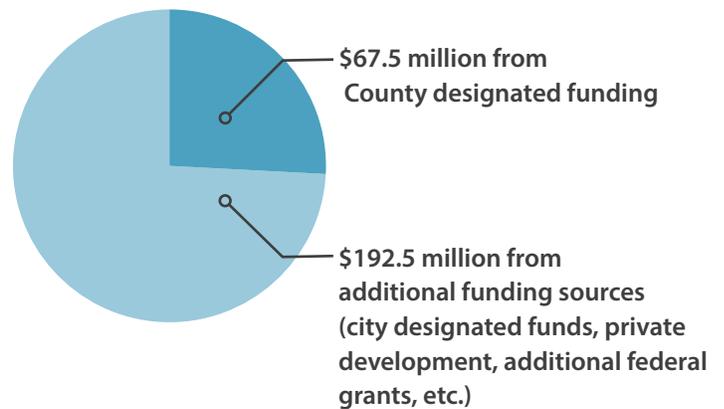
The projects that are reasonably likely to be funded during the 20-year planning horizon are included in the Financially Constrained List. Projects that are unlikely to be funded within the 20-year planning horizon, based on current assumptions about future funding, are included in the Illustrative List. If additional funding becomes available, projects on the Illustrative List would be pursued.

To the right, Figure 5-2 shows the funding assumptions for all the projects identified in this TSP, Figure 5-3 shows the funding assumptions for just the Financially Constrained List, and Figure 5-4 shows a breakdown of the specific funding assumptions for Lane County within the next 20 years.

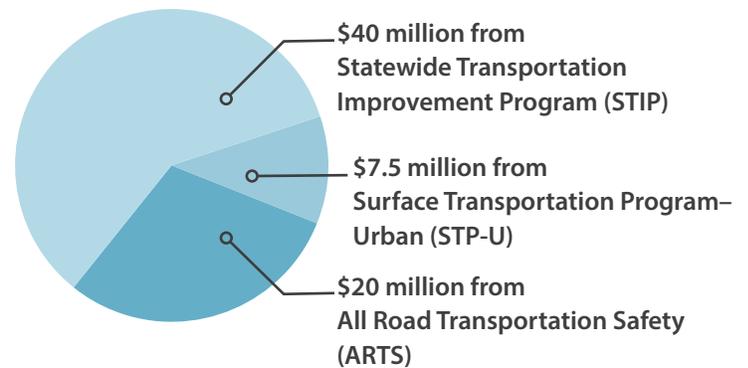
**Figure 5-2.**  
Funding Assumptions for all TSP Projects



**Figure 5-3.**  
Financially Constrained List Funding Sources



**Figure 5-4.**  
20-Year County-Designated Funding Breakdown



## Currently Funded Projects

These transportation projects are not yet built but are already funded for construction or planning within the 20-year horizon period of this TSP. Approximately \$85.5 million worth of transportation improvements are already funded within Lane County, spreading across 12 projects.

*12 projects*  
*\$83.7 million in transportation improvements*

Table 5-1. Currently Funded Projects List

Proj. No.	Fig. No.	Project Name	Project Description	Agency Partners	Project Cost	Const. Dates
19a	5-8, 5-9	Beltline/I-5 Interchange (K16861)	Interchange modernization including Beltline Aux Lane, 1-5 Ramp SB, NB 1-5 ramp, sound wall, and extension of the north-south multi use path from Harlow Road to Garden Way to the south and Old Coburg Road to the north.	ODOT/Lane County/City of Eugene	\$34,000,000	2016-17
19b	5-8, 5-9	Beltline/Delta Interchange (K19490)	Construct interim safety improvements, replace/revise existing ramps, and widen Delta Highway bridge to 5 lanes.	ODOT / Lane County / City of Eugene	\$20,000,000	2019-21
73	5-5, 5-6	US 101 from 15th Street to Redwood Street (K18864)	Construct pedestrian crossings with flashing beacons at three locations in Florence.	ODOT	\$550,000	2018
77a <sup>1</sup>	5-7	OR 126 from Eugene to Veneta (K18756)	NEPA Review for Implementing Fern Ridge Corridor Plan	ODOT	\$3,000,000	2018-19
77d <sup>1</sup>	5-7	OR 126 Fern Ridge Multi-Use Path (K18756)	National Environmental Policy Act (NEPA) Review and design for Cantrell/Perkins from Greenhill Road to Territorial Highway	ODOT/Lane County	\$175,000	2018-19
77f	5-5, 5-6, 5-7	OR 126: Eugene-Florence Safety improvements (K20149)	Widen roadway to 3 lanes to accommodate a 0.8 mile WB passing lane, west of Walton (MP 31.6 to 32.4). Widen shoulders at various locations (MP 24-40).	ODOT/ Lane County	\$7,000,000	2019
77g	5-7	OR 126: Cornerstone Drive to West 11th Street (K19743)	Bus pull-outs and intersection improvements identified in the Fern Ridge Corridor Plan	ODOT	\$9,525,503	2018
78	5-1, 5-2, 5-3	OR 126 from Territorial Highway Chambers St	Construct safety improvements including shoulder rumble strips and fixed object removal.	ODOT	\$525,000	2018
91	5-8, 5-9	Jessen Drive from Ohio Street to Beltline (K18859)	Construct bicycle and pedestrian path.	ODOT / Lane County / City of Eugene	\$2,115,972	2018
124d	5-14	Row River Trail Crossings	Construct additional pedestrian crossing improvements along the corridor.	Lane County / BLM	\$250,000	2018
141a <sup>1</sup>	5-12	Territorial Highway from Gillespie Corners to Lorane (K18245)	Complete design	ODOT / Lane County	\$1,000,000	2018-19
144a <sup>2</sup>	5-7	Elmira – Veneta Multi Use Path (K20238)	Design of off-street multi-use path along Territorial Highway (Phase 1) – not including bridges	ODOT / Lane County / City of Veneta	\$555,300 <sup>3</sup>	2019-21
140	5-2	OR 126 Walker Cr to Chickahominy Cr (K19661)	Passing lane	ODOT	\$5,000,000	2018

Notes: <sup>1</sup> Project will be transferred to County (but not funds). Other funds from J.T. <sup>2</sup> Funding for construction has not been secured.  
<sup>3</sup> Cost may change through further coordination with ODOT and Lane County.

## Financially Constrained Project List

The Financially Constrained Project List identifies the transportation solutions within the County that are reasonably expected to be funded by 2036 and that have the highest priority for implementation. About \$260 million worth of investments, spread over 70 projects, are included in the Financially Constrained Transportation System.

*71 projects*

*\$261.6 million  
in transportation  
improvements*

The Financially Constrained Project List represents a group of projects that could be funded. Because ODOT supports all the projects listed in the constrained and illustrative Lists, strict adherence to priority implementation of the projects currently shown on the constrained list is not required by ODOT. This list may be modified and adapted with the limits of the financial constraint threshold, as it currently exists or as it may evolve, to advance any supported project on state highways in response to any opportunity or issue that may arise during the planning horizon.

The Financially Constrained Projects are classified a 'reasonably likely' based on the criteria in Chapter 3.2 of the *Oregon Transportation Planning Rule* (TPR) and can be considered as a planned or completed improvement for future TPR analysis.

Table 5-2. Financially Constrained Projects List

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
3	5-9	19th Avenue East from Henderson Avenue to Franklin Boulevard	Change to a two-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$3,550,000
4	5-13	30th Avenue from I-5 to University Street	Study to improve bicycle and pedestrian access and safety through the 30th Avenue corridor between Eugene and the LCC basin, to include a review of off-street connections.	Lane County / City of Eugene	\$250,000
6	5-9	31st Street from Hayden Bridge to Bike Path at Pierce Park	Change to a two-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$3,975,000
7	Not Mapped	Active Transportation Plan	County-wide plan to address infrastructure needs for improving access and safety for people walking, running, biking, and riding horses for recreation, exercise, and commuting to work, school, home, parks, towns, transit centers, and other key destinations.	Lane County	\$300,000
9	5-9	Anderson Lane from By-Gully Path to Centennial Boulevard	Add signing and striping on Anderson Street and Quinault Street for bicycle facilities and construct 12-foot wide multi-use path between Anderson Lane and Quinault Street.	Lane County / City of Springfield	\$100,000
11	5-9	Aspen Street from Centennial to West D	Change to a two-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$2,925,000
12	5-7,5-8	Awbrey Lane from Prairie Road to Highway 99W	Construct to Eugene's major collector standards, including two travel lanes with bike lanes, planting strip, and sidewalks on both sides	Lane County	\$1,225,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
15	5-7,5-9	Bailey Hill Road from Warren Street to Eugene UGB	Construct to Eugene's minor arterial standards, including two travel lanes, center turn lane, and bike lanes, planter strip, and sidewalks on both sides	Lane County / Eugene	\$9,200,000
16	5-8	Beacon Drive East from River Road to Scenic Drive	Construct to Eugene's neighborhood collector standards, including two travel lanes, alternating parking bays and planter strips, and bike lanes and sidewalks on both sides	Lane County	\$2,150,000
18a	5-8	Beaver-Wilkes Multi-Use Path along Eugene's UGB	Construct a separated multiuse path facility, consistent with Beaver-Hunsaker Corridor Plan	Lane County / City of Eugene	\$2,700,000
18b	5-8	Beaver Street - Hunsaker Lane from Division Avenue to River Road	Construct consistent with the Beaver-Hunsaker Corridor Plan recommendations	Lane County / City of Eugene / ODOT	\$9,300,000
19c	5-8,5-9	Beltline: New Local Arterial Bridge between Green Acres Rd and Beaver St	Construct a new frontage road with Willamette River Bridge. (Beltline Facility Plan: Local Arterial Bridge)	ODOT	\$83,000,000
21a	5-9	Bob Straub Parkway from 57th Street to Jasper Road	Multi-use path on both sides	Lane County/ City of Springfield	\$3,000,000
24	5-7	Central Road from OR 126 to Fleck Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,725,000
26	5-8	Coburg Loop Path	Construct the Coburg Loop Path.	Lane County / City of Coburg	\$3,300,000
28	5-8	Coburg Road from Coburg Road North to Linn County Line	Construct to major collector standards with two 11' travel lanes and six-foot wide shoulders on both sides. Incorporate systemic safety measures.	Lane County	\$4,900,000
29	5-8	Coburg (New East-West Freight Connector North of Coburg)	Study to determine alignment for a new east-west freight route connection between Coburg Road and I-5, north of the City of Coburg.	Lane County / City of Coburg / ODOT	\$250,000
32	5-12	Cottage Grove-Lorane Highway from town of Lorane to Cottage Grove UGB	Install systemic safety measures such as barricades, curve warning signage; remove vegetation for vision clearance; and incorporate safety edges and a centerline rumble strip with a pavement overlay	Lane County	\$400,000
33a	5-14	Cottage Grove-Lorane Highway from Gowdyville Road to R Street	Construct sidewalks and bike lanes	Lane County / City of Cottage Grove	\$100,000
34	5-8	County Farm Loop North to South Section	Construct to Eugene's major collector standards with two travel lanes, sidewalks on both sides, and planting strips.	Lane County / City of Eugene	\$4,400,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
40	5-8	Dorsey Lane from OR 36 to High Pass Road	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$1,375,000
48	5-9	Fox Hollow Road from Donald Street to Eugene UGB	Upgrade Fox Hollow Road consistent with major collector standards, including provision of two travel lanes, bike lanes, sidewalks on both sides of the road, and planting strips.	Lane County / City of Eugene	\$5,400,000
49	5-9	Franklin Boulevard East from I-5 Frontage to Twin Buttes Road	Construct to freight route standards with 12' travel lanes and 6' shoulders on both sides.	Lane County	\$2,050,000
50	5-9	Game Farm Road South from Game Farm Road East to Harlow Road	Modify and expand Game Farm Road South with a cross-section to include bicycle facilities.	Lane County / City of Springfield	\$4,275,000
52a	5-8,5-9	Gilham Road from Ashbury Drive to Mirror Pond Way	Sidewalk on west side of roadway	Lane County / Eugene	\$272,000
52b	5-8,5-9	Gilham Road from Ayres Road to Ashbury Drive	Upgrade to neighborhood collector standards	Lane County / Eugene	\$1,500,000
54	5-9,5-13	Goshen N Connector from McVay Highway to Goshen Limits	Implement a study to identify the location of a road that provides Goshen Regional Employment Area connectivity to and from Goshen to the north.	Lane County	\$415,000
56a	5-7,5-8, 5-9	Green Hill Road—entire length	Study to determine preferred design solution for the entire corridor	Lane County / City of Eugene	\$500,000
59a	5-9,5-10	Hampton Road	Construct to freight route standards & railroad crossing improvements	Lane County	\$6,400,000
59b	5-9	Hampton Road/Dillard Road/Union Pacific Railroad Crossing	Improve intersection to accommodate future Goshen growth and connectivity over railroad.	Lane County	\$650,000
60a	5-9	Hayden Bridge Road (includes 23rd) from Yolanda to Marcola Road	Change Hayden Bridge Road to a two-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$12,525,000
60b	5-9,5-10	Hayden Bridge Road from 5th to 19th	Add bike lanes and pedestrian crossings.	Lane County / City of Springfield	\$4,200,000
61	5-9,5-10	Hayden Bridge Way	Add crosswalk with a rapid rectangular flashing beacon at the intersections of Grovedale Drive, 3rd Street, and Castle Drive.	Lane County / City of Springfield	\$300,000
64	5-9	Henderson Avenue from Franklin Boulevard to E 19th Avenue	Modify Henderson Avenue with a three-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$3,550,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
69	5-9,5-10	OR 99 from Peebles Road (in Goshen) to West Oregon Avenue (in Creswell)	Enhance safety and connectivity for vehicles, bicyclists, and pedestrians by providing standard travel lane widths and widening shoulders to 6' width on each side of OR 99 from MP 2.13 to 5.63. The project would overlay the entire roadway shoulder to shoulder, addressing slide and access issues where appropriate.	ODOT / Lane County / City of Creswell	\$7,000,000
70	5-8	OR 99 / 1st Avenue West Intersection	Enhance pedestrian crossing by upgrading pedestrian signal heads to countdown pedestrian signals. Upgrade pedestrian signals by using audible signals. Upgrade signal head backplates with retroreflective backplates.	Lane County / City of Junction City	\$20,000
71	5-9,5-13	OR 99/Goshen Avenue Intersection	Modify to an all-way-stop controlled intersection and add a southbound left turn lane.	ODOT / Lane County	\$500,000
77e	5-7	OR126 Fern Ridge Multi-Use Path (Construction)	Implementing Fern Ridge Corridor Plan (construct the Fern Ridge Multi-Use Path) on Cantrell Road and Perkins Road south to OR 126.	ODOT / Lane County	\$9,650,000
80	5-10	OR 126/Deerhorn Road Intersection	Intersection safety improvements.	ODOT / Lane County	\$500,000
81	5-7	OR 126/Ellmaker Road Intersection	Improve lighting, add right turn lanes on single major road approaches and improve intersection visibility or advance warning.	ODOT	\$900,000
87	5-8	Howard Avenue from River Road to North Park	Construct sidewalks on both sides of the road.	Lane County / City of Eugene	\$475,000
89	5-8,5-9	Hyacinth Street from Irvington Drive to Lynnbrook Drive	Construct to Eugene's neighborhood collector standards	Lane County / Eugene	\$700,000
90a	5-9	Jasper-Lowell Road from Parkway Road to Pengra Road	Construct to freight route standards with 12' travel lanes and 6' shoulders on both sides.	Lane County	\$3,475,000
93	5-8	Lake Drive/N. Park Avenue from Howard Road to Horn Lane	Construct neighborhood greenways (separated multiuse path facility).	Lane County / City of Eugene	\$125,000
94	5-14	Latham Road from OR 99 to London Road	Construct bicycle and pedestrian facilities.	Lane County / City of Cottage Grove	\$100,000
97	5-14	London Road from Latham Road to Black Butte	Safety Improvements: guardrails, advance warning signs, curve warning, centerline rumble strips, safety edges with pavement overlay	Lane County	\$5,800,000
100	5-10	Marcola Road from Wendling Road to Johnson Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on each side. Integrate system safety measures.	Lane County	\$4,325,000
101	5-9	Marcola Road/Brush Creek Road from OR 228 to Camp Creek Road	Construct safety improvements including shoulder rumble strips and fixed object removal.	Lane County	\$975,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
111	5-8	Park Avenue (North) from Maxwell Road to Horn Lane	Construct protected bike lanes.	Lane County / City of Eugene	\$26,000
112	5-10	Parsons Creek Road from Marcola Road to Pioch Lane	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$800,000
118	5-8	Prairie Road/Maple Rd Intersection with 1st Avenue West/High Pass Rd	Realign north and south approaches of intersection and add left turn lanes on all approaches; interim improvement, construct curb extensions on the opposing west corner of Maple St and east corner of Prairie Rd to enhance pedestrian visibility and shorten the crossing distance.	Lane County / City of Junction City	\$1,175,000
119	5-5,5-6	Rhododendron Drive from Florence City Limits to Heceta Beach Road	Construct to local road standards and an off-street multi-use path facility.	Lane County / City of Florence	\$3,025,000
121	5-8	River Loop #1 from River Road to Dalewood Street	Construct to Eugene's neighborhood collector standards.	Lane County / City of Eugene	\$1,400,000
122	5-9	River Loop #2 from River Road to Burlwood Street	Construct to Eugene's neighborhood collector standards.	Lane County / City of Eugene	\$6,100,000
124a	5-15	Row River Road from Sharps Creek Road to Brice Creek Rd	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$3,175,000
124b	5-14	Row River Road from UGB to Row River Road	Construct three-lane facility with bike lanes.	Lane County / City of Cottage Grove	\$925,000
124c	5-14	Row River Road from Snauer Lane to Laying Creek Road	Construct safety improvements including shoulder rumble strips and fixed object removal.	Lane County	\$600,000
127	5-9	Scenic Drive from River Loop #2 to Beacon Drive East	Construct to Eugene's neighborhood collector standards.	County / City of Eugene	\$4,000,000
128	5-13,5-14	Sears Road from Molitor Hill Road to Row River Road	Remove fixed objects from the clear zone.	Lane County	\$150,000
129	5-13	Sears Road from MP 0.62 to Saginaw Road East	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,575,000
130	5-9	Seavey Loop from OR 58 to Franklin Boulevard East	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$3,450,000
133	5-9	Spring Creek Drive from River Road to Scenic Drive	Construct to Eugene's neighborhood collector standards.	Lane County / City of Eugene	\$2,600,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
134	5-6	Stagecoach Road from Richardson Road to MP 0.58	Slope stabilization.	Lane County	\$1,100,000
139	5-14	Sweet Lane from OR 99 to Talemna Drive	Upgrade to Cottage Grove urban standards.	Lane County / City of Cottage Grove	\$800,000
141b	5-12	Territorial Highway from Gillespie Corners to Hamm Rd (Phase 1)	Shoulder widening and curve alignment adjustments.	ODOT / Lane County	\$7,000,000
141c	5-12	Territorial Highway from Hamm Road to Lorane (Phase 2)	Shoulder widening and curve alignment adjustments.	ODOT / Lane County	\$10,000,000
143	5-12	Territorial Highway / Lorane Highway Intersection	Implement curve and intersection warning signage safety treatments.	ODOT / Lane County	\$15,000
144b	5-7	Territorial Highway from Suttle Road to OR 126	Construct an off street multi-use path along Territorial Highway not including bridges (Phase I)	ODOT / Lane County / City of Veneta	\$1,075,330
146	5-7	Vaughn Road from Noti Loop Road to Territorial Highway	Construct to freight route standards with 12' travel lanes and 6' shoulders on both sides.	Lane County	\$875,000
149	5-9	Wayside Lane from Ann Court to Riverbend Path	Construct a new multi-use 12-foot wide path along the Mill Race from South 2nd Street to Mill Street at Island Park.	Lane County / City of Springfield	\$80,000
154	5-8	Wilkes Drive from River Road to River Loop #1	Construct to Eugene's major collector standards.	Lane County / City of Eugene	\$7,000,000
155	5-9,5-8	Yolanda Avenue from 23rd Street to 31st Street as well as 31st and 28th for Safe Routes to School	Modify Yolanda Avenue to a two-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$1,100,000

