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Overview

This chapter provides a summary overview of the Benton County Transportation System Plan (TSP). It includes brief introductory information about the following: why a TSP is required by the State of Oregon, the planning process used to develop Benton County's TSP, transportation policy review and necessary changes, the TSP's key findings, achievements, and remaining issues. This Overview also includes a summary version of the Transportation Improvement Plan (TIP), which discusses funding and lists the recommended transportation improvements. References to more detailed information contained in the following chapters is also included.

Introduction

Welcome to the Benton County Transportation System Plan, or TSP. This document is the final result of a collaborative effort among the citizens of Benton County, County staff, and individuals at a number of state and local agencies who worked collectively to research and analyze the County's existing transportation system, and to recommend improvements to the system.

The TSP is required to provide a transportation system that accommodates the expected 20-year growth in population and employment resulting from implementation of the currently adopted Benton County comprehensive land use plan.

Background

In the fall of 1995, Benton County initiated a study of the area transportation system (the most recent Benton County Transportation Plan was completed in 1980). The County conducted this study to prepare a TSP in full compliance with State of Oregon Revised Statute 197.712 and the Oregon Land Conservation and Development Commission (LCDC) Administrative Rule known as the Transportation Planning Rule (TPR). *(The full text of the TPR appears in Appendix A.)*

This Statute and Rule require local jurisdictions to prepare a TSP as part of their overall Comprehensive Plan, in coordination with adjacent and affected agencies. Accordingly, this document provides the necessary elements for Benton County to adopt and implement its TSP. In addition, it provides the cities of Corvallis, Philomath, Albany, Monroe, and Adair, as

well as the Oregon Department of Transportation (ODOT), with the necessary recommendations for incorporation into their respective TSPs.

(For more information about how existing state and local plans, policies, and agencies affected the development of this TSP, see Chapter 2, "How the TSP was Developed.")

State Planning Requirements

The Transportation Planning Rule requires that the TSP contain the following elements:

- ◆ A Bicycle/Pedestrian Plan
- ◆ An Air, Rail, and Pipeline Plan
- ◆ A Transportation Finance Plan
- ◆ Policies and ordinances for implementing the Transportation System Plan

The TPR also requires that alternative transportation modes be given equal consideration during preparation of the TSP, and that reasonable effort be applied to the development and enhancement of these alternative modes to provide reasonable travel options for the public in development of the future transportation system. In addition, the TPR requires local jurisdictions to adopt land use and subdivision ordinance amendments to protect transportation facilities.

The Analysis and Planning Sequence

The TPR not only stipulates that modal plans be developed for roadway, bicycle, pedestrian, public transit, air, rail, and pipelines, but also provides the blueprint for how the analysis should be approached. It suggests the following sequence for the analysis of each mode:

- ◆ Inventory of the existing system
- ◆ Performance evaluation of the existing system
- ◆ Identification and consideration of mitigation measures
- ◆ Establishment of current needs
- ◆ Forecast of future (20-year) travel demand
- ◆ Performance evaluation of the future system
- ◆ Identification of alternative mitigation
- ◆ Selection of a preferred improvement plan
- ◆ Consideration of the financial feasibility

Therefore, the Benton County TSP follows this sequence for each of the modal plans contained in Chapters 3 through 6.

The Planning and Development Process

This TSP is the result of a long and thorough planning and development process during which County staff worked closely with the citizens of Benton County, members of a Task Force and a Technical Advisory Committee, and individuals at a number of state and local agencies.

At the beginning of the planning process, the Board of County Commissioners appointed individuals to serve on the Task Force and the Technical Advisory Committee. Guided by

Benton County staff, these two committees participated in and oversaw development of the TSP, which was accomplished in two primary phases.

During **Phase One**, the Task Force and the Technical Advisory Committee worked with consultants and staff to assemble the TSP Background Document, which contains descriptions, definitions, and analyses of each major transportation element within Benton County, existing transportation deficiencies, a forecast of future deficiencies, cost estimates, and more.

During **Phase Two**, project staff presented the information and findings contained in the Background Document to many community-based gatherings and interest groups to verify issues and findings, solicit input and comments, facilitate visioning and goal setting, and to evaluate and select preferred alternatives.

