

**TransPlan**

***TransPlan***  
***The Eugene-Springfield***  
***Transportation System Plan***

Lane Council of Governments  
99 E. Broadway, Suite 400  
Eugene, Oregon 97401-3111  
(541) 682-4283  
[www.lcog.org](http://www.lcog.org)

**July 2002**

Additional copies of this report may be obtained by contacting:

Lane Council of Governments  
99 East Broadway, Suite 400, Eugene, Oregon 97401-3111  
(541) 682-4283; FAX (541) 682-4099

Material in alternative formats can be arranged given sufficient notice by calling (541) 682-4283.

## Table of Contents

Chapter 1:	Introduction	1-1
Chapter 2:	Policy Element	2-1
Chapter 3:	Plan Implementation	3-1
Chapter 4:	Plan Performance and Implementation Monitoring	4-1
Appendices		
A.	Maps	A-1
	Potential Nodal Development Areas	
	Financially Constrained Roadway Projects	
	Future Roadway Projects	
	Federally Designated Roadway Functional Classification	
	Bus Rapid Transit System	
	Financially Constrained Bikeway System Projects	
	Priority Bikeway System Projects	
	Future Bikeway System Projects	
	Goods Movement and Intermodal Facilities	
B.	Level of Service Standards	B-1
C.	<i>TransPlan</i> Update Process Documentation	C-1
D.	List of Supporting Documents	D-1
E.	Glossary and Acronyms	E-1
F.	<i>Metro Plan</i> Text Amendments	F-1
G.	LCDC Order Approving Alternative Plan Performance Measures	G-1

## List of Figures

Figure 1	<i>TransPlan</i> Study Area Map	1-13
Figure 2	Context for <i>TransPlan</i>	1-14
Figure 3	Fundamental Components of Transportation Planning	1-14
Figure 4	<i>TransPlan</i> Update Timeline	1-15
Figure 5	Typical Process for Implementation of Roadway System Improvements	3-6
Figure 6	Eugene-Springfield Metropolitan Area Geographic Districts Map	3-10
Figure 7	Key Factors That Affect Financial Constraint	3-61

## List of Tables

Table 1a	Financially Constrained 20-Year Capital Investment Actions: Roadway Projects	3-14
Table 1b	Future (Beyond 20 Years) 20-Year Capital Investment Actions: Roadway Projects	3-30
Table 2	Financially Constrained 20-Year Capital Investment Actions: Transit Projects	3-35
Table 3a	Financially Constrained 20-Year Capital Investment Actions: Bicycle Projects	3-40
Table 3b	Future (Beyond 20 Years) Capital Investment Actions: Bicycle Projects	3-51
Table 4	<i>TransPlan</i> Costs, Revenues, and Strategies	3-69
Table 5	Constrained <i>TransPlan</i> Costs and Revenues	3-70
Table 6	Summary of Key Performance Measures	4-5
Table 7	Alternative TPR Performance Measures for the Eugene-Springfield MPO	4-24

# *TransPlan* Chapter 1: Introduction

## Table of Contents

The Importance of Transportation .....	1
Trends and Issues.....	2
Overview of the Regional Transportation System Plan.....	2
Participating Agencies and Geographic Area.....	5
<i>TransPlan</i> Legal Status and Adopted Sections.....	6
Regulatory Framework and Ongoing Nature of Regional Transportation Planning .....	6
Fundamental Components of Transportation Planning .....	8
The <i>TransPlan</i> Update Process.....	8
Plan Organization and Contents .....	11

## The Importance of Transportation

Transportation is one of the key contributors to the Eugene-Springfield region’s quality of life and economic viability. Generally, the need for transportation stems from our need to access goods, services, and other people within and beyond the region. The ease by which we are able to get from home to school, to a job, to medical services, to shopping and back again is dependent upon the efficiency and effectiveness of the region’s transportation system.

As the region grows, additional demands are put on the system. With limited resources, determining the best means for improving the system and meeting future demand is challenging. The framework for making decisions on the future of the region’s transportation system has become more complex in recent years. Federal, state, and local policy calls for consideration of a wide range of factors in the preparation of a regional transportation plan, including:

- ⇒ Identifying the means to reduce reliance on the automobile by increasing the transportation choices available in the region,
- ⇒ Consideration of the interrelationships among the region’s land use and transportation,
- ⇒ Consideration of the financial, environmental, and neighborhood impacts of future plans, and
- ⇒ Identifying strategies to maintain and improve the safety of the transportation system.

Ultimately, the most successful transportation plan will be one that enables us to minimize the time and resources required in the future to access the goods and services we need.

## Trends and Issues

The region is anticipating significant population and employment growth. The population of the Eugene-Springfield area is expected to grow by 41 percent by 2015. Employment in the region is expected to grow by 43 percent during that same period. A forecast of trends during the planning period points to several issues should land use patterns and travel behavior continue as they exist today.