## Illustrative Project List

The Illustrative Project List identifies the transportation solutions that are not reasonably likely to be funded by 2036 based on current financial constraints. Nonetheless, each project identified is supported by the County and ODOT and is important to the transportation system.

*107 projects*  
*\$748.5 million*  
*in transportation*  
*improvements*

Some of the projects will require public sector funding and resources beyond what is available in the time frame of this plan. Others are contingent upon joint funding from local agencies. The Illustrative Transportation Project List includes just under \$750 million worth of investments beyond those included in the Financially Constrained Plan.

**Table 5-3. Illustrative Projects List**

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
1	5-8	18th Avenue East & Deal St from Highway 99E to Dane Lane	Construct to Junction City's major collector standards, including bike lanes on both sides and sidewalk only on the south side (no center turn line).	Lane County / City of Junction City	\$1,625,000
2	5-8	18th Avenue West from Oaklea Drive to Juniper Street	Construct to Junction City's major collector standards, including bike lanes on both sides and sidewalks only on the south side (no center turn lane)	Lane County / City of Junction City	\$2,585,000
5a	5-9,5-13	30th Avenue/McVay Highway/I-5 Interchange	Widen 30th Avenue structure over I-5 as well as McVay Highway and Franklin Boulevard ramp terminals to accommodate future multimodal users and motor vehicle capacity and improve safety for all modes.	Lane County / ODOT	\$65,000,000
5b	5-13	30th Avenue Exit to Gonyea Road	Remove clover ramp to improve access. (Dependent on implementation of Project 118)	Lane County	\$950,000
8	5-7,5-8	Alvadore Road from OR 36 to Snyder Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$5,475,000
10	5-7,5-8	Applegate Trail from OR 36 to Territorial Highway	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$2,300,000
13	5-8	Bailey Lane from West UGB to Prairie Road	Construct to Junction City's major collector standards, including left turn lanes, bike lanes on both sides, and sidewalks.	Lane County / City of Junction City	\$1,250,000
14	5-8	Bailey Lane from North Pitney Lane to Prairie Road	Construct bike lane on north side and south side	Lane County / City of Junction City	\$105,000
17	5-8	Beacon Drive West from River Road to Prairie Road	Construct to minor collector standards, including two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures	Lane County	\$925,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
20	5-11	Blue River Drive (looped road off OR 126)	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,450,000
21b	5-9	Bob Straub Parkway from Mt. Vernon Road to Springfield's UGB	Construct a three-lane cross-section.	Lane County / City of Springfield	\$2,450,000
22	5-7,5-12	Briggs Hill Road MP 2.5 to Spencer Cr Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,800,000
23	5-5,5-6	Canary Road from US 101 to Woahink Lake	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$650,000
25	5-9,5-13	Cloverdale Road from OR 58 to Hendricks Road (State Highway begins)	Construct to minor arterial standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$2,875,000
27	5-8	Coburg Interchange	Improve the Coburg/I-5 Interchange.	Coburg/ Lane County/ODOT	\$35,000,000
30	5-8,5-9	Coburg Road North from Coburg Road to Linn County Line	Construct to freight route standards with 12' travel lanes and 6' shoulders on both sides.	Lane County / City of Coburg	\$7,900,000
31	5-14	Cottage Grove Reservoir Road from London Road to London Road (N to S Loop)	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$8,800,000
33b	5-14	Cottage Grove - Lorane Highway from Gowdyveill Road to Cottage Grove City Limits	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides.	Lane County	\$1,700,000
35	5-7	Crow Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders	Lane County	\$2,100,000
36	5-13	Dale Kuni Road from OR 99 to Creswell UGB	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$2,500,000
37	5-10	Deerhorn Road from OR 126 to Bridge Street	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$26,800,000
38	5-13	Dexter Road from OR 58 to Barbre Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,375,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
39a	5-9,5-13	Dillard Road from OR 99 to Eugene UGB	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$3,750,000
39b	5-9,5-13	Dillard Road/I-5 Interchange	Future study to develop interchange facilities to address the lack of a southbound access to Short Mountain Landfill as well as improve economic redevelopment of Goshen as envisioned by the GREAT plan.	ODOT / Lane County	\$300,000
41	5-9	Edenvale Road from OR 222 to Ridgeway Road	Construct to minor collector standards and multi-use path from Bella Casa Park to OR 222.	Lane County	\$2,150,000
42	5-7	Ellmaker Road from OR 126 to Jeans Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,000,000
43	5-8	Ferguson Road from OR 99 to Territorial Highway	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$7,250,000
44	5-7,5-8	Fir Butte Road from Royal Ave to Clear Lake Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$2,450,000
45	5-15	Fish Hatchery Road from OR 58 to 1st Street	Widen shoulders for safety	Lane County / City of Oakridge	\$500,000
46	5-7	Fisher Road from OR 126 to Royal Avenue	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,075,000
47	5-7	Fleck Road from Territorial Highway to Central Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$2,300,000
51	5-14	Garoutte Road from Mosby Creek Road to Shoreview Drive	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$10,750,000
53	5-7,5-8	Goldson Road from OR 36 to Hall Road	Improve to minor collector standards.	Lane County	\$900,000
55	5-12	Gowdyville Road from Territorial Highway to Cottage Grove UGB	Improve to minor collector standards.	Lane County	\$2,950,000
56b	5-7	Green Hill Road from Barger Drive to Airport Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County / City of Eugene	\$2,875,000
56c	5-7,5-8	Green Hill Road from OR 126 to Crow Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$600,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
56d	5-7,5-8, 5-9	Greenhill Road/Clear Lake Road Intersection	Construct additional westbound and northbound left turn lanes.	Lane County	\$450,000
57	5-8	Grove Street from Silver Lane to Howard Avenue	Construct neighborhood greenways (separated multiuse path facility).	Lane County / City of Eugene	\$75,000
58	5-7, 5-8	Hall Road from OR 36 to OR 36	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$24,000,000
62	5-13	Harvey Road from Hwy 99 to Creswell UGB	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County / City of Creswell	\$1,300,000
63	5-5	Heceta Beach Road from US 101 to Rhododendron Drive	Construct bike lanes along the entire length of Heceta Beach Road.	Lane County / City of Florence	\$3,875,000
65	5-9, 5-10	Hideaway Hills (North) from Hampton Road to N Hideaway Hills Road	Improve road to collector standards to improve connectivity to Goshen	Lane County	\$9,500,000
66a	5-8	High Pass Road (known as 1st Avenue West within Junction City) from Oaklea Dr to Territorial Highway	Construct to Major Collector standards including left turn lane, bike lanes, and sidewalks.	Lane County / City of Junction City	\$6,050,000
66b	5-8	High Pass Road from Junction City West UGB to Oaklea Drive	Construct Major Collector standards including left turn lanes, bike lanes on both sides, and sidewalks on the north side only.	Lane County / City of Junction City	\$3,825,000
67	5-15	High Prairie Road from 1st Street to Oakridge UGB	Construct to major collector standards and implement intersection improvements.	Lane County	\$875,000
68	5-9, 5-13	OR 58/Parkway Road Intersection	Implement advanced intersection warning signage and minor road detection as well as removed fixed objects from the clear zone.	ODOT / Lane County	\$250,000
72	5-13	OR 99/Harvey Road Intersection	Intersection improvements at OR 99.	ODOT / Lane County / City of Creswell	\$300,000
74	5-5, 5-6	US 101/Munsel Lake Road Intersection	Install traffic signal when warranted.	ODOT / City of Florence	\$550,000
75a	5-11	OR 126 at Eagle Rock Park Entrance	Improve sight distance and implement advanced warning signage.	ODOT / Lane County	\$10,000
75b	5-6	OR 126 at Entrance to Camp Lane Park (West of Stagecoach)	Construct a left turn lane on OR 126 to allow better turning movements into the park.	ODOT / Lane County	\$500,000
76	5-7	OR 126 at Perkins Peninsula County Park/ Central Road	Add left turn lane and install any type of median barrier.	ODOT / Lane County	\$6,775,000
77b	5-7	OR 126 from Eugene to Veneta	Construction (Implementing Fern Ridge Corridor Plan)	ODOT	\$115,000,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
77c	5-7	OR 126 from Eugene to Veneta	Construction of Safety Improvements (Implementing Fern Ridge Corridor Plan)	ODOT	\$8,000,000
79	5-5,2	OR 126 /OR 36 Intersection	Analyze and implement a modified intersection configuration and improve intersection lighting.	ODOT	\$500,000
82	5-10	OR 126/Hendricks Park Road Intersection	Improve intersection to accommodate ingress and egress movements for longer vehicles (specifically boat trailers).	ODOT / Lane County	\$300,000
83	5-9	Hill Road from Old Mohawk Road to Marcola Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$4,175,000
84	5-8	Horn Lane and N. Park Avenue to River Road	Construct neighborhood greenways (separated multiuse path facility).	Lane County / City of Eugene	\$125,000
85	5-11	Horse Creek Road from OR 126 to Entrance to Horse Creek Group Campground	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$5,300,000
86	5-6	Horton Road from OR 36 to High Pass Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$4,850,000
88	5-7	Huston Road South from Hunter Road to Perkins Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County / City of Veneta	\$725,000
90b	5-9	Jasper Road from S 42nd to northwest of Mt Vernon Road	Modify Jasper Road to a three-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$6,600,000
92	5-15	Kitson Springs Road from OR 58 to Hill Creek Bridge	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$48,000,000
95	5-9	Laura Street from Scots Glen Drive to Harlow Road	Change to a three-lane cross-section with sidewalks and bicycle facilities.	Lane County / City of Springfield	\$1,600,000
96	5-8	Lingo Lane from Highway 99W to Highway 99E	Improve to minor collector standards.	Lane County	\$2,750,000
98	5-13	Lost Creek Road from OR 58 to Marvin Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$600,000
99	5-13	Lynx Hollow Road from 99W to Melody Lane	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$3,700,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
102	5-8,5	McKenzie View Drive from Coburg Road to Hill Road	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$5,475,000
103	5-8	Meadowview Road E from OR 99 to east UGB	Construct to Junction City's major collector standards including bike lanes on both sides and sidewalks only on the north side	Lane County / City of Junction City	\$4,500,000
104	5-13	Mill Road from OR 58 to Wheeler Road	Realign Mill Road at the intersection of OR 58.	Lane County	\$575,000
105	5-8	Milliron Road from west UGB to east UGB	Construct to Junction City's major collector standards including bike lanes and sidewalks.	Lane County / City of Junction City	\$2,105,000
106	5-14	Mosby Creek Road from Currin Connector to Row River Connector #1	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County / City of Cottage Grove	\$350,000
107	5-5	Munsel Lake Road from US 101 to North Fork Siuslaw Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County / City of Florence	\$8,150,000
108	5-6	Nelson Mountain Road from OR 126 to Shady Creek Crossing	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$5,250,000
109a	5-5,5-6	North Fork Siuslaw Road from OR 126 to Munsel Lake Road	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$800,000
109b	5-5,5-6	North Fork Siuslaw Road from Munsel Lake Road to MP 17.9	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$61,750,000
110a	5-8	Oaklea Drive from OR 99W to 18th Avenue West	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$1,375,000
110b	5-8	Oaklea Drive Modernization from 18th Avenue West to High Pass Road	Construct to Junction City's major collector standards including left turn pockets, bike lanes, and sidewalks.	Lane County / City of Junction City	\$7,200,000
110c	5-8	Oaklea Dr/18th Avenue West	Improve sight distance for northbound approach to the intersection	Lane County / City of Junction City	\$55,000
110d	5-8	Oaklea Drive/10th Avenue West	Install intersection lighting, consider refuge island/curb extensions, and reevaluate need for crosswalk pavement markings.	Lane County / City of Junction City	\$75,000
110e	5-8	Oaklea Drive/6th Avenue West	Install intersection lighting, consider refuge island/curb extensions, and reevaluate need for crosswalk pavement markings.	Lane County / City of Junction City	\$75,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
113	5-7	Perkins Road from City Limits to Central Road	Construct to major collector standards to provide connection to the OR 126/Fern Ridge southern route for bicycles.	Lane County / City of Veneta	\$2,150,000
114	5-8	Pitney Lane (North) from High Pass Road to Bailey Road	Construct to Junction City's major collector standards including bike lanes on both sides and sidewalks only on the east side (no center turn lane).	Lane County / City of Junction City	\$2,675,000
115	5-8	Prairie Road from Bailey Lane to OR 99	Construct to Junction City's major collector standards including bike lanes and sidewalks. Do not construct sidewalks where adjacent to UGB.	Lane County / City of Junction City	\$4,415,000
116	5-7,5-8	Prairie Road from NW Expressway to OR 99	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County / City of Eugene / City of Junction City	\$5,025,000
117	5-8	Prairie Road from Junction City UGB to MP 8.03 (near OR 99)	Construct to Junction City's major collector standards including bike lanes and sidewalks.	Lane County / Junction City	\$1,725,000
120	5-9	Ridgeway Road from OR 58 to MP 1.0	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$900,000
123	5-8	River Road (1st Avenue East) from OR 99 to Junction City's East UGB	Construct to Junction City's major collector standards including center turn lane, bike lanes, and sidewalks.	Lane County / City of Junction City	\$4,275,000
125	5-7	Royal Avenue from Fisher Road to Green Hill Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$2,050,000
126	5-14	River Road (North) from OR 99 to Bennett Creek Road	Upgrade to Cottage Grove's urban standards.	Lane County / City of Cottage Grove	\$450,000
131	5-5,5-6	South Jetty Road from US 101 to BLM Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$550,000
132	5-7	Spencer Creek Road from MP 0.5 to Pine Grove Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$2,450,000
135	5-6	Stagecoach Road from Richardson Road to OR 36	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$61,850,000
136	5-7	Suttle Road from OR 126 to Territorial Highway	Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$3,425,000