The resulting Benton County Transportation System Vision Statement is shown below:

**Benton County Transportation System
VISION STATEMENT**

The Benton County Transportation System seeks to preserve, protect, and promote the County's sustainability, livability, and economic vitality by:

- Providing choices of alternative travel modes
- Maximizing the efficiency of existing facilities
- Intertwining quality of life, land use, and transportation decision making

The Benton County Transportation System will provide equitably funded, safe, efficient, cost-effective mobility and accessibility to all County residents, businesses, and emergency services within and across County boundaries.

(For an in-depth description of the overall process used to develop the TSP, including goals, evaluation criteria, and the level of public involvement, see Chapter 2, "How the TSP was Developed.")

Key Findings

The combination of public feedback and technical analysis confirmed the following key findings:

- ◆ The majority of roadway congestion will occur on the state highway system.
- ◆ Limited new road construction to improve connectivity could allow the County road system to relieve some congestion.
- ◆ Even with improved connectivity and aggressive efforts to decrease dependence on automobile travel, U.S. 20 between Albany and Corvallis and U.S. 20/Highway 34 between Corvallis and Philomath will need to be widened to provide operational capacity that complies with state capacity standards for the next 20 years.

- ◆ Financial constraints will require the lowest-cost alternatives suitable for meeting the needs of the next 20 years and may require a compromise of the vision and/or goals.

Integration and Coordination of Multi-Modal Solutions

Future deficiencies will occur on many of Benton County's transportation systems if travel behavior remains relatively constant and nothing is done to improve the existing system. The majority of these deficiencies will occur on the state highway system, those elements of the roadway system County residents rely on most. Alternative modes are not adequately developed to offer reasonable options for most County residents and would not substantively relieve constrained highway sections. Multi-modal solutions are necessary to alleviate existing and avoid future and more significant constraints. A list of these solutions developed and evaluated with the public to address identified deficiencies appears later in this chapter.

Transportation Policy Review and Changes

The Benton County Comprehensive Plan (1982, reprinted 1989) includes the Transportation Element, which contains the general policies that support the overall objective of providing a balanced transportation system. Additional policy recommendations and enhancements to existing policy are necessary to comply with the TPR and to more clearly address standards in the TPR.

This TSP contains additions and enhancements to the County's transportation policies (*see Chapter 2*). Modal-specific policy information can be found in the corresponding chapters (*see Chapters 3 through 6*). In these chapters, the County's current transportation policies are listed for reference, followed by the proposed new policies. These proposed new policies will replace the current policies when approved.

Growth Management/Land Use Alternatives

The preferred alternative being recommended in the Benton County TSP uses modified land use strategies to achieve the goals and vision of the plan. Specifically, the land use strategies call for concentration of development in certain rural service centers and cities. These land use strategies have particular impact on existing County policies.

Transportation Improvement Plan (TIP)

The Transportation Improvement Plan (TIP) contains specific improvements needed over the next 20-year period at a total estimated cost \$120 million. In the following tables, the projects and corresponding costs have been prioritized in three timeframes, 0-5 years, 5-10 years, and 10-20 years. A list of the specific improvements appears following the tables.

TIP Funding Summary

The two tables below summarize the costs for implementing the TIP, first by general type of improvement and responsible jurisdiction, and then by timeframe. *(For more detailed information about costs and implementation timing on a project-by-project basis see **Table 7-1** in Chapter 7.)*