- ⇒ Congestion would rise dramatically, increasing the cost of travel and reducing the efficiency of the region's roadway network. Congested miles of travel would increase from 2.7 percent of total miles traveled to 10.6 percent, a 293 percent increase. Vehicle miles traveled per capita would go from 10.99 to 11.83, a 7.7 percent increase.
- ⇒ One of the primary roles played by public agencies is in the provision of transportation system infrastructure. Without a balanced approach to the development of future improvements, little change will be made in the transportation choices available to the region. With little improvement in choices, the proportion of drive alone auto trips would increase while the proportion of alternative modes use would decrease.
- ⇒ Shorter trip distance is one factor that contributes to making the use of alternative modes more attractive. The percentage of total trips under one mile in length would decline by 9.2 percent.

## Overview of the Regional Transportation System Plan

The *Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan)* guides regional transportation system planning and development in the Eugene-Springfield metropolitan area. *TransPlan* includes provisions for meeting the transportation demand of residents over a 20-year planning horizon while addressing transportation issues and making changes that can contribute to improvements in the region's quality of life and economic vitality.

There is a great deal of flexibility in choosing how the region's transportation demand is met via supply decisions and demand management strategies. With the balanced and integrated combination of land use, transit, demand management, and bicycle strategies included in *TransPlan*, significant progress can be made away from the trends. Notably, while congestion will still increase significantly over existing conditions, *TransPlan's* proposed combination of strategies will help reduce future congestion by 48 percent over forecasted trends.

Compared to the future Trend Conditions, there will also be:

- ⇒ 8 percent less vehicle miles traveled (VMT) per capita,
- ⇒ 20.5 percent more trips under one mile in length,
- ⇒ 9.3 percent fewer drive alone trips,
- ⇒ 29 percent more non-auto trips, and
- ⇒ 11 percent less carbon monoxide emissions.

In addition, *TransPlan* calls for significant increases in the amount and convenience of transit service, increases in the amount of bikeways and sidewalks, and an expansion of the existing program of transportation demand management (TDM) travel incentives.

The *TransPlan* theme, *Improving Our Transportation Choices*, reflects the plan's focus to provide citizens with a range of safe, convenient, and efficient transportation options characterized by smooth connections between modes. *TransPlan* strives to support the need to diversify transportation choices, while avoiding reliance on any one transportation mode or method of managing the transportation system.

*TransPlan* establishes the framework upon which all public agencies can make consistent and coordinated planning decisions regarding inter- and intrajurisdictional transportation. The regional planning process ensures that the planning activities and investments of the local jurisdictions are coordinated in terms of intent, timing, and effect. *TransPlan* sets forth the long-range policy framework for decision making for the following elements of the region's multi-modal transportation system:

- ⇒ Regional roadways,
- ⇒ Regional transit system,
- ⇒ Regional bikeways and pedestrian circulation,
- ⇒ Regional goods movement (multiple modes), and
- ⇒ Regional aspects of other modes, including air, rail, and inter-city bus service.

Other policy documents and ordinances, such as refinement plans, set forth guidelines for elements of the transportation system that are local rather than regional in nature.

**Implementation actions** accompany the **policy element** as a core component of *TransPlan*. The implementation actions consist of adopted multi-modal capital investment actions and recommended (optional) planning and program actions for carrying out plan policies. The range of implementation actions ensures that local jurisdictions have flexibility in implementing regional policies.

During the *TransPlan* development process, extensive analyses were completed on a wide range of alternative strategies. Based on these analyses, a series of conclusions were drawn about transportation and land use planning in the region that prepared the way for development of the draft *TransPlan* policy framework. The conclusions resulted from consideration of several factors, including: staff research and professional experience, input from *TransPlan* stakeholders and appointed and elected officials, community survey results, results of studies conducted as part of the *TransPlan* update process, and output from the computer models.

Key transportation planning conclusions are summarized below:

**The region can lessen the impact of the transportation challenges by implementing a balanced and integrated set of land use, transportation demand management (TDM), and transportation system improvement strategies.**

*TransPlan* strategies include nodal development and transit-supportive land use patterns, new and expanded TDM programs, and Bus Rapid Transit (BRT), in addition to roadway projects that benefit pedestrians, bicyclists, and motorists. All of these strategies can increase the attractiveness of transportation modes other than the single-occupant vehicle (SOV). The integration of transportation and land use planning is especially important to support compact urban growth, which provides for more pedestrian-, bicycle-, and transit-friendly environments, rather than urban sprawl that supports auto dependency.

*TransPlan* recognizes that sole reliance on more and bigger roadways to meet the transportation demand is short-sighted. Even if adequate funding was available, given the growth anticipated in the region, it is unreasonable to assume the region can build its way out of traffic congestion. The technical evaluation of *TransPlan* alternatives indicated that the travel demand associated with growth will overload the transportation system, even with major capacity-increasing projects.

Experience from cities all over the world suggests that building roads encourages more people to use cars, thereby perpetuating the transportation challenges. In addition, public sentiment indicates resistance to expanding existing roadways and building new roads that would impact open space and neighborhoods.