Project Number	Figure #	Project Name	Project Description	Agency Partners	Project Cost
137	5-6	Sutton Lake Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$10,900,000
138	5-5,5-6	Sweet Creek Road from OR 126 to MP 1.5	Construct to major collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County	\$6,600,000
142	5-7	Territorial Highway/ Bolton Hill Road Intersection	Install traffic signal when warranted.	Lane County / ODOT / City of Veneta	\$500,000
144c	5-7	Elmira - Veneta Multi Use Path Phase 2	Phase 2 with bridges for multi-use path along Territorial Highway	ODOT / Lane County / City of Veneta	\$3,150,000
144d	5-7	Territorial Highway/OR 126W Intersection	Construct additional eastbound and westbound through lanes.	ODOT / Lane County	\$750,000
144e	5-7	Territorial Highway/ Suttle Road Intersection	Intersections improvements needed to facilitate the multi-use path crossing	ODOT / Lane County	\$750,000
145	5-9	Thurston Road from OR 126 to Weaver Road	Change Thurston Road to a three-lane cross-section with sidewalks and bicycle facilities.	County / City of Springfield	\$5,000,000
146	5-6	Upper Deadwood Creek Road from MP 7.5 to Basonette Road	Pave gravel road.	Lane County	\$2,650,000
148	5-7	Warthen Road from Territorial Highway to Knight Road	Construct to minor collector standards and systemic safety improvements	Lane County	\$3,600,000
150	5-10	Wending Road from Marcola Road to Paschelke Road	Construct to minor collector standards.	Lane County	\$1,450,000
151	5-13,5-15	West Boundary Road from Lowell UGB to end of pavement	Construct to minor collector standards and implement safety measures such as rumble strips, guardrails, and removing obstacles from the clear zone.	Lane County / City of Lowell / City of Oakridge / Forest Service	\$24,150,000
152	5-7,5-6	West Sheffler from Poodle Creek Road to Butler Road	Construct to minor collector standards with two 11' travel lanes and 4' shoulders on both sides. Integrate systemic safety measures.	Lane County	\$8,300,000
153	5-15	Westfir-Oakridge Road from Norquist Lane to High Prairie Road	Construct to major collector standards with two 11' travel lanes and 6' shoulders on each side. Integrate system safety measures.	Lane County	\$1,075,000

## Bridge Projects

A bridge is classified as Structurally Deficient if it is showing signs of deterioration due to environmental impacts or continuous vehicle loadings that exceed the bridge’s design capacity. A bridge is classified as Functionally Obsolete when some aspect of the design or structure type is no longer appropriate to handle the traffic because of dimensional or geometric problems.

*14 projects*  
*\$27 million in improvements*

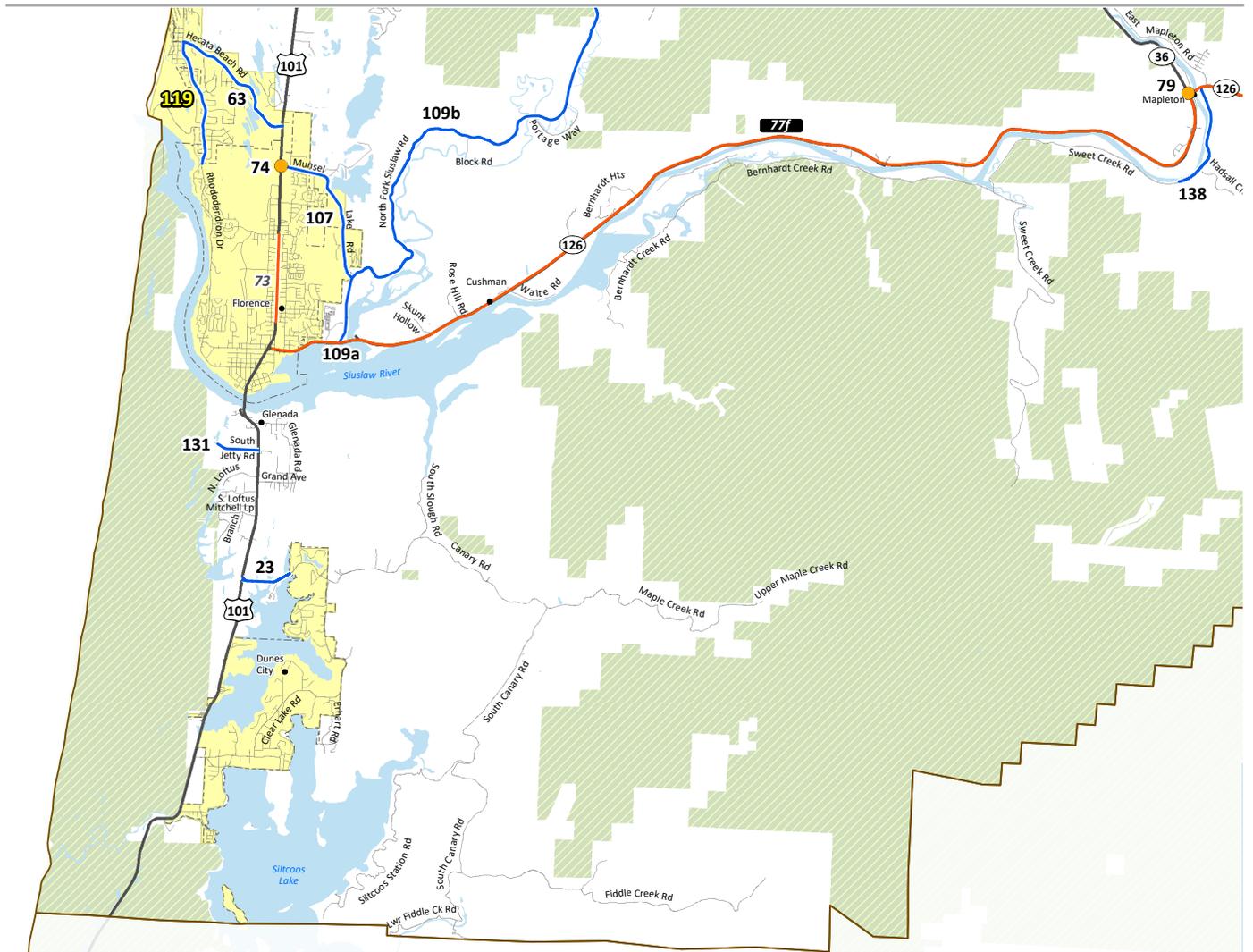
Lane County identified fourteen bridges that are currently either structurally deficient or functionally obsolete. Collectively, these bridges would require approximately \$27 million worth of improvements. However, funding for bridge upgrades is not included in the transportation funding assumptions discussed in this transportation plan since there are additional federal funding sources set aside specifically for bridges.

**Table 5-4. Bridge Project List**

Project #	Figure #	Road	Waterway Crossing	Mile Post	Emergency Route	Freight Route	Deficiency	Cost Estimate
B1	5-11	Blue River Drive	Blue River	1.30	No	No	Functionally Obsolete	\$3,500,000.00
B2	5-10	Bridge Street	McKenzie River	0.01	No	No	Functionally Obsolete	\$950,000.00
B3	5-10	Camp Creek Road	Camp Creek	4.43	No	No	Functionally Obsolete	\$2,000,000.00
B4	5-6	Dahlin Road	Levage Creek	0.05	No	No	Structurally Deficient	\$3,000,000.00
B5	5-7, 5-8, 5-9	Green Hill Road	Amazon Creek	3.35	No	No	Functionally Obsolete	\$1,600,000.00
B6	5-6, 5-12	Indian Creek Road	Indian Creek	5.45	No	No	Functionally Obsolete	\$1,100,000.00
B7	5-15	Kitson Springs Road	Salt Creek	0.27	No	No	Structurally Deficient	\$3,900,000.00
B8	5-14	London Road	Coast Fork Willamette	6.69	No	No	Functionally Obsolete	\$2,800,000.00
B9	5-6, 5-7	Noti Loop Road	Long Tom River	1.30	No	Yes	Functionally Obsolete	\$1,800,000.00
B10	5-14	Row River Road	Row River	2.09	Yes: ODOT Tier 3	No	Functionally Obsolete	\$3,500,000.00
B11	5-13	Saginaw Road East	Coast Fork Willamette	0.12	No	No	Structurally Deficient	\$1,200,000.00
B12	5-15	Sharps Creek Road	Sharps Creek	8.72	No	No	Functionally Obsolete	\$620,000.00
B13	5-15	Sharps Creek Road	Fairview Creek	11.89	No	No	Functionally Obsolete	\$1,100,000.00
B14	5-7, 5-8	Templeton Road	Bear Creek	0.98	No	No	Structurally Deficient	\$770,000.00

Fig. 5-5

# DEFICIENCIES AND IMPROVEMENTS SUBAREA 1

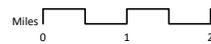


**Legend**

CATEGORY

- County
- County Future Study/Project
- ODOT
- ODOT Future Study/Project
- Urban Growth Boundary
- City Limits
- County Limits
- Siuslaw National Forest
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project

Scale: 1:82,000



## Subarea 1

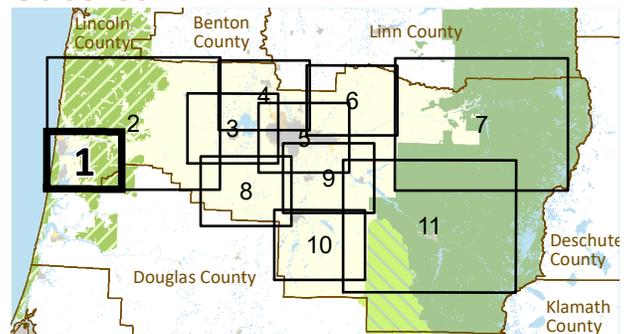
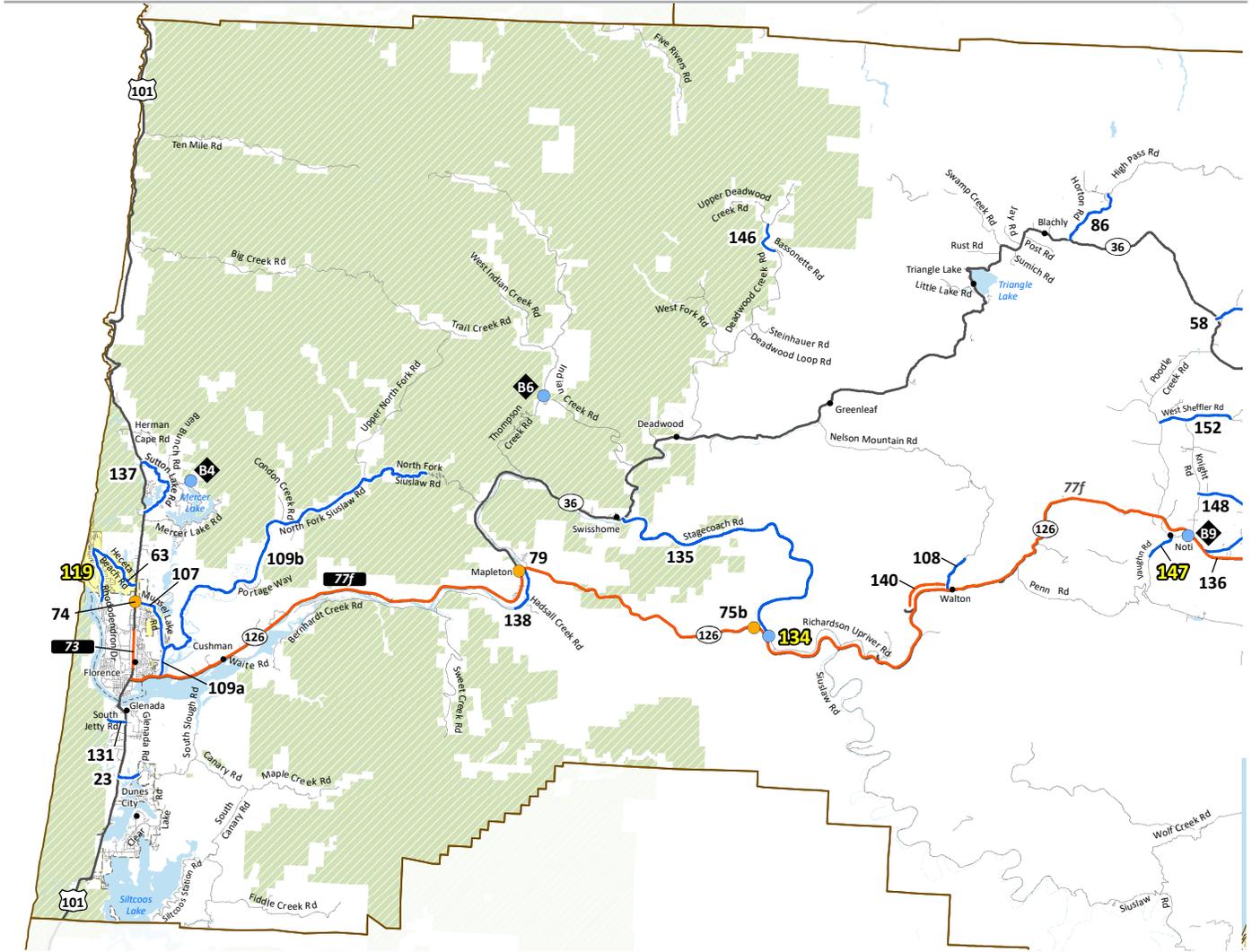


Fig. 5-6

# DEFICIENCIES AND IMPROVEMENTS SUBAREA 2

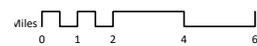


**Legend**

CATEGORY

- County
- - - County Future Study/Project
- ODOT
- - - ODOT Future Study/Project
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project
- Urban Growth Boundary
- City Limits
- County Limits
- Siuslaw National Forest

Scale: 1:190,000



Subarea 2

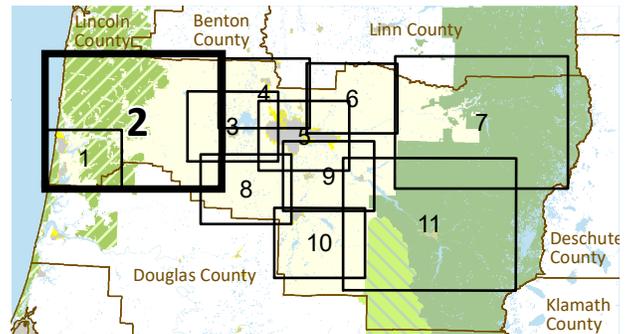
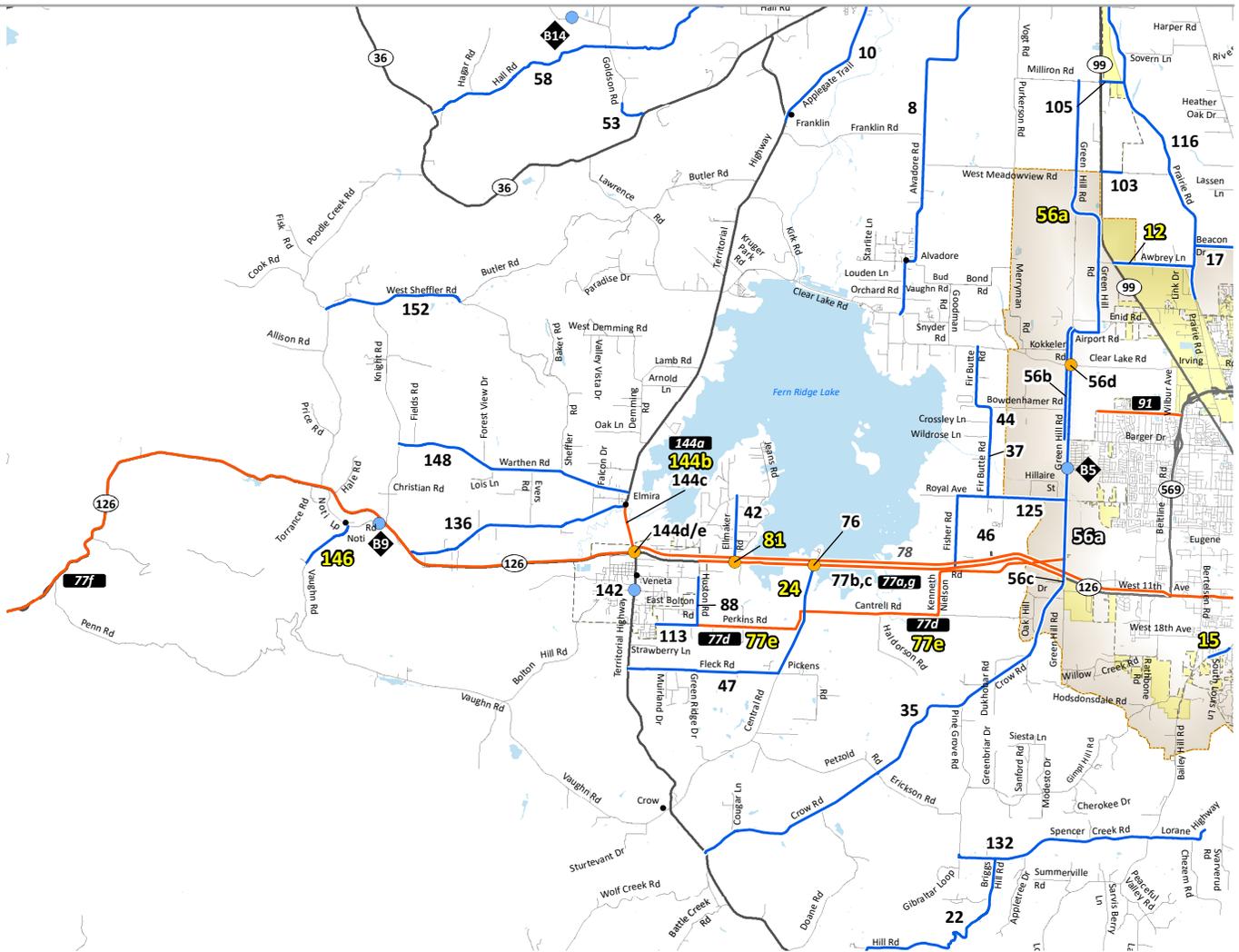


