

TECHNICAL MEMORANDUM #2

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From:	Julia Kuhn, PE, Ashleigh Ludwig, AICP, PE, and Alyssa Loveday, PE	
Project:	Jefferson County TSP Update	
Subject:	TM #2: Goals, Objectives, & Evaluation Criteria – Revised per ODOT Comments	

This memorandum documents the draft guiding principles, goals, objectives, and evaluation criteria for the Jefferson County Transportation System Plan (TSP) update. These are intended to reflect regional goals and values, support economic development activities, and enhance overall community quality of life. The TSP Update goals and objectives will be used to help guide the evaluation of multimodal projects and policies that the County may implement over the next twenty years.

This document is organized into three sections:

- *Background* – An overview of the goals and objectives from the adopted 2007 TSP as well as key transportation issues for consideration as part of the update.
- *Goals and Objectives* – Broad statements reflective of desired project outcomes and transportation system improvements that can support the land use and economic growth vision for the County. The objectives reflect the discrete elements that, taken as a whole, support and promote the goals.
- *Evaluation Criteria* – A methodology for identifying and assessing whether considered transportation alternatives and policies move in the direction of achieving the County's identified plan goals and objectives.

BACKGROUND

The TSP provides the County, its cities, and the Oregon Department of Transportation (ODOT) with guidance for planning, operating, funding, and improving a multimodal transportation system over the next twenty years. The TSP focuses on priority projects, policies, programs, and future studies to be undertaken by the County as well as a provides a framework for additional projects that could be implemented should funding become available. The TSP is intended to be flexible to respond to changing community needs and revenue sources. It also helps to articulate a clear vision among the

County, the cities of Madras,¹ Metolius, Culver, unincorporated communities, and ODOT on the transportation needs and priority projects.

The adopted TSP includes nine goals related to vehicular mobility, active transportation, safety, equity, environmental impacts, and financing. The existing goals served as a basis for developing the goals and objectives for the TSP update and are provided in Attachment A.

A number of policy and community changes have occurred since the 2007 adoption that will help shape the update process. Some key examples include:

- Increased population, continued economic development, and changes to commuting patterns throughout the Central Oregon region have placed additional demands on the County's transportation system.
- Freight traffic has continued to play an increasingly important role in both regional and statewide economic development, which places additional stress on the maintenance of key arterials and highways in the County.
- There is an increasing need to provide multimodal transportation options that support all users.
- State and local policies support increased prioritization for funding safety-related improvements for all users of the transportation system.
- Statewide transportation improvement funds are available for improving and/or expanding public transit options.
- Transportation related technology has improved that can inform user choices of routes, modes, and times to travel. The update will incorporate Transportation System Management and Operations (TSMO) strategies, including opportunities to use Intelligent Transportation Systems (ITS),² to improve the safety, efficiency and reliability of the multimodal transportation facilities within and through the County.

¹ The City of Madras maintains a TSP that guides development of the transportation network within the Madras UGB. Even so, those traveling to or from Madras often utilize the County transportation network. As such, stakeholders from Madras will be consulted as part of the Jefferson County TSP development process.

² Intelligent Transportation Systems (ITS) are systems that integrate advanced communication technologies into vehicles and transportation infrastructure. Examples may include a wide range of technologies, including dynamic road message signs, vehicle detection systems, automatic road enforcement, and variable speed limits.

GOALS AND OBJECTIVES

To support the TSP update, the following goals and objectives are intended to help plan for a safe, convenient, and economical multimodal transportation system and support continued economic development and growth in the County.

GOAL 1: MOBILITY AND CONNECTIVITY

Promote a multimodal transportation system that moves people and goods between rural communities and Madras, Metolius, Culver, Camp Sherman, Crooked River Ranch and other key destinations within the County as well as to the adjacent counties, Central Oregon, and the state.

Objectives

- 1.1 Identify the 20-year roadway system needs to accommodate developing or undeveloped areas.
- 1.2 Promote an integrated system of principal roadways and highways that move people and goods throughout the County, offers access to other areas of the region and state, and provides access to employment, commercial, and residential areas.
- 1.3 Collaborate with ODOT, the local communities and the railroad to prioritize safety improvements and maintenance needs.
- 1.4 Update transportation performance standards to ensure the efficient movement of people, goods, and commodities.
- 1.5 Update policies and standards that address street connectivity, spacing, and access management.
- 1.6 Balance local and state goals related to the highways that run through local communities.
- 1.7 Provide comfortable, convenient, and safe walking and cycling facilities within and between the local communities.
- 1.8 Support transit service to improve mobility within the County and connectivity to Bend, Redmond, Prineville, and other regional and state destinations.