The technical evaluation of the alternative plan concepts indicated that implementation of a balanced set of strategies, such as those mentioned above, will enable the region to reduce reliance on the auto. Projections indicated fewer VMT system-wide, fewer miles of the transportation system experiencing traffic congestion, decreased number of drive-alone auto trips, increased amounts of shared auto trips, and an increase in shorter trip lengths.

**The ability of the region to fund capacity-increasing roadway projects will be limited by other allocation decisions.**

The region lacks the financial capacity to add enough streets and highways to maintain existing levels of service (LOS). Funding for capacity-increasing projects is impacted by other funding decisions, including the priority and the amount of resources allocated to operations, maintenance, and preservation of the existing system.



## **Implementation and expansion of TDM strategies can contribute to greater use of transportation modes other than the single-occupant vehicle.**

It is unrealistic to assume that automobile dependency can be eliminated, but it can be managed and complemented with cost-effective modes of transportation other than autos. Encouraging the use of transportation modes other than the SOV will become more important as the region grows and traffic congestion levels increase. The technical evaluation of alternative plan concepts indicated that TDM strategies can contribute to greater use of modes such as bicycling, walking, transit, and carpooling.

*TransPlan* focuses on voluntary demand management strategies, such as incentives (e.g., free or reduced-cost bus pass programs). In the future, the region may explore opportunities to establish market-based, user-pay programs to offset subsidization of the true cost of automobile use and other transportation services.

## **The region can maintain conformity with air quality standards over the next 20 years.**

The EMME2 Travel Forecasting Model indicated that the region will be able to maintain conformity with existing national air quality standards through implementation of any of the alternative plan concepts. Despite traffic growth, the offsetting effects of less-polluting and more fuel-efficient new vehicles will cause a net decline in emissions, even under trend conditions. The attainment and maintenance of air quality standards is primarily due to improved auto emission technology, rather than reduced reliance on autos.

## **Participating Agencies and Geographic Area**

*TransPlan* represents a coordinated effort of public agencies and citizens. The local jurisdictions involved in regional transportation planning include the Lane Council of Governments (LCOG), the cities of Eugene and Springfield, Lane County, and Lane Transit District (LTD). Other agencies involved in the planning process include the Oregon Department of Transportation (ODOT), the Lane Regional Air Pollution Authority (LRAPA), Oregon Department of Land Conservation and Development (DLCD), Federal Highway Administration (FHWA), and the Federal Transit Agency (FTA).

The *TransPlan* study area is illustrated in Figure 1.

Because *TransPlan* serves as both the federally required Regional Transportation Plan for the Eugene-Springfield area and as the Transportation Functional Plan for the *Eugene-Springfield Metropolitan Area General Plan (Metro Plan)*, two planning horizons are referred to in the document: 2015 and 2021. The 2015 planning horizon is used to be consistent with the 2015 *Metro Plan* planning horizon. In particular, forecasted regional land use allocations use the *Metro Plan*'s 2015 land uses as a basis. The 2015 planning horizon is used in conjunction with

the Performance Measures contained in Chapter 4 that are a requirement of the Land Conservation and Development Commission's (LCDC) Transportation Planning Rule (TPR).

A 2021 planning horizon has been developed to meet federal requirements for maintaining at least a 20-year financial constraint and air quality conformity determination. Because there is no official land use allocation beyond 2015, the 2021 forecasts represent an extrapolation of 2015 population and employment. Revenue and Cost estimates used in *TransPlan* are for 2021.

## ***TransPlan* Legal Status and Adopted Sections**

**Local jurisdictions will adopt *TransPlan* as the region's transportation plan. The portions of *TransPlan* that will be adopted as *Metro Plan* policy amendments include goals, policies and 20-year fiscally constrained Capital Investment Action project lists (programmed and unprogrammed projects).**

Under state law, *TransPlan* is a functional plan of the *Metro Plan*. The *Metro Plan* is the official long-range general plan (public policy document) for the region comprised of the cities of Eugene and Springfield and metropolitan Lane County. The *Metro Plan* establishes the broad framework upon which Eugene, Springfield, and Lane County make coordinated land use decisions. As a functional plan, *TransPlan* must be consistent with the *Metro Plan*. *Metro Plan* amendments required for consistency will be adopted by the elected officials concurrent with the adoption of *TransPlan*.

See Appendix F: *Metro Plan* Text Amendments for a description of proposed amendments.

## **Regulatory Framework and Ongoing Nature of Regional Transportation Planning**

Federal, state, regional, and local requirements comprise the regulatory framework that shapes the Eugene-Springfield region's transportation planning process. The two most influential pieces of legislation are the federal *Transportation Equity Act for the 21<sup>st</sup> Century* (TEA 21) (successor to the Intermodal Surface Transportation Efficiency Act [ISTEA]) and the Oregon TPR. Urbanized areas with a population of 50,000 or more people are required by federal statute to have a regional transportation plan that demonstrates consideration of several factors, such as system preservation and efficiency, energy conservation, and congestion relief. The plan must also be in compliance with National Ambient Air Quality Standards and be constrained to financial resources reasonably expected to be available.