Fig. 5-7

# DEFICIENCIES AND IMPROVEMENTS SUBAREA 3

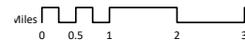


**Legend**

CATEGORY

- County
- County Future Study/Project
- ODOT
- ODOT Future Study/Project
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project
- Metropolitan Planning Area
- Urban Growth Boundary
- City Limits
- County Limits

scale: 1:100,000



## Subarea 3

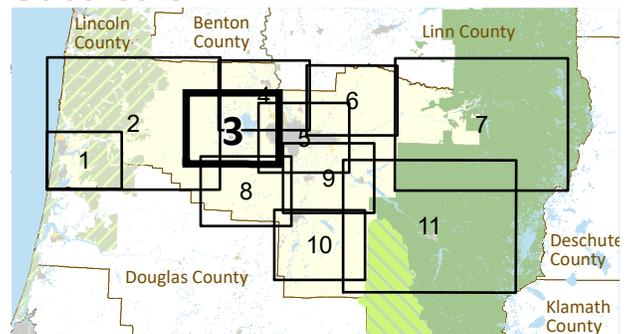
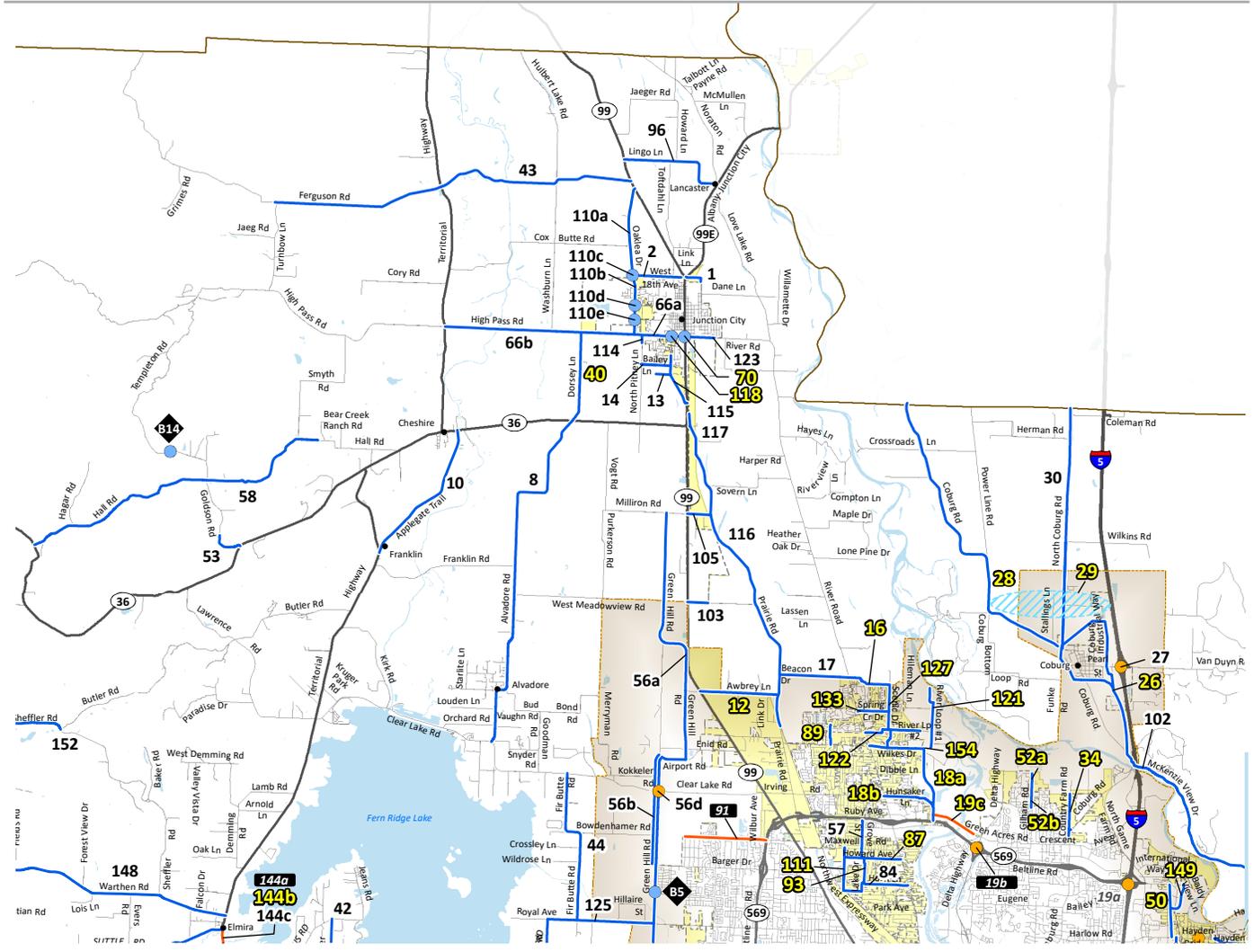


Fig. 5-8  
**DEFICIENCIES AND IMPROVEMENTS SUBAREA 4**

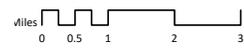


**Legend**

CATEGORY

- County
- County Future Study/Project
- ODOT
- ODOT Future Study/Project
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project
- Future Study Needed to Identify
- Metropolitan Planning Area
- Urban Growth Boundary
- City Limits

Scale: 1:100,000



**Subarea 4**

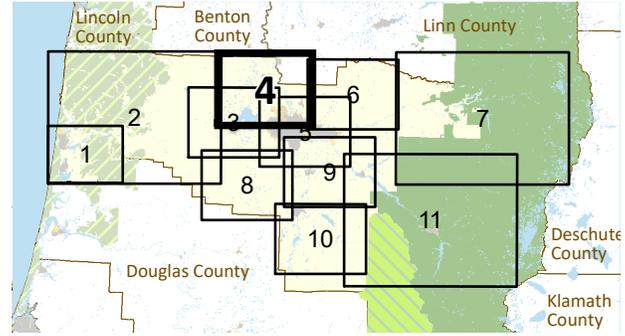
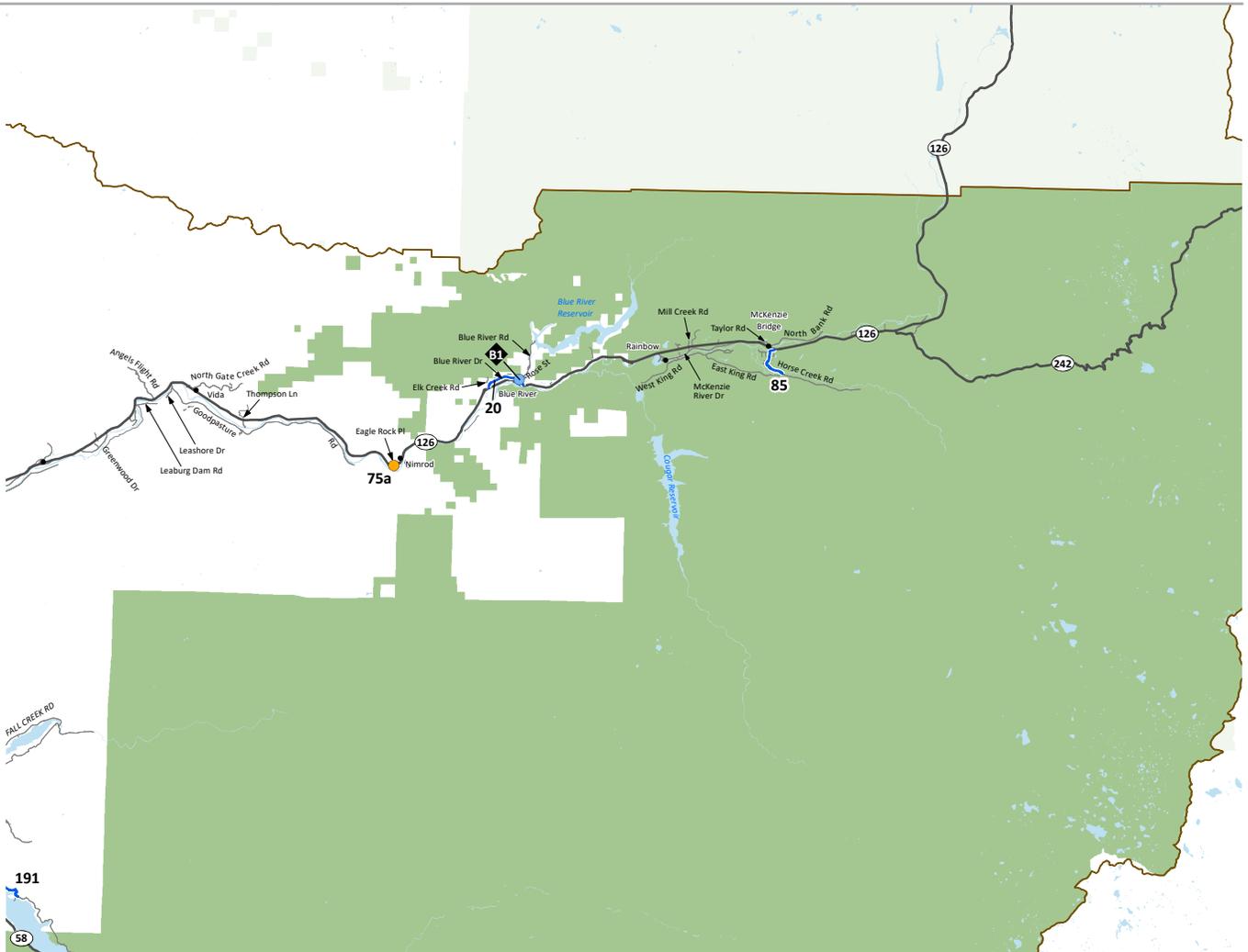






Fig. 5-11

# DEFICIENCIES AND IMPROVEMENTS SUBAREA 7

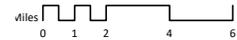


**Legend**

CATEGORY

- County
- County Future Study/Project
- ODOT
- ODOT Future Study/Project
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project
- Urban Growth Boundary
- City Limits
- County Limits
- Willamette National Forest

Scale: 1:190,000



Subarea 7

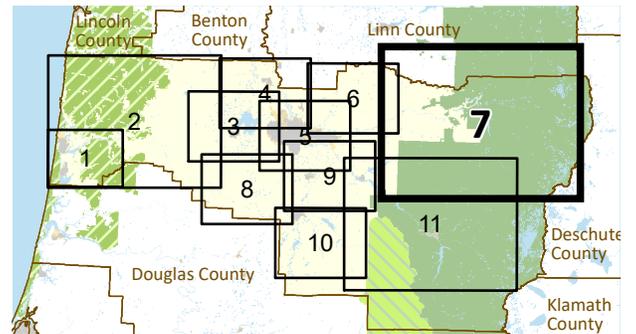
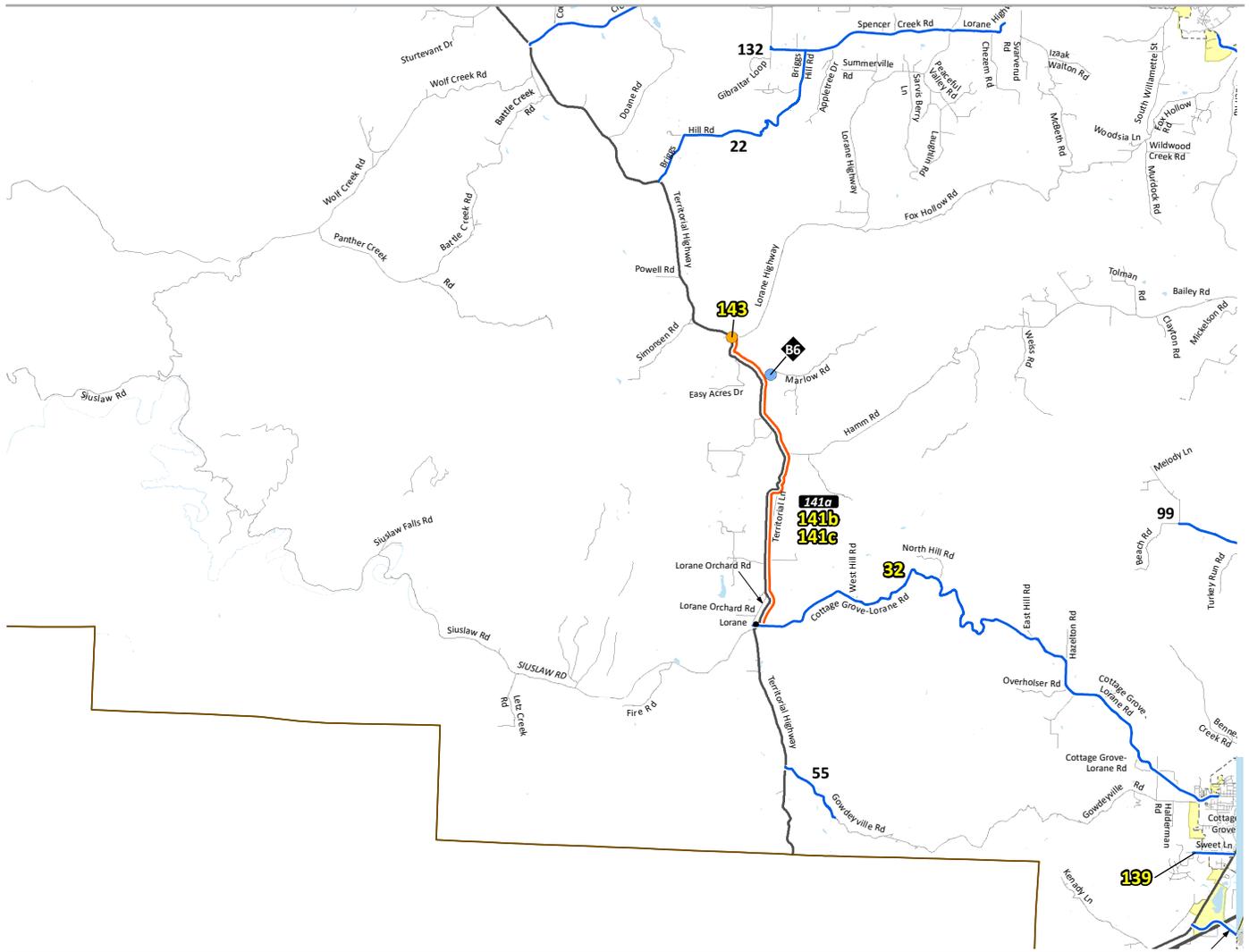


Fig. 5-12  
**DEFICIENCIES AND IMPROVEMENTS SUBAREA 8**

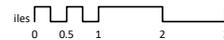


**Legend**

CATEGORY

- County
- County Future Study/Project
- ODOT
- ODOT Future Study/Project
- XX Illustrative Project
- XXX Financially Constrained Project
- XX Currently Funded Project
- Urban Growth Boundary
- City Limits
- County Limits
- City/Unincorporated Community