**Table 1-1
TIP Cost Summary By Category (\$1,000s)**

	Estimated Total Cost	City*	Federal/ State	County
BRIDGE REPLACEMENTS				
0-5 Year Bridge Replacement Costs	\$3,452		\$2,866	\$586
5-10 Year Bridge Replacement Costs	\$500	\$0	\$425	\$75
10-20 Year Bridge Replacement Costs	\$125		\$106	\$19
Bridge Replacement TOTAL	\$4,077	\$0	\$3,397	\$680
SAFETY REPLACEMENTS				
0-5 Year Safety Improvements Costs	\$1,015	\$110	\$300	\$605
5-10 Year Safety Improvements Costs	\$418	\$0	\$0	\$418
10-20 Year Safety Improvement Costs	\$720	\$135	\$450	\$135
Safety Improvements TOTAL	\$2,153	\$245	\$750	\$1,158
BIKEWAY IMPROVEMENTS				
0-5 Year Bikeway Improvement Costs	\$426	\$426	\$0	\$0
5-10 Year Bikeway Improvement Costs	\$5,869	\$0	\$0	\$5,869
10-20 Year Bikeway Improvement Costs	\$2,279	\$0	\$1,683	\$596
Bikeway Improvement TOTAL	\$8,574	\$426	\$1,683	\$6,465
LEVEL OF SERVICE (Volume-to-Capacity)/INCREASED CAPACITY IMPROVEMENTS				
0-5 Yr. Level of Service/Increased Cap.	\$4,720	\$0	\$0	\$4,720
5-10 Yr. Level of Service/Increased Cap.	\$14,441	\$204	\$12,682	\$1,555
10-20 Yr. Level of Service/Increased Cap.	\$56,770	\$0	\$53,040	\$3,730
Level of Service (V/C) TOTAL	\$75,931	\$204	\$65,722	\$10,005
PAVEMENT PRESERVATION				
0-5 Year Pavement Preservation Costs	\$11,611	\$0	\$6,611	\$5,000
5-10 Year Pavement Preservation Costs	\$5,000	\$0	\$0	\$5,000
10-20 Year Pavement Preservation Costs	\$10,000	\$0	\$0	\$10,000
Pavement Preservation TOTAL	\$26,611	\$0	\$6,611	\$20,000
TRANSIT IMPROVEMENT COSTS (Funding Sources Not Identified)				
0-5 Year Transit Improvement Costs	\$0	\$0	\$0	\$0
5-10 Year Transit Improvement Costs	\$400	\$0	\$0	\$0

10-20 Year Transit Improvement Costs	\$1,725	\$0	\$0	\$0
Transit Improvement TOTAL	\$2,125	\$0	\$0	\$0

* Figures shown are from various city TSPs.

**Table 1-2
TIP Cost Summary By Timeframe (\$1,000s)**

	Estimated Total Cost	City	Federal/ State	County
0-5 Year Total	\$21,224	\$536	\$9,777	\$10,911
5-10 Year Total	\$26,628	\$204	\$13,107	\$12,917
10-20 Year Total	\$71,619	\$135	\$55,279	\$14,480
20-Year Capital Improvement Costs SUBTOTAL	\$117,346	\$875	\$78,163	\$38,308
Transit Improvement Costs	\$2,125	\$0	\$0	\$0
20-Year Capital Improvement Costs TOTAL	\$119,471	\$875	\$78,163	\$38,308

Future Funding Needs

The funding of transportation system costs is a difficult challenge shared by most communities throughout Oregon and the United States. Cutbacks in federal transportation programs have heightened this problem and forced local governments to look for new ways to fund necessary transportation services. While the State of Oregon continues to provide a large portion of funding through the state gas tax, this source of revenue has not kept pace with increasing needs. Against this stagnant funding picture, many communities, including Benton County, face a funding gap in which current and future transportation system needs exceed available revenues.

Roads and Bridges

This TSP identifies approximately \$120 million of capital improvement projects in Benton County over the next 20 years. Of this amount, \$78 million is expected to be funded from state and federal sources. Approximately \$1 million are projects belonging to cities or urban development in Benton County. The remainder of the projects, totaling \$38 million, will be the responsibility of the County. *(For a more detailed discussion of funding sources available to local government for transportation improvements, see Chapter 7.)*

The County's estimated needs have been based on the assumption that during the 20-year period Benton County will obtain partial or full funding from state and federal sources for improvements to County facilities and services, particularly bridge replacements and safety projects. Recent historical expenditures for improvements of the types identified in the TSP have averaged about \$400,000 per year. The unfunded need throughout all jurisdictions within Benton County over the 20-year period is \$55 million. Of this amount approximately \$30 million of new road fund revenue is required.

Transit

This TSP also identifies new or expanded intercity and rural public transit service within the County with a capital cost of \$2,125,000, and operating costs of \$12,090,000 over the 20-year planning horizon.

Of the total shortfall over the next 20 years, the amount that is directly related to public transit expansion is \$14 million. The future role of the County in funding expanded rural and intercity transit service has not been determined at this time. Possible governance includes expansion of the Linn Benton Loop partnership of the participating agencies or the creation of a transportation district.

Proposed Funding Options

Early in the development of the TSP, a survey of community leaders and key stakeholders was conducted to seek their view on many issues linked to the County transportation plan. Most stakeholders believe future transportation needs will require a balanced package that enables all system beneficiaries to contribute, with existing residents and businesses and new development shouldering their fair share of the cost load. They identified the local gas tax and system development charges as preferred funding sources for transportation system improvements.

