



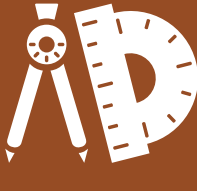
# KLAMATH COUNTY TRANSPORTATION SYSTEM PLAN

## EXECUTIVE SUMMARY

### What is a transportation system plan (TSP)?

A TSP is a long-range planning document that guides the County's investments in its transportation system. Its purpose is to ensure that over the next 20 years, people can continue to safely and reliably get to work, school, shopping, and recreation.

### Projects, Programs, Policies, & Studies in a TSP May Include

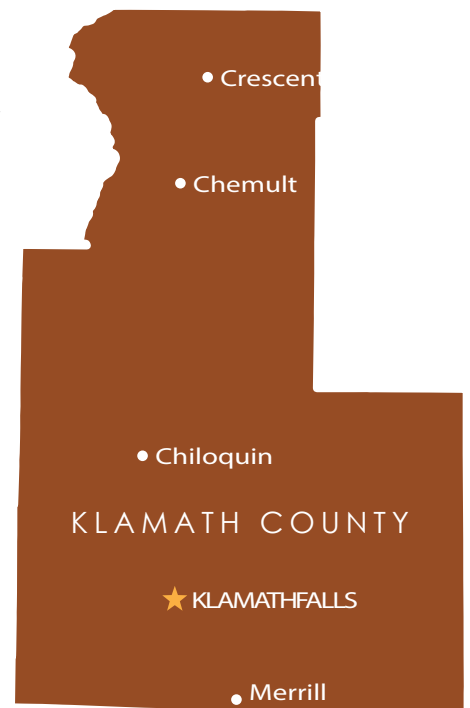
				
<b>Determining</b> needed transportation improvements	<b>Improving</b> roads and pedestrian and/or bicycle paths	<b>Constructing</b> new roads or pedestrian and/or bicycle paths	<b>Updating</b> roadway design standards	<b>Identifying</b> strategies to fund transportation projects and operations

### What geographic area does the TSP cover?

The TSP is primarily rural in nature and serves all regions of the County outside of the Klamath Falls, Chiloquin, Merrill, and Malin urban growth boundaries (UGBs). While County facilities within the Klamath Falls UGB are addressed separately in the Klamath Falls Urban Area TSP, they were considered in the County's TSP funding plan.

### Why does Klamath County need a TSP?

The State of Oregon requires in Oregon Statewide Planning Goal 12: Transportation that Klamath County have a local TSP. Development of the TSP was guided by Oregon Revised Statute (ORS) 197.712 and the Department of Land Conservation and Development (DLCD) administrative rule known as the Transportation Planning Rule (TPR, OAR 660-012-0060).



## Why was Klamath County's TSP updated in 2021?

The County's TSP was last adopted in 2010. Updating the TSP helps account for population and employment growth in the County; allows for removing planned projects that have been completed or are no longer needed; gives an opportunity to bolster transportation elements that may be lacking (e.g., bicycle, pedestrian, and transit); provides an opportunity to create a more equitable plan; and confirms consistency with applicable laws and adopted plans at the federal, state, and local levels.

## How is the TSP organized?

Chapter	Content
1	<b>Introduction</b> provides a brief overview of the planning context for the TSP, including background information, study area, update process, public engagement, and organization.
2	<b>Goals, Policies, and Evaluation Criteria</b> establishes the goals and objectives that express the County's long-range vision for the transportation system.
3	<b>Needs Assessment and Evaluation</b> identifies the transportation system needs and outlines the process used to develop the TSP's list of planned capital improvements and transportation policies and programs.
4	<b>Modal Plans and Projects</b> gives an overview of the recommended projects, programs, policies, and studies for the multimodal system and the costs estimated for construction.
5	<b>Transportation Funding and Implementation</b> summarizes transportation funding and implementation, including estimated revenue, cost of 20-year needs, and potential funding sources.

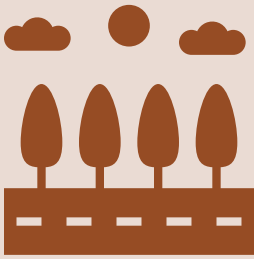
## What's in the works for the next 20 years?