Scale: 1:100,000



**Subarea 8**

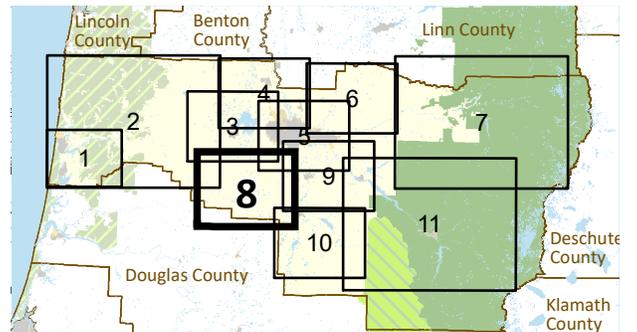
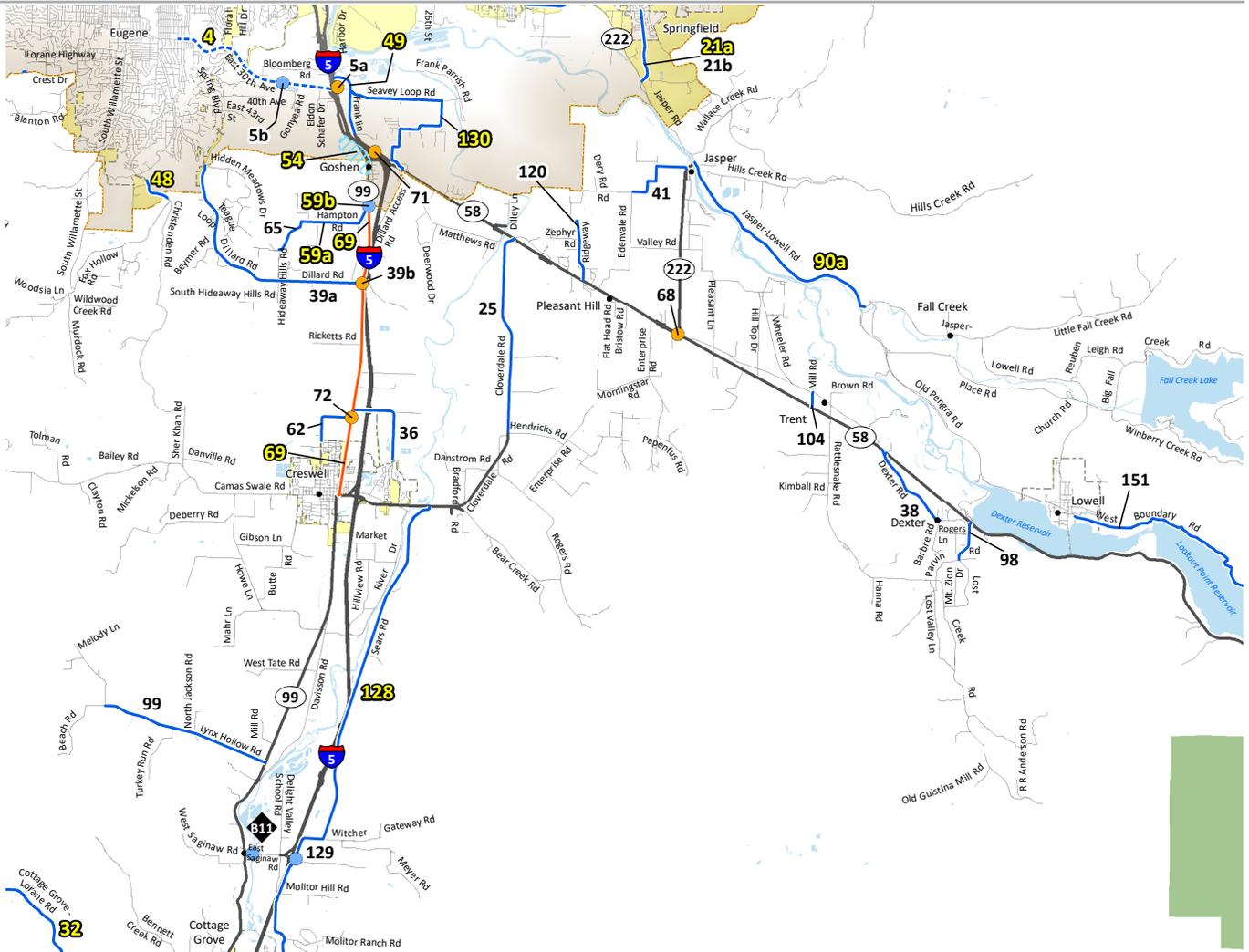


Fig. 5-13

# DEFICIENCIES AND IMPROVEMENTS SUBAREA 9

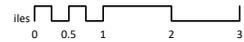


**Legend**

CATEGORY

- County
- - - County Future Study/Project
- ODOT
- - - ODOT Future Study/Project
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project
- XX Bridge Project
- XX Future Study Needed to Identify
- XX Metropolitan Planning Area
- XX Urban Growth Boundary

Scale: 1:100,000



Subarea 9

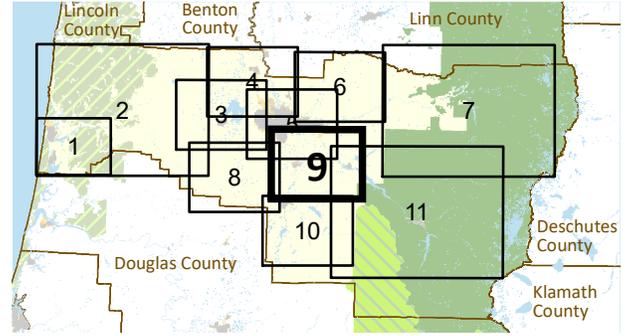
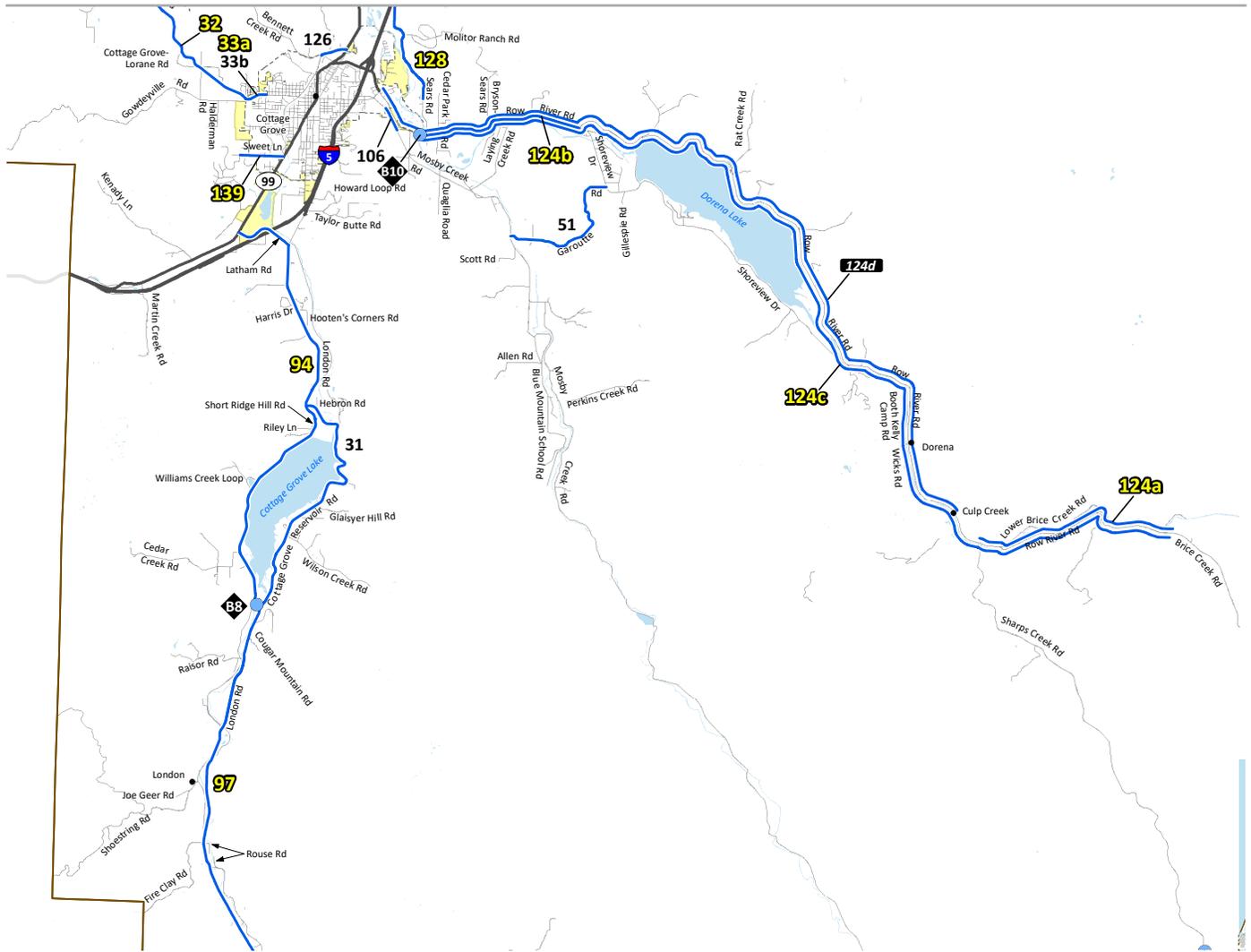


Fig. 5-14

# DEFICIENCIES AND IMPROVEMENTS SUBAREA 10

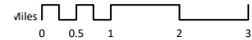


**Legend**

CATEGORY

- County
- - - County Future Study/Project
- ODOT
- - - ODOT Future Study/Project
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project
- Urban Growth Boundary
- City Limits
- County Limits
- City/Unincorporated Community

Scale: 1:100,000



## Subarea 10

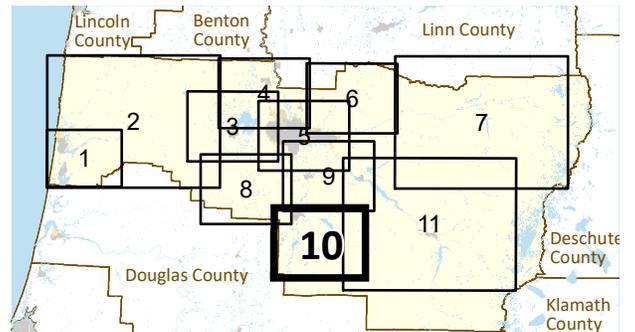
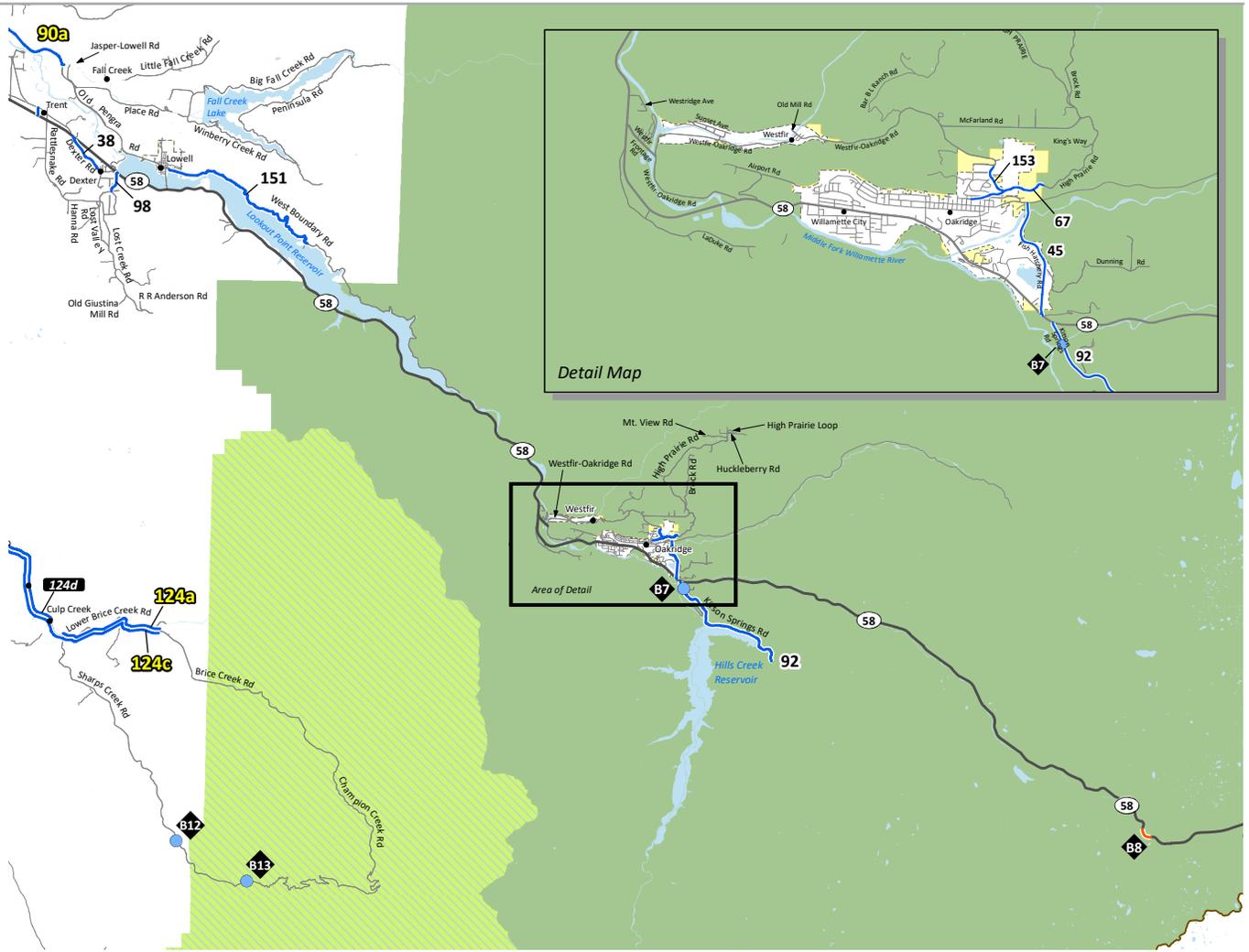


Fig. 5-15

# DEFICIENCIES AND IMPROVEMENTS SUBAREA 11

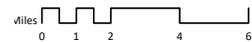


**Legend**

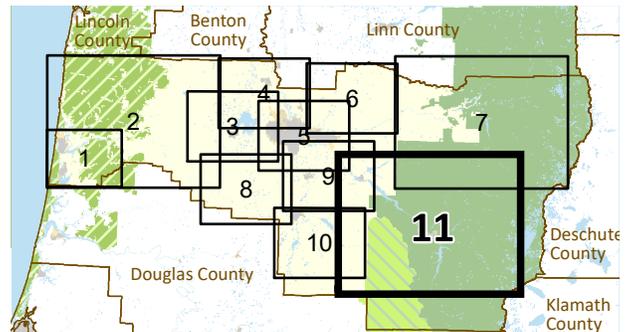
CATEGORY

- County
- County Future Study/Project
- ODOT
- ODOT Future Study/Project
- XX Illustrative Project
- XX Financially Constrained Project
- XX Currently Funded Project
- Urban Growth Boundary
- City Limits
- County Limits
- Willamette National Forest

Scale: 1:190,000



Subarea 11





## 6. STANDARDS

In addition to policies and projects, the TSP establishes standards to guide the design, operations, and management of the transportation system consistent with the County's overall goals and objectives. As discussed previously, the TSP policies guide future transportation decisions by Lane County and inform the development of code for broader applicability, such as to land use development. In the same way, the standards recommended herein will be translated into code language as necessary for applicability to land use development; otherwise, these standards are intended to guide Lane County operations. The standards recommended in this chapter include the following:

- » Functional Classifications
- » Freight Routes
- » Emergency Routes
- » Road Design
- » Access Spacing Standards
- » Operational Standards
- » Transportation System Management
- » Traffic Impact Analysis Guidelines
- » Tool Box

Lane County currently has standards on most of the above. Changes to existing standards resulting from this TSP will be carried out as code amendments to the extent they are applicable to land development. For example Traffic Impact Analyses (TIA) are specifically directed at land development as a tool to evaluate and mitigate impacts that a development may have on the transportation system. Lane County currently has codified TIA applicability provisions, which are proposed to be broadened in this TSP to add four more conditions to better account for safety relative to access connections (or driveways) and multi-modal improvements (such as bicycle and pedestrian facilities). These recommendations will be implemented in subsequent code amendments. Otherwise, most of the standards described in this Chapter are either to provide context for the reader about the multiple objectives of the transportation system (e.g. the spacing standards described herein are consistent with existing code standards) or, more specifically, to provide tools and guidance for Lane County (as described below). Most of the standards herein involve slight modifications to current standards for improved coordination and consistency with federal designations (i.e. the functional classifications) and the needs of the 12 cities within Lane County (e.g. translating Lane County's Volume-to-Capacity Ratios to City Level of Service Standards for equivalent system operations metrics.)

New tools for Lane County included in this Chapter are: freight routes, emergency routes, and a tool box. As discussed in this chapter, there are already freight and emergency routes designated at the state and federal levels that affect state highways and other roads within Lane County. Through this TSP, additional state highways and Lane County roads are recognized as being essential for meeting freight and emergency needs. These local designations will help Lane County prioritize investment decisions, including maintenance activities. Further, these additional designations are intended to leverage additional funding from state and federal sources. The tool box includes a variety of techniques that are known to be effective in addressing transportation needs, such as crosswalks and wayfinding signage, that are more detailed and context-sensitive than can be applied to specific projects within a 20-year TSP.