In compliance with provisions in TEA 21 and the TPR, *TransPlan* contains transportation policies and expected actions and is financially constrained to revenues reasonably expected to be available. *TransPlan* includes demonstration of compliance with federal and state air quality requirements, a description of the plan amendment process, and documentation of the plan update public involvement process.

The ongoing nature of regional transportation planning allows *TransPlan* to be a dynamic plan of action for the future transportation system, rather than a static snapshot in time. The range of implementation actions and plan amendment and update processes ensure that *TransPlan* will adapt to meet changing conditions within the region, as well as adapt to residents' changing needs. The plan's implementation and further refinement will continue through the collaborative efforts of citizens and organizations that own, operate, regulate, and use the transportation system.

*TransPlan* is particularly important for guiding transportation public policy and investment decision making over the three- to five-year period following plan adoption, until the next plan update. Section 450.222 of the federal metropolitan planning regulations requires the transportation plan to be reviewed and updated at least every three years in maintenance and nonattainment areas and at least every five years in attainment areas. The Eugene-Springfield region is designated as a maintenance area for carbon monoxide and designated as a nonattainment area for particulate matter (PM<sub>10</sub>).

Figure 2, Context for *TransPlan*, illustrates how *TransPlan* is integrated into the overall transportation planning regulatory framework.

# Fundamental Components of Transportation Planning

The *TransPlan* **policy framework** (Chapter Two) and **implementation actions** (Chapter Three) are structured around three fundamental components of transportation planning:

1. Land use,
2. Transportation demand management, and
3. Transportation system improvements.

*TransPlan* uses these components in a balanced and integrated manner to achieve results. These components can be visualized as the three sides of a balanced triangle, as illustrated in Figure 3. The triangle is supported by a foundation of finance policies and implementation actions. Finance policies provide the direction needed to fund implementation of the land use, demand management, and system improvement policies.

The **land use** component of transportation planning is addressed by *TransPlan* policies and implementation actions that encourage meeting the need for transportation-efficient development patterns, such as nodal development and transit-supportive land use patterns. These development patterns reduce trip lengths and auto dependency and support transit, bicycling, and walking.

The **demand management** component is supported by *TransPlan* policies and implementation actions that strive to meet the need to reduce demand on the transportation system. This reduced demand can occur through actions that eliminate the need for vehicle trips and increase the use of transit, carpooling and vanpooling, bicycling, and walking.

**System improvements** are supported by *TransPlan* policies and implementation actions that address the need for improved operations and maintenance of the existing system and investments in system infrastructure and services. *TransPlan* emphasizes the integration and coordination of system improvements and development patterns.

## The *TransPlan* Update Process

*TransPlan* addresses trends and issues related to growth and changes in the community's needs and attitudes since the last transportation plan was adopted in 1986. *TransPlan* is the result of an extensive update process that represents a comprehensive and integrated approach to transportation planning. The update process encompassed extensive public involvement, a broad range of technical analyses and studies, and the expertise of staff, consultants, public officials, and stakeholders. See Appendix C: *TransPlan* Update Process Documentation for a detailed description of the update process, including public involvement.

A timeline of the four phases of the *TransPlan* update is presented in Figure 4.

**Phase I, Issues Identification**, began in June 1992 and focused on publicizing the kickoff of the *TransPlan* update and identifying the issues, needs, and concerns of community residents about

transportation and land use planning. Phase I included identification of federal and state requirements with which *TransPlan* needed to comply.

**Phase II, Alternatives Development**, began in July 1993 and focused on identifying a range of strategies to address issues. Public involvement work in Phase II was centered around the stakeholder process. Phase II work included a number of special studies that supported strategy analysis.

**Phase III, Alternatives Evaluation and Draft Plan Direction**, began in October 1995 and focused on developing and evaluating alternative plan concepts and obtaining direction on the policy framework for the draft plan.

**Phase IV, Draft Plan Development, Review, and Adoption**, focused on developing, reviewing, and revising the draft plan and adopting the final plan. The public review began in February 1998 with release of the draft plan. Two open houses were conducted and four public hearings and two joint worksessions were held with the planning commissions of Eugene, Springfield, and Lane County, and the Lane County Roads Advisory Committee (RAC). In addition, 21 individual combined worksessions were held with the planning commissions and RAC. This review resulted in a set of recommendations from those advisory bodies to their respective elected officials.

The May 1999 Revised Draft *TransPlan* went through an extensive public and adopting official review. A variety of techniques were used to inform and involve the public including direct mail, broad distribution of *TransPlan*, website information, direct contact in-person and via e-mail; Metro TV; distribution of *TransPlan* summary to all Register-Guard, Springfield News, and Business Week subscribers; display ads; news releases; active contact with print, radio, and television media; public comment periods; and public hearings. Throughout the deliberations of the Revised Draft *TransPlan* by the adopting officials, the public was informed of all meetings and any opportunities for public comment.