GOAL 2: ECONOMIC DEVELOPMENT

Plan a transportation system that supports existing industry and encourages economic development in the County.

Objectives

- 2.1 Develop and promote a multi-modal transportation network that supports the existing industrial, data storage, agricultural, and tourism industries and supports economic diversification in the future.
- 2.2 Support efforts to improve multimodal connectivity to industrial lands, including the Madras airport and surrounding industrial lands.
- 2.3 Promote railroad freight service, when possible, through integration of road and rail transportation. Upgrade highways facilitating key freight routes in areas where rail is not an option.
- 2.4 Prioritize improving and maintaining the key freight routes of US97, US26, and US20 to promote movement of goods and services within the region.
- 2.5 Identify the 20-year roadway system needs to accommodate developing or undeveloped areas.
- 2.6 Improve coordination between the private sector and the County to better integrate the industrial areas with these future transportation system improvements.
- 2.7 Encourage recreational tourism by developing connections and promoting access to major recreational locations and destinations and key services in the County, including parks, reservoirs, and trail systems.
- 2.8 Encourage bicycle tourism by prioritizing and improving recreational routes through the County.

GOAL 3: SAFETY

Provide a transportation system that promotes the safety of current and future travel modes for all users.

Objectives

- 3.1 Use a data-driven process to reduce fatal and serious injury crashes.
- 3.2 Develop a multi-modal transportation system that incorporates safety and operational improvements for all users.
- 3.3 Promote a transportation system that balances the need for mobility for through traffic with access to the unincorporated communities.
- 3.4 Provide multimodal facilities that support safe, livable, and vibrant communities.
- 3.5 Ensure that transportation facilities are designed, constructed, and maintained consistent with their expected use, vehicular travel speeds, and volumes.

- 3.6 Reduce the number and severity of crashes.
- 3.7 Maintain and improve key emergency vehicle routes.
- 3.8 Promote railway and highway safety at and near railway intersections.
- 3.9 Update County access management and design standards for all county roads.
- 3.10 Evaluate opportunities for providing TSMO improvements that address safety and efficiency for all modes.
- 3.11 Consider traffic calming techniques to encourage appropriate use of local and residential roads and support the addition of pedestrian crossings along roads when appropriate.

GOAL 4: MULTIMODAL USERS

Provide a multimodal transportation system that supports a safe, efficient, and low-stress environment for walkers, cyclists and transit users as well as benefits the overall health and environment within the County.

Objectives

- 4.1 Promote walking and cycling, public transportation, micro mobility options, and rideshare/carpool programs through community awareness and education.
- 4.2 Support the development of a safe and efficient regional public transportation system, including development of mobility hubs and park-and-rides.
- 4.3 Promote an interconnected network of bicycle, pedestrian, and transit facilities throughout the County.
- 4.4 Add bicycle, pedestrian, and transit facilities when new roads are constructed and/or existing roads are reconstructed.
- 4.5 Promote a transportation system that includes comfortable and convenient pedestrian, bicycle and transit facilities to and from schools, community gathering places, grocery stores, and other services.
- 4.6 Develop plan elements that provide safe, multimodal connections between bicycle, pedestrian, transit, and vehicle facilities.
- 4.7 Develop a plan that supports a County-wide pedestrian, bicycle and public transportation system that interfaces with existing and planned facilities in the City of Madras, Culver, Metolius, Crooked River Ranch, and state and regional parks (i.e., The Cove Palisades).
- 4.8 Promote a transportation system that includes pedestrian, bicycle and public transportation connections to recreational and tourist destinations throughout the County.

- 4.9 Support widening roadway shoulders as part of maintenance and operational activities to provide for bicycle travel.

GOAL 5: ENVIRONMENT

Provide a transportation system that balances transportation services with the need to protect the environment.