## Functional Classifications

The various functions of a roadway (especially relative to the competing objectives of mobility and land access) are classified in a way that helps balance different demands. As shown in the figure below, arterials are roadways that maximize mobility, whereas local roadways predominately provide access to adjacent lands. As implied by their name, collectors collect local traffic for connections to arterial roads; as such, they must balance both demands of access and mobility.

Functional classification is an important tool for managing the roadway network, such as establishing different design requirements. Changes to roadway classifications resulting from this TSP are predominantly to align with the federal classification system, which is used to determine federal aid funding eligibility.

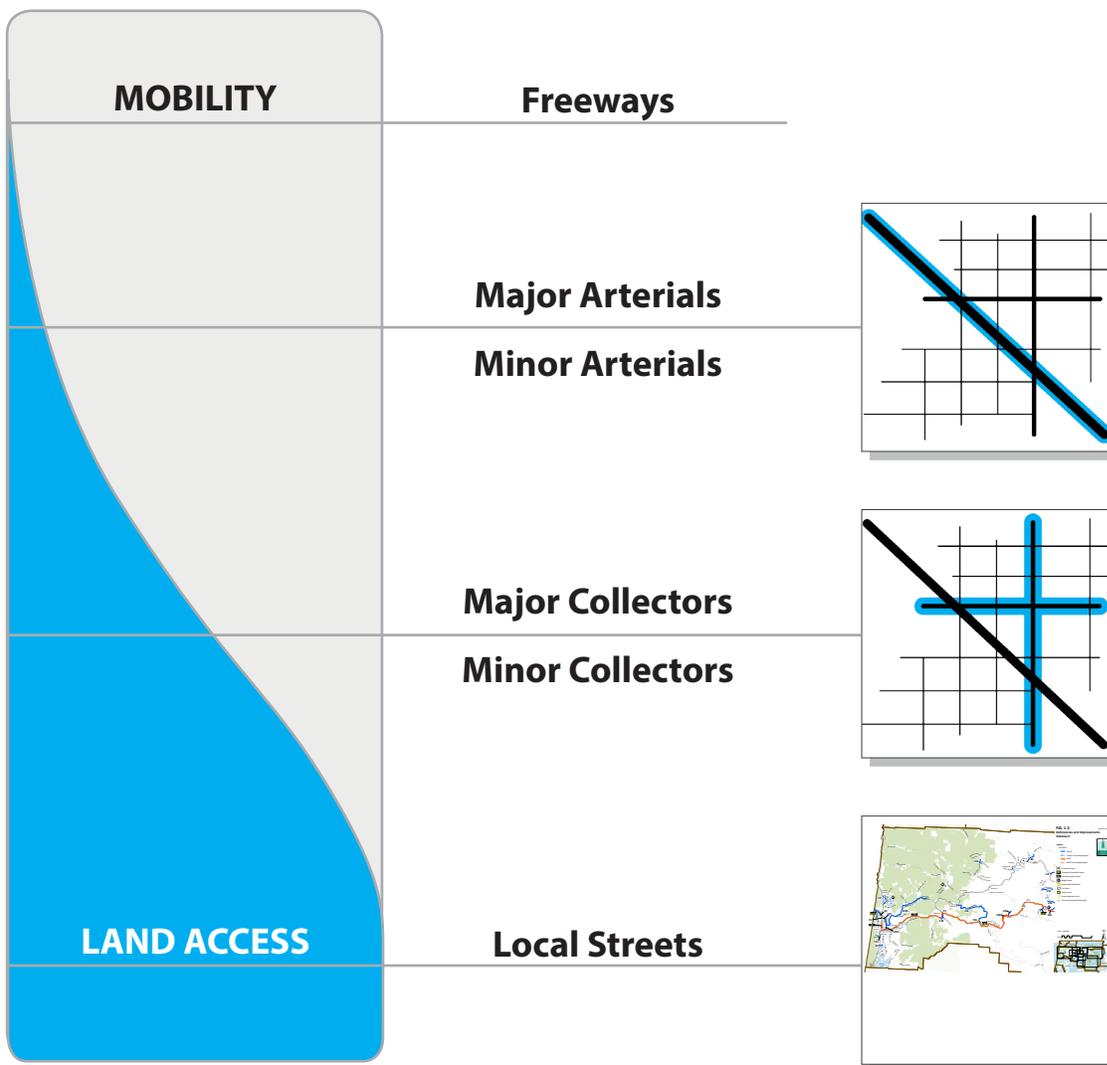
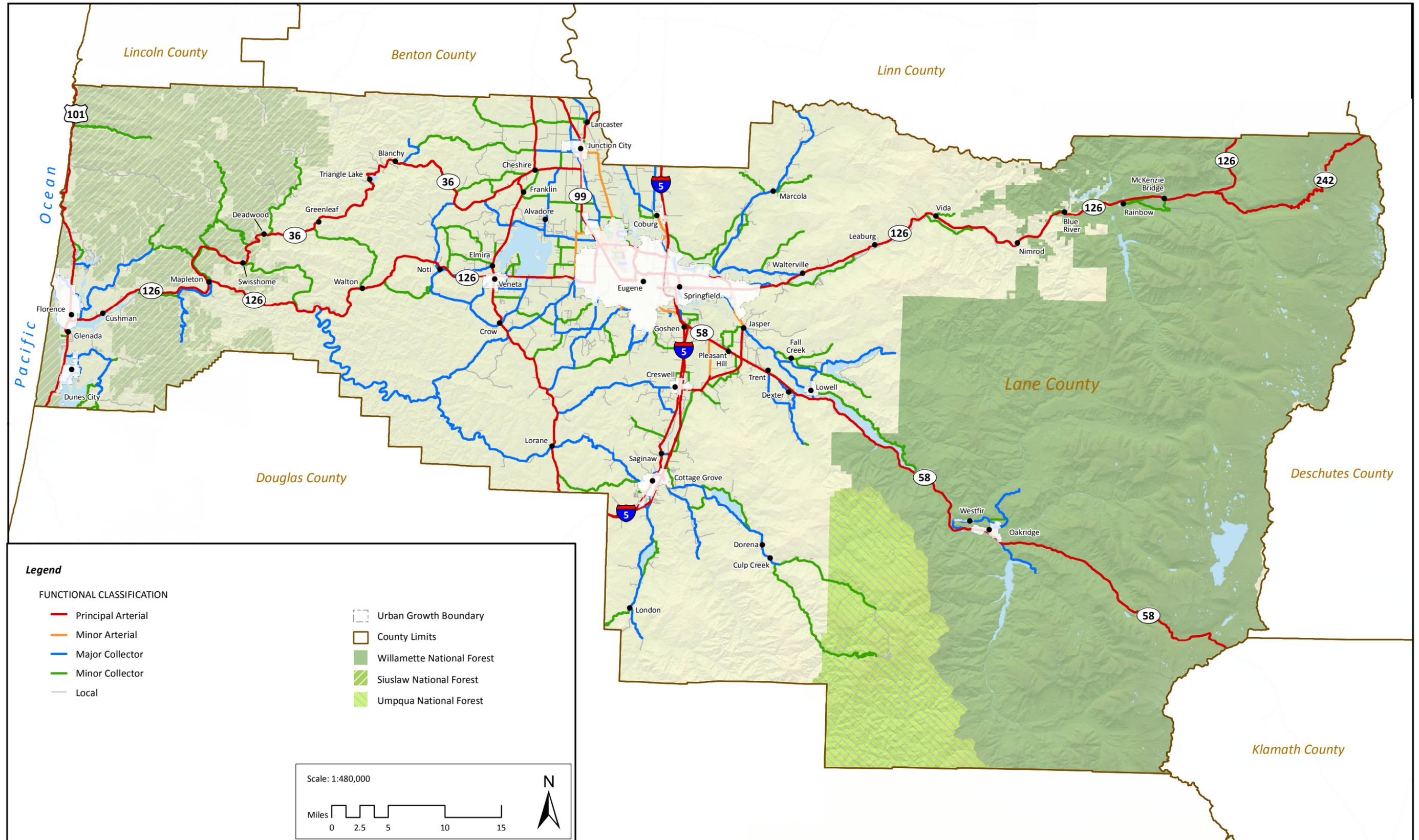


Fig. 6-1  
ROADWAY FUNCTIONAL CLASSIFICATIONS



## Routes

The National Highway System (NHS) was designated by Congress in 1995 and the federal government encourages states to focus federal highway funding on maintaining the NHS network in a state of good repair. The Federal Highway Administration (FHWA) has its own federal functional classification that overlaps with, but does not necessarily match Oregon's state classification system. For the purposes of this Plan, the affected roadways are identified as Freight Routes. Figure 6-2, however, identifies which Freight Routes are based on a Federal designation (as shown in blue) or a State designation (as shown in yellow). This TSP recommends additional roadways to be designated as Freight Routes, as shown in green on Figure 6-2.

### RESOURCE ROUTES

The additional Freight Routes recommended by Lane County through this TSP are in recognition of the roadways critical movement of truck freight between major destinations, such as ports and industrial areas, and existing Freight Routes. These roadways serve an important role in the county roadway network and should be designed and managed to safely accommodate the movement of goods. These routes would require a minimum of 12-foot travel lanes with five-foot shoulders and could be considered priority maintenance routes.

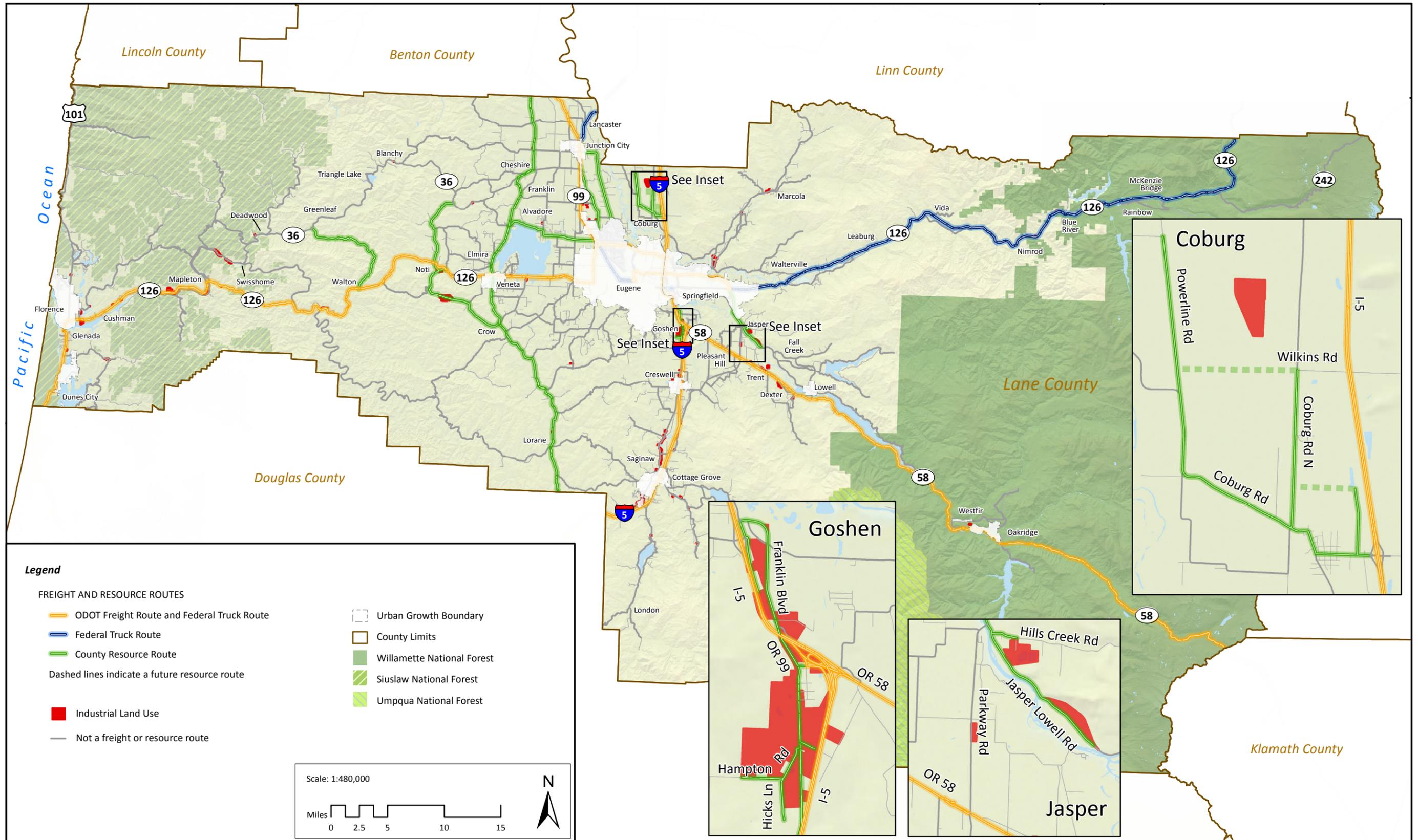
These designations affect existing roads. There are few new roads recommended in this TSP; and in those few instances, future studies are recommended to determine alternatives and alignments.

The need for additional freight connectivity north of the City of Coburg was identified as part of the City's TSP update process; during the co-adoption process, the Lane County Board of Commissioners directed Lane County staff to include this in the Lane County TSP to address needs for existing rural uses and roadways outside Coburg's urban growth boundary (UGB). This area is circled on Figure 5-8 and a future study is recommended in this TSP project list.

**Table 6-1. Freight Route Ownership & Designation**

Road Name	Owner	Designator
<b>STATE &amp; FEDERALLY DESIGNATED FREIGHT ROUTES</b>		
US 101 south of Florence	ODOT	ODOT
OR 126 from Eugene to Florence	ODOT	ODOT
OR 126 east of Eugene	ODOT	Federal
OR 99 north of Eugene	ODOT	ODOT
OR 99W North of Junction City	ODOT	ODOT
OR 99E North of Junction City	ODOT	Federal
Interstate 5	ODOT	ODOT
OR 58	ODOT	ODOT
<b>COUNTY DESIGNATED FREIGHT ROUTES</b>		
Nelson Mountain Road between OR 126 and OR 36	County	County
Noti Loops Road and Vaughn Road between OR 126 and Territorial Highway	County	County
Poodle Creek Road between OR 126 and OR 36	County	County
Territorial Highway	ODOT	County
Clear Lake Road east of Territorial Highway	County	County
Prairie Road between Eugene and Junction City	County	County
River Road between Eugene and Junction City	County	County
Coburg Road north of Coburg	County	County
Coburg Road North north of Coburg	County	County
Coburg Industrial Way north of Coburg	County	County
Wilkins Road north of Coburg	County	County
Powerline Road north of Coburg	County	County
OR 99 near Goshen	ODOT	County
College View Road near Goshen	County	County
Franklin Boulevard near Goshen	County	County
Hampton Road near Goshen	County	County
Hicks Lane near Goshen	County	County
Peebles Road near Goshen	County	County
Bob Straub Parkway south of Eugene	County	County
Jasper-Lowell Road near Jasper	County	County
Hills Creek Road near Jasper	County	County

Fig. 6-2  
FREIGHT ROUTES



## Emergency Routes

Figure 6-3 shows the existing ODOT-designated Lifeline Routes and proposed County-designated emergency transportation routes in Lane County, along with tsunami inundation areas and current bridge locations and conditions. These designations are described below. With regard to bridges, Lane County has been working with ODOT to prioritize upgrades to vulnerable bridges along these routes. This TSP contains a bridge projects list which includes these priority upgrades.

### Lifeline Routes

The Oregon Highway Plan (OHP) Goal 1, Policy 1E designates routes for emergency response in the event of an earthquake. Routes identified as Tier 1 are the most critical to ensuring a functioning statewide transportation network. A functioning Tier 1 lifeline system provides traffic flow through the state and to each region. Tier 2 lifeline routes provide additional connectivity and a level of redundancy with the Tier 1 lifeline system. The Tier 2 system allows for direct access to additional locations, increases traffic volume capacity, and provides alternate routes in high-population regions to accommodate potential outages on the Tier 1 system. Tier 3 lifeline routes provide another, more finely meshed level of connectivity and redundancy to support the Tier 1 and 2 systems.

ODOT has designated Interstate 5, OR 58, and US 101 south of OR 126 (Florence-Eugene Highway), as Tier 1 lifeline routes in Lane County. Interstate 105 from OR 99 to Interstate 5, OR 126 (Florence-Eugene Highway), OR 69 (Beltline Highway), and OR 99W-OR 99 from Interstate 105 to Benton County are designated Tier 2 lifeline routes. US 101, north of OR 126 (Florence-Eugene Highway) is designated as a Tier 3 route.