*TransPlan* adopting officials first opened the public record on May 1, 1999, and closed it on October 29, 1999. Public hearings were conducted on September 29, 1999, and October 20, 1999, in which approximately 685 people submitted testimony in the form of an oral presentation at one of the two public hearings, e-mail testimony, by letter, or by petition. *TransPlan* staff prepared a response to the public testimony, which was provided to the adopting officials and the general public.

*TransPlan* adopting officials held an extensive amount of worksessions to review and deliberate on the public comment and the Revised *TransPlan*. Fifty-four individual worksessions were held prior the LCOG Board adoption scheduled for June 28, 2001. In addition, the adopting officials conducted three joint worksessions to resolve any outstanding issues that resulted from the individual meetings. Adopting officials then forwarded the outstanding issues to the Metropolitan Policy Committee (MPC) for dispute resolution. All adopting officials received agendas and materials for all MPC meetings. The public was kept informed of the MPC meetings and opportunities for public comment.

MPC formed two sub-committees to resolve the outstanding differences. One committee was assigned to resolve the seven outstanding issues and the other was directed to identify and recommend Alternative Plan Performance Measures, which were ultimately approved by the LCDC. Both committees met several times prior to sending their recommendations to the full MPC. All issues approved by MPC were sent to the adopting officials for concurrence by the four adopting agencies.

# Plan Organization and Contents

The remaining sections in *TransPlan* are summarized below:

## **Chapter Two: Policy Element**

- Presents goals, objectives, and policies that comprise the regional transportation planning policy framework for the region

## **Chapter Three: Plan Implementation**

- Describes adopted Capital Investment Actions
- Describes optional Planning and Program Actions
- Presents a financial plan
- Describes air quality conformity
- Presents a parking management plan

## **Chapter Four: Plan Performance and Implementation Monitoring**

- Describes anticipated plan impacts and achievements
- Discusses the program for monitoring plan progress over time
- Summarizes the plan update cycle

## **Appendix A: Maps**

Contains the following maps:

1. Potential Nodal Development Areas
2. Financially Constrained Roadway Projects:
3. Future Roadway Projects
4. Federally Designated Roadway Functional Classification
5. Bus Rapid Transit System
6. Financially Constrained Bikeway System Projects
7. Priority Bikeway System Projects
8. Future Bikeway System Projects
9. Goods Movement and Intermodal Facilities

## **Appendix B: Level of Service Standards**

- Describes application of the level of service policy.

## **Appendix C: *TransPlan* Update Process Documentation**

- Documents public involvement and technical analysis efforts undertaken to develop *TransPlan*.

## **Appendix D: List of Supporting Documents**

- Lists supporting documentation that was developed during the update process, including related plans, working papers, and final reports.

**Appendix E: Glossary and Acronyms**

- Provides acronyms and a glossary of key transportation and land use terminology used in *TransPlan*.

**Appendix F: *Metro Plan* Text Amendments**

- Provides proposed amendments to *Metro Plan*.