The Roadway, Bicycle and Pedestrian, and Transit Plans in Chapter 4 make up the majority of TSP projects. Each plan has tables and figures with detailed project information. Projects, programs, policies, and studies fall into the following categories based on their likelihood of implementation:

TSP PROJECT	VISIONARY PROJECT
<ul style="list-style-type: none"> <li>Expected to occur within 20 years</li> </ul>	<ul style="list-style-type: none"> <li>Not likely to occur within 20 years</li> </ul>
<ul style="list-style-type: none"> <li>Includes a high-level cost estimate; likely requires additional funding and/or design work</li> </ul>	<ul style="list-style-type: none"> <li>Does not include a high-level cost estimate</li> </ul>
<ul style="list-style-type: none"> <li>Prioritized as high, medium, or low (based on need and implementation ease).*</li> </ul>	<ul style="list-style-type: none"> <li>Documented to capture longer-term needs; changing circumstances may warrant it sooner.</li> </ul>

\* High-level cost estimates specify amounts the County may be responsible to cover. Costs may change during project design phases and do not account for potential right-of-way acquisition and significant environmental impacts. TSP identifies potential funding partnerships to assist with programming and planning.

These categories give the County flexibility to accelerate or postpone projects based on how economic development and community needs evolve over the next 20 years. The County is not obligated to complete the project list, but listing projects in the TSP is important for future grant funding eligibility. Project design and permitting are subject to change, will ultimately be determined through design processes, and are contingent on County and/or Oregon Department of Transportation (ODOT) approval.



## ROADWAY PLAN

The County's Roadway Plan includes four elements: roadway, transportation systems management and operations (TSMO), safety, and bridges.

### Roadway Elements

Roadway elements include passing lane studies, corridor extension projects, and intersection evaluation projects. No roadway or intersection capacity deficiencies are anticipated within the study area by 2040; therefore, roadway projects focus on improving mobility and connectivity.

**Read more about [roadway projects](#):** TSP Table 4-4 (p 43) and Figure 4-4 (p 45).

### TSMO Elements

TSMO strategies help improve aspects of an existing roadway or intersection (e.g., performance, safety, reliability, etc.) without requiring major reconstruction. Intelligent Transportation Systems (ITS) is one TSMO strategy that can enhance traffic flow, maintenance activities, and safety with technology.

Informing drivers about incidents, weather conditions, and congestion with ITS infrastructure, such as variable message signs, is useful and cost-effective for rural areas, such as Klamath County. The TSP recommends that the County's ITS Plan be updated to incorporate new technologies.

**Read more about [TSMO projects](#):** TSP Table 4-5 (p 48), Figure 4-5 (p 50)

### Safety Elements

Safety element projects intended to reduce crash frequency, severity, and risk are included in the TSP. Project locations were identified by examining historic crash data, reviewing current site conditions, and/or based on safety concerns raised by the public. Several locations have near-, mid-, and/or long-term treatments to help with project implementation.

**Read more about [safety projects](#):** TSP Table 4-6 (p 54) and Figure 4-7 (p 58)

### Bridge Elements

Bridges are a critical element to the County's transportation system as they support motor vehicle transport, especially freight movement, and the overall economy in Klamath County, south central Oregon, and the entire state. The County owns and maintains 205 bridges, including those located in the UGBs.

**Read more about [bridge projects](#):** TSP Table 4-7 (p 61) and Figure 4-8 (p 63)



## BICYCLE & PEDESTRIAN PLAN

In rural Klamath County, people walking, biking, and rolling generally share the same facilities. Unlike urbanized areas—where people biking use designated lanes or wide shoulders and people walking or rolling use sidewalks—rural facilities for non-motorized travel usually consist of wide shoulders and/or multi-use paths. As in most rural areas, the needs of people walking, biking, and rolling are similar. Facilities that are deficient for one user are also deficient for the others, thus recommended improvements can benefit more than one type of user.

These projects intend to provide designated spaces in rural unincorporated areas for people to access local destinations and to provide continuity throughout the County for people to move more freely and access regional destinations. These facilities also serve as connections to available transit services, which help people reach destinations within and beyond the county. Since many of the projects include long stretches of roadway shoulder widening or shared use paths, which tend to be costly, most are visionary (not likely to occur within 20 years).

**Read more about bicycle and pedestrian projects:** TSP Table 4-8 (p 67), Table 4-9 (p 68), Figure 4-9 (p 69), and Figure 4-10 (p 71)



## TRANSIT PLAN

Providing high-quality, available, and reliable transit service supports the environment, economic development, and equity for all travelers in Klamath County. Public transit is an important option for people that cannot or choose not to drive or bike. Public transit can also complement walking, biking, and/or driving trips. Several transit providers operate in Klamath County as either intercounty/intercity services or as regional services that connect riders to adjacent counties, such as Deschutes and Jackson.