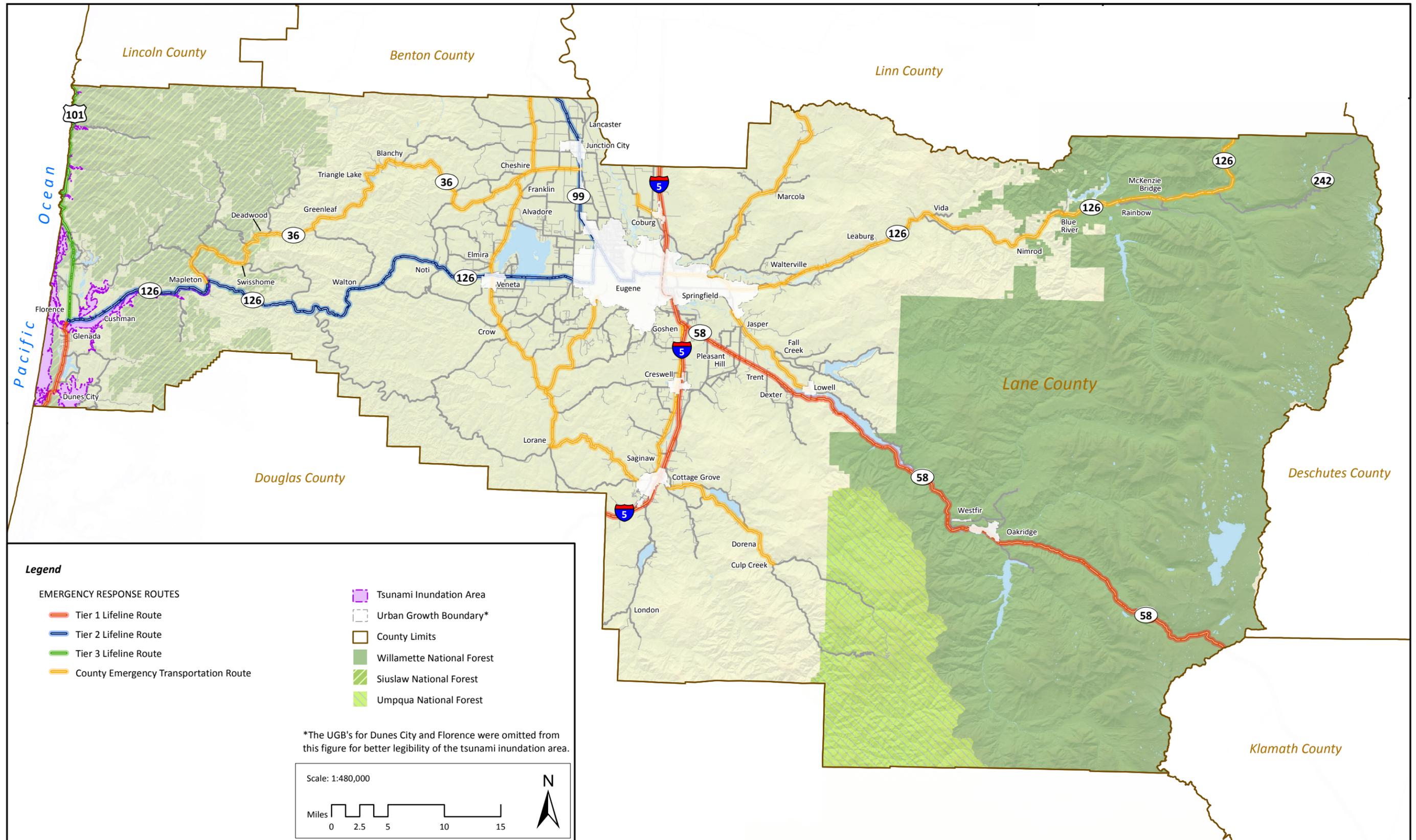
### Emergency Transportation Routes

The County designated Emergency Transportation Routes to facilitate the movement of response resources such as personnel, supplies, and equipment to heavily damaged areas during a major regional emergency or disaster. Designated routes in Lane County include OR 36, Territorial Highway from OR 36 to Cottage Grove-Lorane Road, Coburg Road from the Coburg UGB to Powerline Road, Lorane Highway from Territorial Highway to Bailey Hill Road, Bailey Hill Road from Lorane Highway to the Eugene UGB, Cottage Grove-Lorane Road from Territorial Highway to the Cottage Grove UGB, Row River Road from the Cottage Grove UGB to Shoreview Drive (north end) and from Shoreview Drive (south end) to Sharps Creek Road, Shoreview Drive from Row River Road (north intersection) to Row River Road (south intersection), OR 126 from the Springfield UGB to Horse Creek Road, Marcola Road from the Springfield UGB to Wendling Road, Jasper Road/Jasper-Lowell Road from the Springfield UGB to Pengra Road, and Pengra Road from Jasper Road/Jasper-Lowell Road to the Lowell UGB. The TSP would prioritize investments along these routes to preserve the function for emergency response.

### Tsunami Evacuation Routes

The Oregon Department of Geology and Mineral Industries has developed tsunami evacuation plans for coastal communities in Lane County. These plans detail evacuation routes, evacuations sites, shelters, and evacuation areas. Evacuation signs have been installed along roadways to indicate the direction inland or to higher ground. Roadways located in tsunami inundation areas include portions of OR 126 west of Mapleton, US 101, Ten Mile Road, Big Creek Road, North Fork Road, Sand Dunes Road, and Siltcoos Station Road.

Fig. 6-3  
EMERGENCY RESPONSE ROUTES



## Road Design

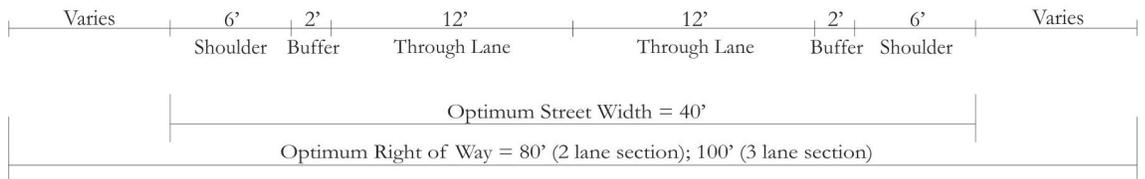
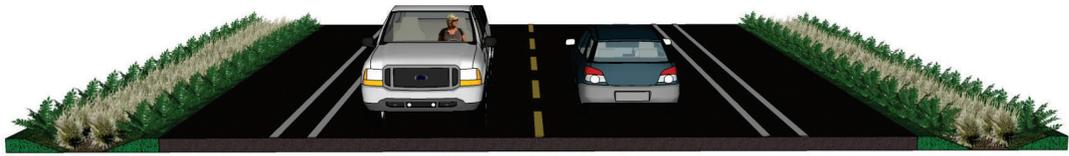
Figures 6-4 to 6-8 illustrate five typical standard cross-section types for County roadways outside of an UGB. The recommended road design standards are generally consistent with the current roadway design standards. In order to conform with the Federal Functional Classification System and maintain eligibility for federal aid, road design standards are now defined by functional classification rather than average daily traffic (ADT).

**Table 6-2. Typical Road Design Standards Outside of an UGB**

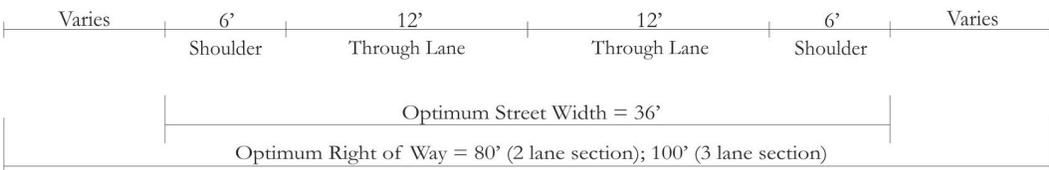
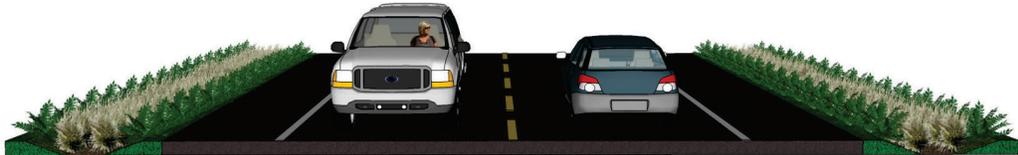
Functional Classification	Optimum ROW Width	Optimum Road Width	Through Lane	Buffer	Shoulder
Major Arterial	80 ft/100ft	40 ft	12 ft	2 ft	6 ft
Minor Arterial	80 ft/100ft	36 ft	12 ft	n/a	6 ft
Major Collector	80 ft/100ft	34 ft	11 ft	n/a	6 ft
Minor Collector	80 ft/100ft	30 ft	11 ft	n/a	4 ft
Local Road	50 ft	28 ft	10 ft	n/a	4 ft

**Table 6-3. Prevailing Road Design Standards for Other Conditions**

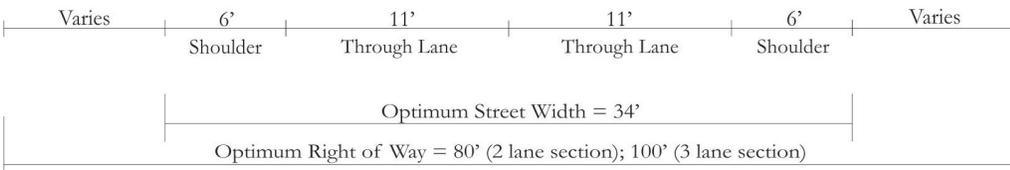
Condition	Prevailing Road Design Standards
Resource Routes Outside an UGB	County Resource Route Standards (12 ft through-lanes, 5 ft shoulders)
Bicycle Routes Outside an UGB	County Bicycle Route Standards (6ft shoulders)
Roads within an UGB	Relevant City's Roadway Design Standards
State Highways	Oregon State Highway Design Manual



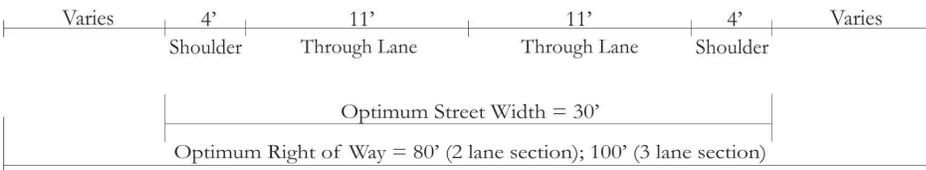
**Fig 6-4.**  
Major Arterial  
Typical Standard  
Cross-Section



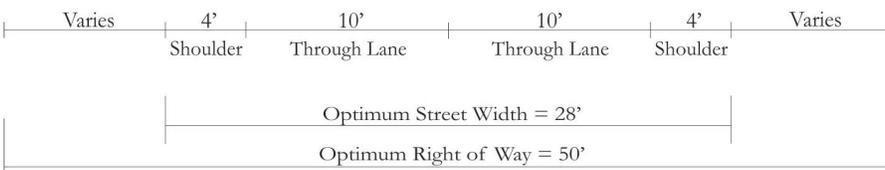
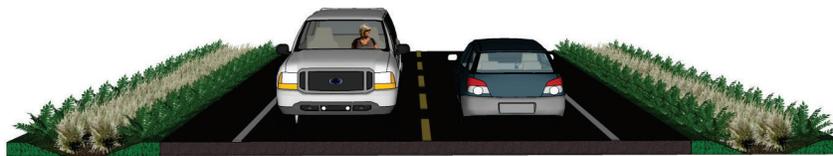
**Fig 6-5.**  
Minor Arterial  
Typical Standard  
Cross-Section



**Fig 6-6.**  
Major Collector  
Typical Standard  
Cross-Section



**Fig 6-7.**  
Minor Collector  
Typical Standard  
Cross-Section



**Fig 6-8.**  
Local Road  
Typical Standard  
Cross-Section

## Design Exception Guidelines

The construction of some roadways may be constrained by challenging topography or environmentally sensitive, historic, or developed areas. These roadways may require modified designs to allow for reasonable construction costs. Guidance for modifications to the standard designs is provided in Table 6-4.

**Table 6-4. Constrained Roadway Design Options**

Roadway	Terrain	State Highway	Major Arterial	Minor Arterial	Major Collector	Minor Collector	Local Roadway
Minimum Through Lane Width*	All	N/A	12 feet	11 feet	10 feet	10 feet	10 feet
Minimum Shoulder Width**	Level		6 feet	5 feet	5 feet	3 feet, if less than 3,000 ADT	3 feet, if less than 3,000 ADT
	Rolling	N/A	6 feet	5 feet	5 feet		
	Mountainous***		4 feet	4 feet	4 feet		

\* The minimum through lane width along a resource route should be maintained at 12 feet where feasible.

\*\* The minimum shoulder width along a resource route should be maintained at 5 feet where feasible.

\*\*\* Wider shoulders should be considered on uphill slopes where feasible.

## Walking & Biking Standards

As shown in Figures 6-4 to 6-8, the existing County roadway design standards include shoulders along all roadways. These shoulders act as both the bicycle facility and the pedestrian facility. Design standards apply to new construction, but roadway shoulders should also be considered as part of pavement preservation projects to improve the safety of all modes of transportation.

Newly constructed roadways outside an UGB should provide accommodations for people choosing to walk or bike via a six-foot paved shoulder with two foot buffer along principal arterial roadways, a six-foot paved shoulder along minor arterial and major collector roadways, and a four-foot paved shoulder along minor collector and local roadways. Roadways designated as County Bicycle Routes should provide 6-foot shoulders<sup>1</sup>. A county-wide Bicycle and Pedestrian Master Plan is identified as a need in the Lane County TSP project list. Designated bike routes identified as a result of this future plan must also adhere to cross-sectional standards for bicycle route facilities.

1 The existing designated bicycle routes for Lane County can be viewed at <http://www.lanecounty.org/departments/pw/transplanning/pages/lanecountybicyclemap.aspx>.

## Shared-Use Paths

Shared-use paths provide off-roadway facilities for walking and biking travel and, depending on location, can serve both recreational and transportation needs. Shared-use path surface types and widths vary by location, predominant use, and maintenance requirements. Hard surfaces are generally better for bicycle travel and ADA compliance requirements. Widths need to provide ample space for a mix of walking and biking modes and should be able to accommodate maintenance vehicles.

The TSP recommends that new shared-use paths constructed outside of an UGB be paved, 12 feet wide in areas with significant walking or biking demand, and 10 feet wide in areas with lower anticipated demand (see Figure 6-9). As noted in Lane Code, the County Engineer may vary the width of the typical paved shared-use path in constrained areas, such as steep, environmentally sensitive, historic, or previously developed areas.



**Fig 6-9.**  
**Major Arterial**  
**Typical Standard**  
**Cross-Section**

Varies	2'	10'-12'	2'	Varies
	Gravel Shoulder	Paved Path	Gravel Shoulder	
Optimum Right of Way = 24'				

## Access Spacing Standards

Access spacing is a broad set of techniques used to balance the need for efficient, safe, and timely travel with access to individual destinations. Appropriate access spacing management standards and techniques can reduce congestion and crash rates, and may lessen the need for construction of additional roadway capacity.

Minimum public roadway intersection and private access spacing standards for County-owned roadways outside of an UGB in Lane County are identified in Table 6-5. These are consistent with the current County spacing standards. New roadways or redeveloping properties should comply with these standards to the extent practical, as defined in Lane Code.

As the opportunity arises through redevelopment and as feasible, roadways not complying with these standards could be improved through strategies such as shared access points, access restrictions such as use of a median or channelization islands), or closure of unnecessary access points.

**Table 6-5. Minimum Public Roadway Intersection and Private Access Spacing Standards**

Posted Speed or Travel Speed*	Principal Arterial (ODOT)	Major Arterial	Minor Arterial	Major Collector	Minor Collector	Local Roadway
> 55 mph	See Oregon Highway Plan	700 feet	475 feet	475 feet	325 feet	100 feet
50 mph		550 feet	475 feet	475 feet	325 feet	100 feet
40 & 45 mph		500 feet	400 feet	400 feet	325 feet	100 feet
30 & 35 mph		400 feet	275 feet	275 feet	220 feet	100 feet
< 25 mph		400 feet	200 feet	200 feet	150 feet	100 feet

Source: Lane Code, Section 15.138, Road and Driveway Approach Spacing Standards.

\*County staff shall determine the travel speed for roadways without a posted speed. An applicant for access may submit a speed study completed by an Oregon certified engineer or other professional with appropriate expertise, to be considered and approved by the County, if there is disagreement with the County speed determination.

### Other Conditions

Local agencies' adopted roadway and access spacing standards should apply to County-owned roadways within an UGB.

Spacing standards for state highways are determined by ODOT. ODOT spacing standards are defined in the Oregon Highway Plan, OAR 731-051, and ODOT's Highway Design Manual.

## Operational Standards

Operational standards provide a metric for assessing the impacts of new development on the existing transportation system and for identifying where capacity improvements may be needed. They are the basis for requiring the improvements needed to sustain the transportation system as growth and development occur. Two methods to gauge intersection operations include volume-to-capacity (v/c) ratios and level of service (LOS). Operational Standards apply only to the movement of vehicular traffic.

### Volume-to-capacity (v/c) ratio

A v/c ratio is a decimal representation between 0.00 and 1.00 of the proportion of capacity that is being used at a turn movement, approach leg, or intersection.