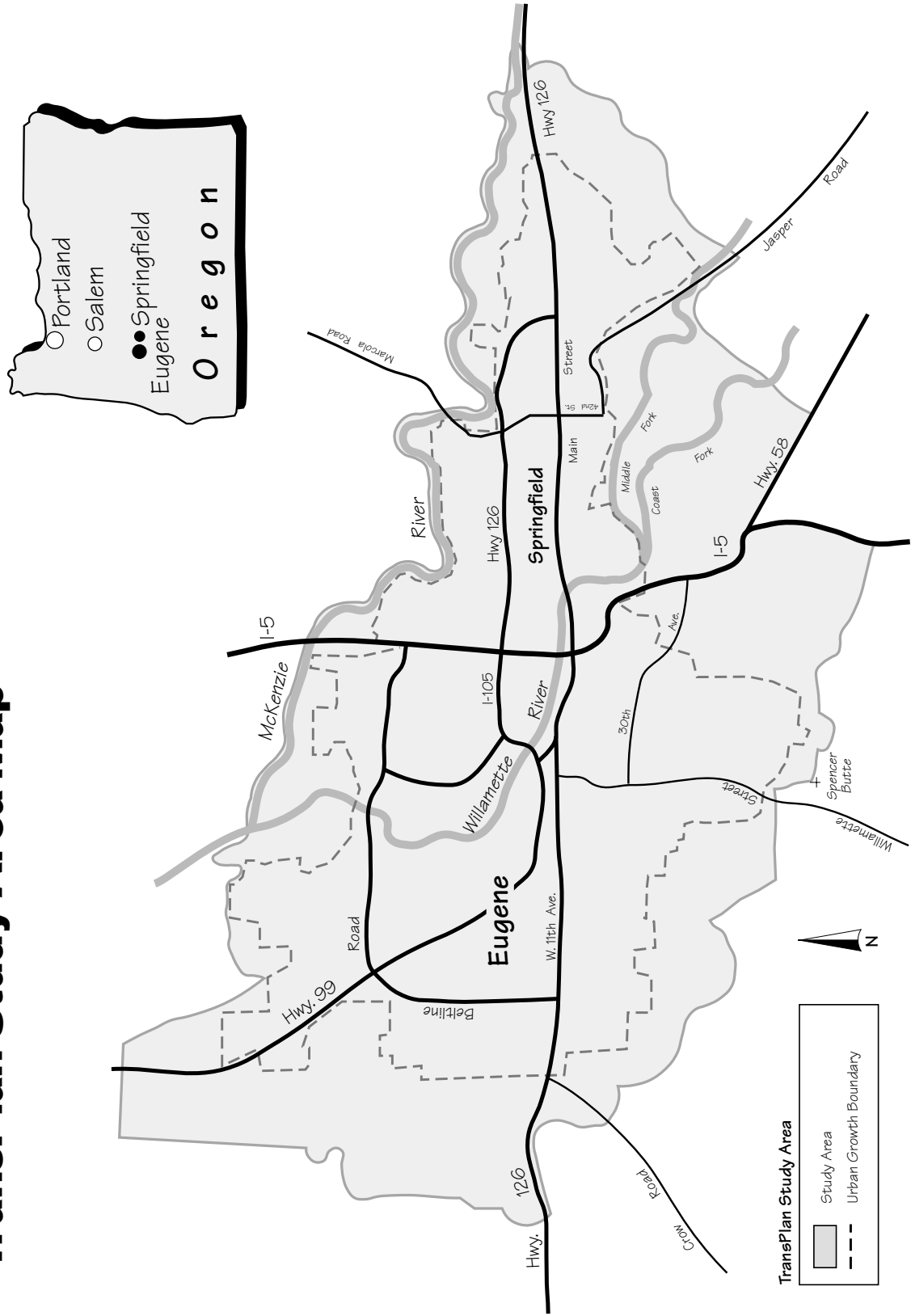
**Appendix G: LCDC Order Approving Alternative Plan Performance Measures**