Objectives

- 5.1 Develop a multi-modal transportation system that supports walking, cycling and public transportation as viable options, minimizes energy consumptions, and lessens air quality impacts.
- 5.2 Develop and upgrade transportation facilities to be consistent with the adopted Oregon Transportation Plan (OTP), the Oregon Highway Plan (OHP), and the Transportation Planning Rule (TPR).
- 5.3 Comply with applicable state and federal noise, air, water, and land quality regulations.
- 5.4 Ensure valuable soil, water, scenic, historic, and cultural resources are preserved within the County.
- 5.5 Evaluate and implement, where cost-effective, environmentally friendly materials and design approaches (e.g. storm water retention/treatment to protect waterways, solar infrastructure, impervious surfaces, etc.).
- 5.6 Consider the needs for safe wildlife passage as part of transportation facility design and construction.

GOAL 6: PLANNING AND FUNDING

Maintain the safety, physical integrity, and function of the County's multi-modal transportation network, consistent with Goal 6 of the OTP.

Objectives

- 6.1 Seek and maintain long-term funding stability for transportation maintenance projects.
- 6.2 Evaluate new, innovative funding sources for transportation improvements.
- 6.3 Ensure that the existing transportation network is conserved and enhanced through maintenance and preservation.
- 6.4 Identify areas where refinement plans or interim measures would increase the life of a facility or delay the need for improvements.

- 6.5 Review and revise where necessary local land use and development requirements to ensure that future land use decisions are consistent with the planned transportation system.
- 6.6 Continue to enhance relationships and improve coordination among Madras, Culver, Metolius, Cascades East Transit (CET), ODOT, and the Federal Highway Administration (FHWA).
 - a. Cooperate with ODOT in the implementation of the Statewide Transportation Improvement Program (STIP) and Statewide Transportation Improvement Funding (STIF);
 - b. Encourage the improvement of state highways;
 - c. Encourage planning coordination between Madras, Culver, Metolius, and the State by establishing standards for County roadways within urban growth boundaries, cooperative road improvement programs, funding alternatives, and schedules;
 - d. Work with applicable jurisdictions in establishing the right-of-way needed for new roads identified in the TSP;
 - e. Leverage federal and state highway funding programs;
 - f. Coordinate with and provide guidance to CET in programming public transportation funds received by Jefferson County; and,
 - g. Encourage citizen involvement in identifying and solving transportation issues.

GOAL 7: EQUITY

Provide access to the transportation system for all users.

Objectives

- 7.1 Provide transportation mode choices supportive of users of all abilities and ages.
- 7.2 Improve walking, cycling and transit options, especially to those areas serving specific sociodemographic characteristics such as poverty status, race/ethnicity, youth populations, elderly populations, and persons with disabilities.
- 7.3 Consider impacts to the transportation disadvantaged when assessing transportation infrastructure projects.

EVALUATION CRITERIA

A qualitative process based on the goals and objectives listed above will be used to evaluate the policies and alternatives identified during the TSP update. This evaluation process will provide qualitative ratings of each identified concept based on the following scale:

- Most Desirable: The concept addresses the criterion and/or makes substantial improvements in this criteria category.
- Moderately Desirable: The concept partially addresses the criterion and/or makes some improvements in this criteria category.
- No Effect: The criterion does not apply to the concept or the concept has no influence on the criteria.
- Least Desirable: This concept does not support the intent of and/or negatively impacts the criteria category.

At this level of screening, the qualitative comparison will be used to inform discussions about the benefits and tradeoffs of each identified concept. The specific evaluation measures to evaluate each criteria will be developed after confirmation of the goals and objectives with the project stakeholders. An example of how the criteria may be used are shown in Table 1.

Table 1. Example Evaluation Measures in Evaluation Matrix

Criteria Number	Evaluation Criteria	Evaluation Measures (Example)
Goal 3: Provide a transportation system that promotes the safety of current and future travel modes for all users.		
3.1	Reduce incidence and severity of motor vehicle crashes.	<p>To what extent does the alternative reduce the estimated frequency of fatal and serious injury crashes?</p> <p>Whenever possible, measure the crash modification factors (CMFs) from the Highway Safety Manual for estimating relative change in predicted crash frequency.</p>

The transportation alternatives identified through the technical analyses, discussions with the Project Advisory Committee (PAC) and the community at-large will be assessed using the criteria herein.