Due to the magnitude of the unfunded costs of the projects identified in the TSP, the local gas tax and system development charges would not be sufficient to fund all of the needed projects. Consideration should be given to including a local option levy and/or general obligation bonds as a portion of the future funding strategy.

Recommended Project List

Listed below are the recommended improvement projects contained in the TSP. Some projects arose only out of the public involvement process, while others came from the technical analysis and field observations. Evaluation and selection of the projects are given in Chapters 3 through 6, with the cost and timeline of each project shown in **Table 7-1** at the end of Chapter 7. Project numbers [in brackets] correspond to the discussions presented in Chapters 3 through 7, and to the maps at the end of Chapter 7 (**Figures 3-A, 3-B, 3-C.1, and 3-C.2**) indicating the locations of the projects.

State Highway Widening

- ◆ U.S. 20—widening to four lanes, Conifer Avenue to North Albany Road [A1]
- ◆ U.S. 20/Highway 34—widening, Highway 99W to U.S. 20/Highway 34 junction [C1]
- ◆ U.S. 20—widening, U.S. 20/Highway 34 junction to Woods Creek Road [D1]
- ◆ Highway 99W—widening to four lanes, Walnut Boulevard to WPRR overpass [E1]
- ◆ Highway 99W—widening to four lanes, Rivergreen Avenue to Airport Avenue [F7]
- ◆ Highway 34 curve near Alsea—realignment [K9]

State Highway Bridge Replacements

- ◆ Van Buren Avenue bridge replacement (City/ODOT decision) [H6]

State Highway Intersection Improvements

- ◆ U.S. 20/Highway 34 Junction—traffic signal [C2]
- ◆ Independence Highway/U.S. 20—traffic signal [A4]
- ◆ Arnold Avenue/Highway 99W—traffic signal [E3]
- ◆ Highway 99W—traffic signal in Monroe [G4]
- ◆ Highway 223/U.S. 20—turn lanes [G5]
- ◆ Priest Road/U.S. 20—signing [K4]
- ◆ Eddyville-Blodgett Highway/U.S. 20—turn lanes [G6]
- ◆ Scenic Drive/U.S. 20—turn lanes [A5]
- ◆ Greenberry Road/Highway 99W—turn lanes [F5]
- ◆ Old River Road/Highway 99W—turn lanes [G7]
- ◆ Highway 34/Fish Hatchery Road—turn lanes [K8]
- ◆ Wren Road/Highway 223—realignment, channelization, signing [K3]
- ◆ U.S. 20/Marys River Estates—right turn deceleration lane [K7]
- ◆ Eastbound U.S. 20/Highway 34 to southbound Highway 99W—improvements [F3]

County Road Bikeway/Shoulder Widening

- ◆ Crystal Lake Drive—between Park Avenue and South 3rd Street [M2]
- ◆ Chapel Drive—between 19th Street and Bellfountain Road [M4]
- ◆ 19th Street—between U.S. 20/Highway 34 and Chapel Drive [M5]
- ◆ Bellfountain Road—between Airport Avenue and Greenberry Road [M6] *
- ◆ NE Granger Avenue—between Pettibone and U.S. 20 [M8]
- ◆ Independence Highway—between Camp Adair Road and U.S. 20 [M9]
- ◆ Metge Avenue—between Independence Highway and Oak Grove Dr [M10]
- ◆ County Club Drive—between Barley Hill Drive and U.S. 20/Highway 34 [M12]

County Road Bridge Replacements

- ◆ Llewellyn Road bridge overflow channel [H4]
- ◆ Crescent Valley bridge [H7]
- ◆ Norton Creek bridge [H8]
- ◆ Old River Road bridge [H9]
- ◆ Chapel Drive bridge [H10]
- ◆ Tampico Road bridge [H11]
- ◆ Harris Road bridge over Alder Creek [H12]
- ◆ Elliot Circle bridge [H13]
- ◆ Llewellyn bridge #25 [H14]
- ◆ Bellfountain Road bridge over Oliver Creek [H15]
- ◆ Llewellyn bridge #2 [H16]
- ◆ Airport Avenue bridge [H17]
- ◆ Harris Covered bridge [H18]
- ◆ Price Creek bridge [H19]