# Chapter 1 Figures

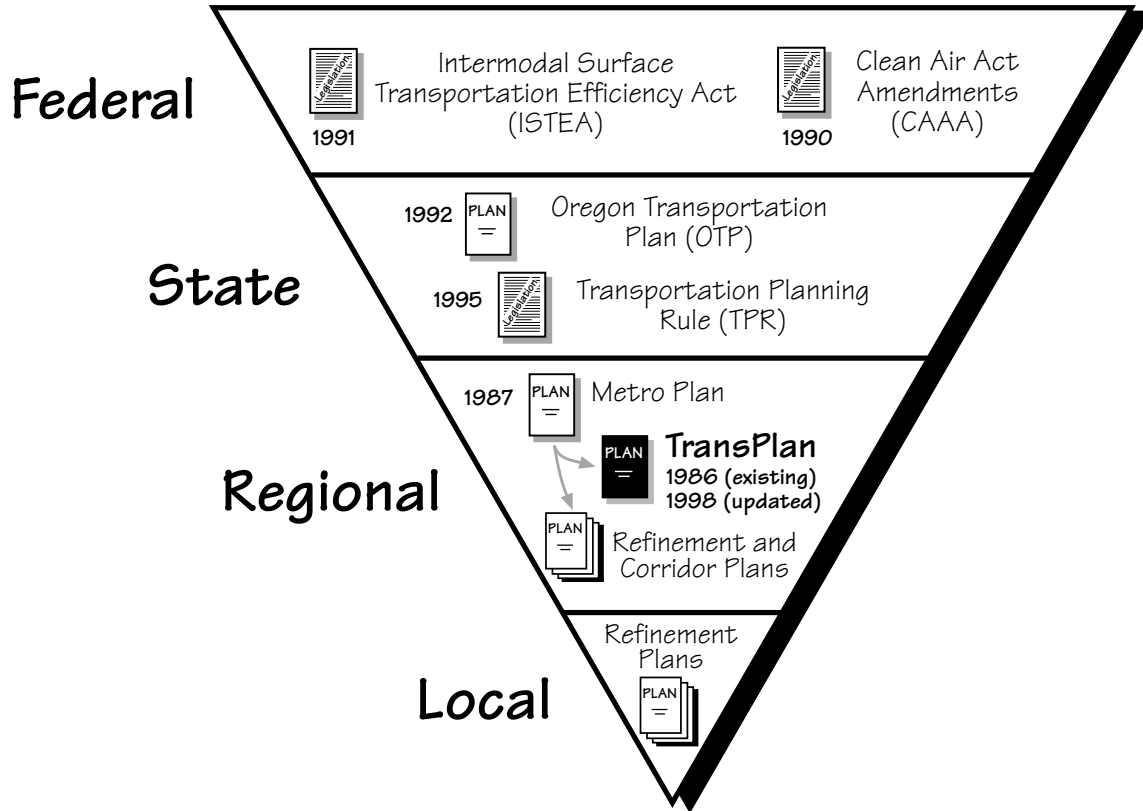
**Figure 1**

## TransPlan Study Area Map



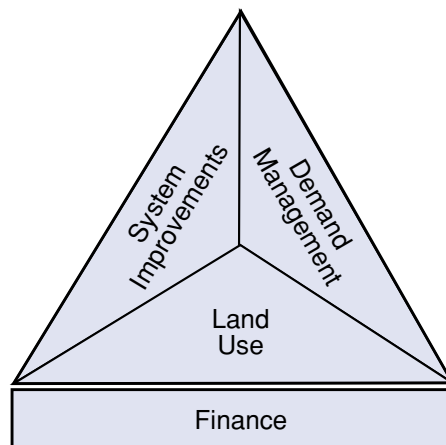
**Figure 2**

## Context for TransPlan



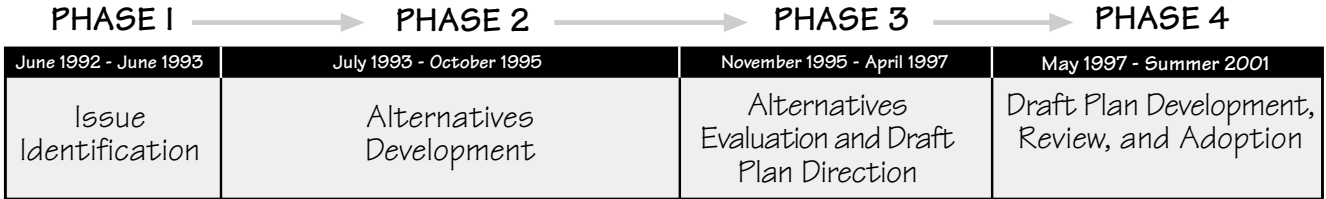
**Figure 3**

## Fundamental Components of Transportation Planning



**Figure 4**

# TransPlan Update Timeline



## Agency Logos



# *TransPlan* Chapter 2: Policy Element

## Table of Contents

Introduction.....	2
Part One: <i>TransPlan</i> Goals.....	3
Goal #1: Integrated Transportation and Land Use System.....	3
Goal #2: Transportation System Characteristics.....	3
Part Two: <i>TransPlan</i> Objectives.....	5
Objective #1: Accessibility and Mobility.....	5
Objective #2: Safety.....	5
Objective #3: Environment.....	6
Objective #4: Economic Vitality.....	6
Objective #5: Public Involvement.....	7
Objective #6: Coordination/Efficiency.....	7
Objective #7: Policy Implementation.....	8
Part Three: <i>TransPlan</i> Policies.....	9
Consolidated List of <i>TransPlan</i> Policies.....	10
Land Use Policies.....	13
Transportation Demand Management Policies.....	19
Transportation System Improvements: System-Wide Policies.....	22
Transportation System Improvements: Roadway Policies.....	25
Transportation System Improvements: Transit Policies.....	28
Transportation System Improvements: Bicycle Policies.....	31
Transportation System Improvements: Pedestrian Policies.....	34
Transportation System Improvements: Goods Movement Policies.....	36
Transportation System Improvements: Other Modes Policies.....	37
Finance Policies.....	39

# Introduction

The *TransPlan* policy element guides transportation system planning in the Eugene-Springfield metropolitan area. A basic assumption in the development of the *TransPlan* policy element is that transportation systems do more than meet travel demand; they have a significant effect on the physical and socioeconomic characteristics of the areas they serve. Transportation planning must be viewed in terms of regional and community goals and values such as protection of the environment, impact on the regional economy, and maintaining the quality of life that area residents enjoy.

The *TransPlan* policy element consists of the following components:

- ♦ Goals (2),
- ♦ Objectives (7), and
- ♦ Policies (37).

The *TransPlan* policy element is consistent with the region's overall policy framework for regional planning as set forth in the *Metro Plan*.

⇒ **The *TransPlan* goals and policies will be adopted and incorporated by amendment into the *Metro Plan*.**

## Part One: *TransPlan* Goals

Consistent with the *Metro Plan*, the following definition is used for *TransPlan* goals:

**Broad statement of philosophy that describes the hopes of the people of the community for the future of the community. A goal may never be completely attainable but it is used as a point towards which to strive.**

### Goal #1: Integrated Transportation and Land Use System

Provide an integrated transportation and land use system that supports choices in modes of travel and development patterns that will reduce reliance on the auto and enhance livability, economic opportunity, and the quality of life.

**Definition/Intent:** This goal recognizes the need to integrate transportation and land use planning to enhance livability, economic opportunity, and quality of life. Integration supports transportation-efficient development patterns and choices in transportation modes that reduce reliance on the auto.

**Reference:** Developed by *TransPlan* update stakeholders; based in part on *Oregon Transportation Plan (OTP) (1992) Goal 3*.