ATTACHMENT A:

2005 JEFFERSON COUNTY ADOPTED TSP GOALS AND OBJECTIVES

OBJECTIVES AND STRATEGIES

Statewide planning Goal 12 requires jurisdictions to provide and encourage a safe, convenient and economic transportation system. This section lists the objectives the County feels should be met in order to comply with that Goal, and strategies that will be used to meet the objectives. The strategies will be implemented through land use regulations contained in the Jefferson County Zoning Ordinance, road construction and access spacing standards contained in the Jefferson County Code, and specific transportation projects outlined in Sections 4 and 5. The objectives and strategies listed here are not intended to be mandatory approval criteria used in making land use decisions.

Objective 1: Provide a multi-modal transportation system that will accommodate traffic generated by increased development and population growth in the County without adversely impacting existing transportation facilities.

- Strategies:
- 1.1 Require a Traffic Impact Study when traffic from a proposed new development could impact the existing transportation system. Prohibit new development that would result in levels of travel that would reduce the Level of Service of a road or intersection below LOS C unless the developer will construct improvements to the transportation system that will maintain that Level of Service.
 - 1.2 Applications for Comprehensive Plan amendments, rezones or amendments to land use regulations will be reviewed to verify that the allowed land uses will not change the functional classification of a road unless the TSP will either be amended to modify the function, capacity or performance standards of the transportation facility, or will be amended to provide transportation facilities, improvements or services adequate to support the proposed land uses.

Objective 2: Protect the ability of state highways to move people and goods through and within the County in a safe manner with minimal impediments to traffic flow.

- 2.1 Work with ODOT to increase safety and facilitate the smooth movement of traffic on state highways by limiting new access points, closing some existing road access to the highway, adding passing lanes, and providing turn lanes at intersections.
- 2.2 Coordinate with the City of Madras and ODOT to designate detour routes for use during emergency closures of Highways 97 and 26.

Objective 3: Make safety a primary consideration in the development of new transportation facilities and new access points on existing roads, and in the maintenance or modification of existing facilities.

- Strategies:
- 3.1 Unsafe intersections with inadequate sight distance or skewed geometry should be closed or modified to provide right-angle intersections with adequate sight distance when roads are upgraded or new development will significantly increase the number of vehicles using the intersection.

- 3.2 Maintain spacing standards between access points on roads in order to increase safety and minimize conflicts with traffic flow. The spacing will be based on the functional classification of the road.
- 3.3 Zoning Ordinance regulations will continue to require the development and maintenance of clear-vision areas at intersections that will assure adequate sight distances.
- 3.4 Zoning Ordinance regulations will require adequate emergency vehicle access to all development.
- 3.5 Promote the identification and development of emergency evacuation routes in the event of wildfire hazard or other emergency.

Objective 4: Plan, develop and maintain an interconnected transportation system that will link people with communities and recreational areas.

- Strategies:
- 4.1 New subdivisions will be required to provide for the continuation of the existing road network where feasible or where needed to provide access to adjoining properties.
 - 4.2 Continue to classify roads in the County as arterials, collectors, and local roads based on their function and design, and adopt standards to maintain the road's capacity.
 - 4.3 Coordinate with cities in the planning, design and construction of roads to connect with the city's road network or that would serve future urban development.

Objective 5: Continue to protect and provide for alternative means of transportation.

- Strategies:
- 5.1 Zoning Ordinance regulations will protect present airport facilities from conflicting uses and development that would create hazards to aircraft.
 - 5.2 Encourage the preservation of rail corridors within the County. If improvements are planned, minimize conflicts with adjoining land uses and ensure that adequate vehicular mobility is provided.
 - 5.3 Paved shoulders will be required during the construction of new roads and the upgrading or maintenance of existing roads to provide for bicycle and pedestrian use.
 - 5.4 Support the Central Oregon Intergovernmental Council's efforts to meet the transportation needs of persons who are 60 and over, low income, and/or disabled, as outlined in the Jefferson County Coordinated Human Services Transportation Plan.

Objective 6: Find sources other than the County to cover the cost of transportation improvements.

- Strategies:
- 6.1 Developers and property owners served by the road will be responsible for the construction and ongoing maintenance of new public and private roads.
 - 6.2 Require developers to make off-site transportation improvements by upgrading substandard roads and intersections that will be impacted by a new subdivision or other development. Improvements that are required will be based on a direct nexus between the level of road impacts that will be caused by increased traffic generated by the development and the level of transportation facility improvements that are required.
 - 6.3 Urban Growth Boundary expansions should be accompanied by an agreement to transfer jurisdiction of County roads within the UGB to the city.