**Read more about transit projects and programs:** TSP Table 4-10 (p 74)

## How will TSP projects and programs be funded?



Chapter 5 summarizes current and potential new funding sources to help implement projects over the next 20 years. Transportation funding is uncertain, which creates challenges for estimating what is available for transportation projects and which projects or programs will receive funding. Therefore, the TSP includes a conservative list of capital construction projects, emphasizing lower-cost methods and increasing use of technology. Project implementation timing will depend on:

- County policies and available funding at federal, state, and/or local levels;
- Changes in local development priorities; and/or
- The formation of public-private or public-public partnerships with private business or other public agencies.

In total, rural and urban TSP Projects are estimated to cost the County up to **\$161 million over the next 20 years**. As summarized in the table below, this cost includes roadway, TSMO, safety, bicycle, pedestrian, and bridge improvements. Transit service program recommendations within Klamath County are estimated at approximately \$6 million; these are typically funded by transit-specific revenues but could involve partnerships with the County.

### County Contribution Costs by Priority

Project Type	High Priority	Medium Priority	Low Priority	Total
Roadway	\$ 100,000	\$ 25,000	-	\$ 125,000
TSMO	\$ 111,000	\$ 28,000	\$ 5,000	\$ 144,000
Safety	\$ 761,000	\$ 468,000	\$ 109,000	\$ 1,338,000
Pedestrian	\$ 271,000	\$ 652,000	\$ 370,000	\$ 1,293,000
Bicycle	-	\$ 26,570,000	\$ 46,660,000	\$ 73,230,000
Transit	-	-	-	-
Bridge	\$ 15,040,000	\$ 930,000	-	\$ 15,970,000
<b>Rural Total</b>	<b>\$ 16,283,000</b>	<b>\$ 28,673,000</b>	<b>\$ 47,144,000</b>	<b>\$ 92,100,000</b>
<b>Estimated Urban TSP Cost<sup>1</sup></b>	<b>\$9,575,000</b>	<b>\$23,910,000</b>	<b>\$35,310,000</b>	<b>\$68,795,000</b>
<b>Grand Total</b>	<b>\$25,858,000</b>	<b>\$52,573,000</b>	<b>\$81,809,000</b>	<b>\$160,895,000</b>

<sup>1</sup> The County's projects, programs, and studies within the Klamath Falls UGB are covered through the Klamath Falls Urban Area TSP. An estimate of these projects are included in the financial totals to provide a complete understanding of the County's financial outlook.

## Historical Revenue Sources

The primary funding sources for County transportation improvement projects have been Motor Vehicle Apportionment (MVA) and Secure Rural Schools (SRS) funds. The County also has a reserve fund that has been used for sizeable capital projects. The sum of available funds for the County varies by year based on fuel consumption and vehicle registrations. Currently, the County's average annual revenue amounts to approximately \$12 million per year.

In the past two years, all primary funding sources (MVA and SRS) have been used for operation and maintenance of existing County roadways. Right now, the County is spending \$2.7 million more a year than it is making, which requires that the reserve fund be used to cover the funding gap or other funding sources be obtained.

## Funding Projections And Gaps

Between historical spending and anticipated revenue (including Oregon House Bill 2017 increases), the County estimates a 20-year revenue of about \$212.6 million; this equates to about \$10 to \$11.5 million per year (including an annual decrease in SRS funds). This means that the County will continue to exceed its annual revenue with its current spending. TSP Projects will need to be funded by a depleting reserve fund or new sources.

## Potential Funding Sources

The TSP identifies five approaches to address the funding gap that the County can explore:

- 1 Evaluate current expenditures
- 2 Identify partnership opportunities
- 3 Identify additional grant opportunities
- 4 Identify public/private sponsorship opportunities
- 5 Raise local revenue through user fees and taxes

The County is operating at an approximately

**\$2.7M**  
**per year deficit.**

This requires the County to use the reserve fund or obtain other funding sources such as grants.

Chapter 5 details these approaches and identifies specific grants and fees that could fund TSP projects and programs.

The County can increase its local revenue through mechanisms such as user fees or taxes to fund roadway construction and operations; TSP Table 5-3 (p 87) provides options to consider. Some sources may have implications for other aspects of the County budget. Some could also be used as a local match to obtain greater federal or state funding, further stretching local dollars.

**Example:** a \$20/person annual fee applied to the County's unincorporated population (about 20,500 people) results in nearly \$2.05 million in revenue over a five-year period. If used as a 10% local match toward federal and state grants, the County could leverage \$20.5 million for TSP Projects.