Ratio = Peak hour traffic volume / hourly capacity

A lower ratio indicates smooth operations and minimal delays. A ratio approaching 1.00 indicates increased congestion and reduced performance.

### Level of Service (LOS)

LOS is an A thru F “report card” rating based on the average delay experienced by vehicles at the intersection.

**LOS A, B, & C** Traffic moves without significant delays over periods of peak hour travel demand.

**LOS D and E** Progressively more delayed operating conditions.

**LOS F** Average vehicle delay is high, demand exceeds capacity, typically resulting in long queues and delays.

Modifying the adopted County operational standards is recommended as part of this TSP update. The TSP recommended changes include applying LOS as an additional metric (it is currently required as part of traffic impact analyses), and providing more consistency between the v/c ratio standards. In addition, it is recommended that operational standards should not apply to unsignalized intersection approaches serving 20 vehicles or fewer during the peak hour. These changes will be implemented as Lane Code amendments.

**Table 6-6. Operational Standards**

Intersection Type	Location	LOS min.	v/c max.
<b>Signalized, All-way Stop, or Roundabout Controlled Intersections</b>	Inside UGB	E	0.85
	Outside UGB	D	0.80 during average peak weekday hour*
<b>Two-way Stop and Yield Controlled Intersections</b> (more than 20 vehicles during the average peak weekday hour*)	Inside UGB	E	0.95
	Outside UGB	D	0.80
<b>Two-way Stop and Yield Controlled Intersections</b> (less than 20 vehicles during the average peak weekday hour*)	Mobility targets do not apply		
<b>State-owned Roadways</b>	Comply with the mobility targets included in the Oregon Highway Plan		
<b>City-owned Roadways</b>	Comply with the operational standards included in local TSPs or development codes if this doesn't result in a lesser degree of mobility.		
* Average peak weekday hour is typically, but not always, the evening peak period between 4 p.m. and 6 p.m. during the spring or fall			

**Alternative Mobility Targets (AMT)**

Three identified study intersections are expected to fail to meet current ODOT mobility targets under 2036 forecasted volumes and potential solutions are not expected to be completed by 2036 due to financial constraints. Based on the ODOT Region 2 documented methodology for developing AMTs, the final recommended AMTs are as follows.

**Table 6-7. Summary of Recommended AMTs**

Intersection	Existing OHP Mobility Target	Recommended Alternative Mobility Target
McVay Highway/30th Avenue	0.85 for 30 HV Conditions	v/c ≥ 1.0 for no more than 2 hour
Territorial Highway/OR 126	0.80 for 30 HV Conditions	0.80 using a PHF of 1.00
OR 99/Goshen Avenue	0.80 for 30 HV Conditions	v/c ≥ 1.0 for no more than 3 hours

## Transportation System Management

Transportation System Management (TSM) refers to strategies that contribute to using the roadway more efficiently typically through improved management and operations. Some examples of TSM infrastructure includes countermeasures from dedicated carpool lanes to technical Intelligent Transportation Infrastructure Systems (ITS) infrastructure such as travel time information signs, ramp meters, and coordinated signal timing.

Lane County has several regional ODOT-owned roadways and major County-owned roadways that could benefit from TSM infrastructure. Before future investments are made along these roadways, designs should be reviewed with County and ODOT staff to determine whether communications or other ITS infrastructure should be addressed as part of the roadway design/construction.

### State- and County-owned Roadways

- » I-5
- » I-205
- » US 101
- » OR 36
- » OR 58
- » OR 69
- » OR 126
- » OR 99W
- » OR 99E
- » McVay Highway
- » OR 99 Goshen-Divide
- » Springfield-Creswell Highway (OR 222)
- » Springfield Highway (OR 228)
- » Territorial Highway (OR 200)
- » Delta Highway

## Traffic Impact Analysis Guidelines

The County's Traffic Impact Analysis (TIA) guidelines implement Sections 660-012-0045(2)(b) and -0045(2) (e) of the State Transportation Planning Rule (TPR). These sections require the County to adopt mobility targets and a process to apply conditions to land use proposals in order to minimize impacts on and protect transportation facilities.

The County's development review process is designed to help achieve its goal of managing growth in a responsible and sustainable manner. The applicant is required to submit full and accurate information upon which County staff and elected officials can base decisions. A developer-submitted transportation study prepared by a Professional Engineer qualified in the traffic engineering field is a critical tool used by the County to assess the expected transportation system impacts associated with a proposed development and the long-term viability of the transportation system.

In addition to the triggers listed in Lane County Code, Section 15.697, the TIA triggers listed below are recommended. These TSP recommendations will be implemented as amendments to Lane County Code.

**Table 6-8. Additional Lane County TIA Triggers**

	Projected increase in trip generation of 50 or more trips outside an urban growth boundary, or 100 or more trips inside an urban growth boundary during either the AM or PM peak hour.
	Potential impact to roadways where congestion or safety problems have been previously identified.
	Changes in land use designation, or zoning designation.
	An increase in use of adjacent roadways by vehicles exceeding 26,000 pound gross vehicle weight.
	The location of an existing or proposed access driveway does not meet minimum spacing or sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles are likely to queue or hesitate at an approach or access connection, thereby creating a safety hazard.
	Potential impacts to pedestrian and bicycle routes, including, but not limited to school routes and multimodal roadway improvements identified in the TSP.
	Project development would increase intersection or driveway volumes by 25 peak hour vehicles trips or greater on roadways classified as minor collector, major collector, minor arterial or principal arterial.
	A TIA is required by ODOT pursuant with OAR 734-051.

## Toolbox

In acknowledgment that the scope of this TSP does not include many refined applications of transportation needs, such as local roads, transportation programs, or operations and maintenance, a sampling of transportation tools is provided below. This toolbox provides guidance to the County on various multi-modal tools that could be implemented as needs arise and when funding is available. Additionally, rural safety countermeasures were developed by ODOT as part of the ARTS<sup>2</sup> program and are included in the appendix for further guidance.

### Road Crossings

Roadways with high traffic volumes and/or speeds in areas with nearby transit stops, residential uses, schools, parks, shopping and employment destinations generally require consideration of enhanced road crossings. These crossings should include treatments such as marked crosswalks, high visibility crossings, and curb extensions to improve the safety and convenience of road crossings.

Blocks longer than 500 feet in urban and rural community areas should have mid-block pedestrian and bicycle access ways at spacing no more than 330 feet. Exceptions include where the connection is impractical due to inadequate sight distance, high vehicle travel speeds, or other factors that may prevent the crossing (as determined by the County).

### Bicycle, Pedestrian, and Motor Vehicle Improvement Tools

A variety of potential improvements are available to address the needs of the transportation system. These potential solutions can be used to improve biking, walking, and driving in Lane County, particularly in urban areas.

**Table 6-9. Bicycle, Pedestrian, and Motor Vehicle Improvement Tools**



#### Crosswalks

High-visibility markings, often consisting of a “zebra” striping pattern, can be effective at locations with high pedestrian crossing volumes, near schools, and/or areas where motorist awareness of pedestrian crossings may be poor.



2 The All Roads Transportation Safety (ARTS) Program is a safety program that addresses all public roads in the State of Oregon that utilize federal funds from the Highway Safety Improvement Program (HSIP). ARTS's data-driven approach uses crash data, risk factors, and other supported methods to identify the best possible locations for achieving the greatest benefits.



### **Pedestrian Refuge Islands**

Refuge islands allow pedestrians to cross one segment of the road to a relatively safe location out of the travel lanes, and then continue across the next segment in a separate gap in traffic. Refuge islands are most appropriate at midblock crossings where right-of-way allows for adequate space between opposing travel lanes.



### **Sidewalks and Sidewalk Infill**

Good sidewalks are continuous, accessible to everyone, provide adequate travel width and feel safe. Sidewalks can provide social spaces for people to interact and contribute to quality of place. Completing sidewalk gaps improves the connectivity of the pedestrian network. Sidewalk gap infill should be prioritized in higher demand areas. Sidewalk infill can often be addressed as frontage improvements when land develops or redevelops.



### **Curb Extensions**

Curb extensions reduce the pedestrian crossing distance and improve motorists' visibility of pedestrians waiting to cross the road. Curb extensions can also serve as good locations for bike parking, benches, public art, and other streetscape features. Curb extensions are most appropriate where travel lanes are excessively wide, or where on-street parking is provided.



### **Rectangular Rapid Flashing Beacon (RRFB)**

The RRFB is designed to encourage greater motorist compliance at crosswalks. The RRFB is a rectangular shaped lightbar with two high intensity LED lighthoods that flash in a wig-wag flickering pattern. The lights are installed below the pedestrian crosswalk sign (located on each side of the road near the crosswalk button) and are activated when a pedestrian pushes the crosswalk button. RRFBs are most applicable at midblock locations when pedestrians must cross multi-lane roadways, near schools, at locations with pedestrian safety issues, and at locations where pedestrian visibility is restricted.





### Bike Lanes

Designated exclusively for bicycle travel, bike lanes are separated from vehicle travel lanes with striping and also include pavement stencils. Bike lanes are typically recommended along arterials and collectors, especially for roadways with high vehicle volumes and speeds. Right-of-way often constrains quick installation of bike lanes and can often lead to trade-offs with parking availability.



### Share the Road Signage

'Share the Road' signage can be used to raise awareness and legitimize the presence of bicycles on the roadways. This signage is applicable to roadways where bike lanes are not necessarily appropriate (e.g., roadways with low vehicle volumes and speeds). 'Share the Road' signage can be used to supplement shared lane markings.



### Shared Lane Marking

Shared-lane markings or "sharrows" are designed to inform motorists to expect cyclists in the travel lane and to inform cyclists that they should be in the travel lane and away from parked cars. On hilly routes that do not have room to accommodate bike lanes in both directions, uphill bike lane and downhill shared lane markings can be used. Shared lane markings should not be used on facilities where vehicle speeds are significantly greater than bicyclist speeds. Roads with under 3,000 vehicles per day and speeds under 25 miles per hour are typically best suited for shared lane markings.



### Bicycle Boulevard/Neighborhood Greenway

Traffic calming can be used to optimize neighborhood streets for bicycle and pedestrian travel. Intersection improvements can be made to assist bicyclists at difficult roadway crossings. A roadway should only be converted to a bicycle boulevard where it is appropriate to discourage through-motor vehicle traffic. Bicycle boulevards work well when a parallel route is available to motorists.





### Shared-use paths

Shared-use paths can provide a desirable facility particularly for novice riders, recreational trips, and cyclists of all skill levels preferring separation from traffic. Facilities may be constructed adjacent to roads, through parks, or along linear corridors such as active or abandoned railroad lines or waterways. Shared-use paths are a useful tool when both bicycle and pedestrian gaps are present, especially when right-of-way is constrained along one side of the roadway. When right-of-way is constrained, shared-use paths may provide a less impactful solution to providing full pedestrian and bicycle facilities than a typical cross-section with bike lanes and sidewalks. Lane County’s shared-use path design standards can be found in Figure 6-9.



### Wayfinding Signage and Pavement Markings

Directional signage indicating locations of destinations and travel time/distance to those destinations increases users’ comfort and accessibility to the pedestrian and bicycle systems. Pavement markings can be used on bicycle boulevards, which are low-traffic bike routes without bike lanes. Wayfinding signage also helps direct bicyclists to routes with comfortable bicycle facilities.



### Construct Turn Lanes to separate Turning Vehicles from Through Traffic

The provision of turn lanes (left or right) removes slowing or stopped vehicles attempting to turn off of a roadway from faster moving through traffic. This not only provides significant safety benefits, but also enhances system capacity.



### Bike Master Plan

The focuses of Bike Master Plans are to identify safe bicycle routes throughout the County, strengthen bicycle policies, and develop programs to support bicycling. Throughout the TSP process, several comments were made about the desire for a better bicycling system. These comments have been documented and will be implemented in a future Lane County Bike and Pedestrian Master Plan as funding becomes available.





### Modernization to meet Design Standards

The modernization of a roadway generally refers to upgrading elements to meet current design standards and capacity needs. Outdated roadway designs may not be serving present day demands due to insufficient number and width of lanes, poor geometry, or failure to accommodate a particular mode of travel (e.g., no bike lanes).



### Modify Intersection Approach Geometry

When the configuration of through and turn lanes at intersection approaches does not properly reflect the demand for these movements, the right of way at signalized intersections cannot be efficiently utilized. Also, poor alignment of opposing lanes or mismatched left turn treatments often require signal phasing that may not be the most effective option for maximizing through capacity. By reconfiguring the number and type of lanes approaching a signalized intersection, significant improvements in capacity may be achieved.



### Signal Timing Enhancements

The assignment of right of way to competing movements at an intersection plays a critical role in the overall capacity of that intersection and the roadway itself. Old signal timing plans may not be appropriately serving current demands or may not be designed to accommodate fluctuating demands throughout the day or week. Also, timing plans can be created based on specific priorities, such as giving preference to the mainline during peak travel periods. In some situations, signal timing may be adequate, but adjacent signals are not equipped to communicate with each other or are too close together to coordinate properly. Signal timing enhancements can be a quick and cheap solution to reducing congestion at signalized intersections.





### Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) come in many forms and have numerous applications. In general, they include any number of ways of collecting and conveying information regarding roadway operations to agency staff managing the facility or to motorists. This can allow both operators and motorists to make informed decisions based on real-time information, leading to quicker responses to incidents, diversion away from congestion, and increased efficiencies in roadway operation.



### Restrict Turning Movements at Approaches

The number of conflict points on a roadway introduced by a particular approach can be significantly reduced by restricting turn movements, such as allowing only right-in and right-out movements, allowing only right-in movements, or prohibiting only left-out movements (as shown in graphic). This treatment is most appropriate for developments with several accesses or where left turns out of the access are difficult due to high conflicting volumes. Restricting turning movements can also present the opportunity to install non-traversable medians.



### Intersection or Roadway Capacity Enhancements

Capacity improvements at intersections (adding turn lanes or changing traffic control) are considered system management measures and are generally preferred over widening an entire corridor. Roadway widening improvements should only be considered if all other strategies have been explored and considered insufficient.







## 7. THE PLANNING HORIZON...AND BEYOND

In addition to the investment decisions of the 2018 Lane County TSP, further issues will need to be explored through 2036 and beyond.

### The Improved Transportation System

Under the implementation of the Financially Constrained List, three key transportation characteristics will improve throughout the County:

**Safer Streets:** By adding turn lanes, widening shoulders, providing rumble strips, and improving intersection geometrics and traffic control, the road network in Lane County will be safer for everyone.

**More Multimodal Connections:** Projects and planning studies were identified in this Plan to address multimodal infrastructure needs to facilitate active transportation options throughout the County.

**Transportation Infrastructure for Future Development:** Several projects were identified to support future development in key growth areas in Lane County such as Goshen, Florence, and the Eugene-Springfield area.

### Additional Funding Sources

Based on the identified funding gap, the County may wish to consider expanding its funding options in order to fund more of the desired improvements in a timely manner.

New transportation funding options include local taxes, assessments, and charges, as well as regional, state, and federal appropriations, grants, and loans. Factors that constrain these resources, include the willingness of local leadership and the electorate to burden citizens and businesses with taxes and fees, the portion of available local funds dedicated or diverted to transportation issues from other competing County programs, and the availability of state and federal funds. The County must consider all opportunities for providing or enhancing funding for the transportation improvements included in the TSP.

### Conceptual Alignments

All proposed road extensions and shared-use paths included in this Plan are shown with conceptual alignments. These conceptual alignments represent a planning level illustration that connectivity enhancements are needed in these areas. Before construction of any of the projects can begin, more detailed surveys will need to be undertaken to identify hydrologic, topographic or other geological constraints that could hinder the alignment of the planned improvements. Final alignments will be identified after these surveys have been completed. All projects that are located on State facilities will require ODOT approval and will be subject to the design criteria in the state's Highway Design Manual.

## Jurisdictional Transfers

The roadways within Lane County are not entirely under Lane County's jurisdiction. ODOT has many highways through Lane County and most of the roads within UGBs are under the respective City's jurisdiction. However, Lane County also has several roads not only within UGBs, but within city limits. Ultimately, all Lane County roads within city UGBs will be transferred to the respective cities. The transfer process is intended to better align operations and maintenance with the function of the roadway. Lane County roads are built for the rural environment. Transferring jurisdiction is a complex process because many cities expect the roadways to be built to urban standards first, which is a significant cost that Lane County is not always able to assume.

This TSP includes policies and standards to facilitate jurisdictional transfer. Specifically, Goal 8 Coordination includes policies to defer to cities for design standards within their UGBs and to develop criteria with cities and ODOT for jurisdictional transfers. The TSP does not define those criteria, as those will be subject to intergovernmental agreements with each agency.

As for ODOT facilities, the Oregon Highway Plan, Policy 2C sets forth ODOT's policies on transferring roadway ownership from ODOT to a local government and vice versa. The policy recognizes the need to "rationalize and simplify management responsibilities" and to "increase efficiency in operation and maintenance" of roadway segments and corridors. The process for transferring jurisdiction is described in ODOT procedural memo ROW 10-01-01.