County Road Intersection Improvements

- ◆ West Hills Road/Reservoir Road—traffic signal [G1]
- ◆ West Hills Road/SW 53rd Street—traffic signal [G2]
- ◆ Greenberry Road/Bellfountain Road—minor alignment improvement [F4] *
- ◆ Bellfountain Road/Airport Avenue—intersection improvements [F6] *
- ◆ Independence Highway/Springhill Drive—signing [K1]
- ◆ Palestine Avenue/Oak Grove Drive—alignment [K6]
- ◆ Gibson Hill Road/Scenic Drive—alignment [A6]
- ◆ Ryals Avenue/Independence Highway—signing [K5]
- ◆ Grange Hall Road/Fern Road—signing [K2]

County Road Level of Service/Increase Capacity

- ◆ South Fork Road—paving [J1]
- ◆ Reservoir Road/SW 53rd Street—traffic signal, at-grade railroad crossing [C3]
- ◆ Airport Avenue improvements per Corvallis Airport Master Plan [I1]
- ◆ Gravel Road Surfacing Program [O2]

County Road Pavement Preservation Program [O1]

Rural Transit/Transportation Demand Management (TDM)

- ◆ Satellite Park-and-Ride Shuttle—Provide shuttle service to Adair, Lewisburg and Monroe [L1]
- ◆ Satellite Park-and-Ride Lots—Negotiate shared parking agreements for park-and-ride lot usage in Adair, Lewisburg, and Monroe [L2]
- ◆ Express Bus Service—Provide express bus service from Albany to Philomath [L3]
- ◆ Support Expanded Corvallis Transit System Service [L4]**
- ◆ County Cruiser—New vehicles, expanded service [L5]
- ◆ Continued Valley Retriever Service [L6]**
- ◆ Continued Rural Rounds Service [L7]**
- ◆ Continued Linn-Benton Loop Service [L8]**

**For more information about these projects, see section 3.4.1.F “Bellfountain Road Refinement Plan” in Chapter 3. The final decision on the construction or modification of these projects will be made through the development of and approval of the refinement plan.*

***No cost associated with these projects in summary tables.*

Plan Achievements

Within this TSP, the citizens of Benton County have a new Vision Statement for their transportation system to support, defined goals and objectives for implementation of the TSP, and goal-based evaluation criteria to support future decision making for transportation related issues.

Most importantly, Benton County has a compliant and executable Transportation System Plan that supports this vision and accomplishes these goals of the community.

Remaining Issues

A major focus of the state's Transportation Planning Rule is to avoid capacity-increasing highway improvements through modal shifts, and other modifications to travel behavior effected through land use regulation or other local policy changes. This plan concludes that all of the increased capacity needs outside of urban growth boundary areas within Benton County are on the state highway system.

This plan also concludes that to meet State Highway Plan criteria, capacity improvements will be required on U.S. 20 throughout Benton County during the 20-year planning horizon. Viable alternative strategies under the control of Benton County that could reduce travel demand, thereby avoiding the need for highway capacity improvements, were not identified. The details of the extent and timing of the capacity improvements should be completed by the State during the corridor planning process and development of highway refinement plans.

This TSP proposes a refinement plan for the Bellfountain Road corridor. This refinement plan will identify, analyze, and recommend specific actions to improve safety while retaining the rural character of the area.

A policy needs to be drafted to address how the transfer of road jurisdictions occurs when County land is annexed into a city. City annexations adjacent to County roads should include the road right-of-way in the description to facilitate transfer of jurisdiction when appropriate.

Road maintenance operations constitute the largest component of the County's transportation program. The maintenance work program should be enhanced to refine current management systems and to better plan, schedule, and measure work expended in the road system.

How this Document is Organized

The chapters that follow this summary Overview contain:

- ◆ An in-depth description of the process used to develop the TSP, including public involvement, goals, objectives, and evaluation criteria (*Chapter 2*)
- ◆ A description of this plan's relationship to other plans, policies, and transportation agencies (*Chapter 2, second half*)
- ◆ Separate modal plans that present new and retained transportation policies and the preferred alternatives (*Chapters 3 through 6*):

Chapter 3: Roadway Plan

Chapter 4: Bicycle and Pedestrian Plan

Chapter 5: Public Transportation Plan

Chapter 6: Air, Rail, and Pipeline Plan

- ◆ A Transportation Improvement Plan for the 20-year planning period, with prioritized improvements, timing of improvement needs, and an implementation and funding strategy (*Chapter 7*)

- ◆ Two Appendices:
 - Appendix A: State of Oregon Transportation Planning Rule
 - Appendix B: Oregon Department of Transportation's Access Management Standards