### Goal #2: Transportation System Characteristics

Enhance the Eugene-Springfield metropolitan area's quality of life and economic opportunity by providing a transportation system that is:

- a) Balanced,
- b) Accessible,
- c) Efficient,
- d) Safe,
- e) Interconnected,
- f) Environmentally responsible,
- g) Supportive of responsible and sustainable development,
- h) Responsive to community needs and neighborhood impacts, and
- i) Economically viable and financially stable.

**Definition/Intent:** The goal is to provide an overall transportation system that provides for all of these needs. Transportation decisions on specific facilities and services will require balancing some characteristics with others.

- a) A **balanced** transportation system is one that provides a range of transportation options and takes advantage of the inherent efficiencies of each mode.
- b) An **accessible** transportation system is one that serves all areas of the community and offers both residents and visitors convenient and reliable transportation options.

- c) An **efficient** transportation system is one that is fast and economic for the user, maximizes the mobility available through existing facilities, and leverages as much benefit as possible from new transportation facilities.
- d) A **safe** transportation system is one that is designed, built, and operated to minimize risk of harm to people and property and allows people to feel confident and secure in and around all modes of travel.
- e) An **interconnected** transportation system is one that provides for ease of transfer between different modes of travel, such as auto to bus or bicycle to rail.
- f) An **environmentally responsible** transportation system is one that reduces transportation-related environmental impact and energy consumption.
- g) A transportation system that is **supportive of responsible and sustainable development** integrates transportation and land use planning in support of transportation-efficient development.
- h) A transportation system that is **responsive to community needs and neighborhood impacts** is flexible and adaptable, and addresses transportation-related impacts in residential areas.
- i) An **economically viable** and **financially stable** transportation system is one that is cost efficient; financially feasible; and has sufficient, ongoing financial support to ensure transportation system investments can be operated and maintained as desired.

**Reference:** Based on OTP (1992) Goals 1 and 3 and stakeholders' input.

## Part Two: *TransPlan* Objectives

Consistent with the *Metro Plan*, the following definition is used for *TransPlan* objectives:

**An objective is an attainable target that the community attempts to reach in striving to meet a goal. An objective may also be considered as an intermediate point that will help fulfill the overall goal.**

### Objective #1: Accessibility and Mobility

Provide adequate levels of accessibility and mobility for the efficient movement of people, goods, and services within the region.

**Definition/Intent:** **Accessibility** refers to physical proximity and ease of reaching destinations throughout the urban metropolitan area. This objective supports the need for multimodal accessibility to employment, shopping, other commerce, medical care, housing, and leisure, including adequate public transit access for people who are transportation disadvantaged. This objective also supports the need for improved access for tourists to destinations. **Mobility** is the ease with which a person is able to travel from place to place. It can be measured in terms of travel time.

Access and mobility are provided at different levels on different classes of transportation facilities. For example, a local street has a high level of accessibility for adjacent residences and businesses, with a low level of mobility for non-local traffic. An arterial street has a lower level of accessibility, with a higher level of mobility for through movement of travelers. Local jurisdictions will determine what constitutes adequate levels of accessibility and mobility and what is efficient movement of people, goods, and services within the region.

**Reference:** Based on OTP (1992) Policy 1C; *Transportation Equity Act for the 21<sup>st</sup> Century* (TEA 21) Metropolitan Planning Factor E.

### Objective #2: Safety

Improve transportation system safety through design, operations and maintenance, system improvements, support facilities, public information, and law enforcement efforts.

**Definition/Intent:** *TransPlan* Goal 2 sets forth safety as a key characteristic of the desired transportation system. This objective supports the need for taking a comprehensive approach to building, operating, and regulating the transportation system so that travelers feel safe and secure.

**Reference:** Based on OTP (1992) Policy 1G; TEA 21 Metropolitan Planning Factor B.



## Objective #3: Environment

Provide transportation systems that are environmentally responsible.

**Definition/Intent:** This objective places a priority on fulfilling the need to protect the region's natural environment and conserving energy in all aspects of transportation planning processes. The primary intent of this objective can be met through compliance with all federal and state regulations relevant to environmental impact and consideration of applicable environmental impact analyses and practicable mitigation measures in transportation decision-making processes. Significant benefits can be achieved from coordinating the environmental process with the transportation planning process, such as early identification of issues and resources, development of alternatives that avoid or minimize impacts early in the project development process, and more rapid project delivery.

The region's need to reduce transportation-related energy consumption can be met through increased use of transit, telecommuting, zero-emissions vehicles, ridesharing, bicycles and walking, and through increased efficiency of the transportation network to diminish delay and corresponding fuel consumption.

**Reference:** Based on OTP (1992) Policy 1D; TEA 21 Metropolitan Planning Factor D; Statewide Planning Goal 5: Open Spaces, Scenic, and Historic Areas, and Natural Resources; Goal 6: Air, Water, and Land Resources Quality.

## Objective #4: Economic Vitality

Support transportation strategies that improve the economic vitality of the region and enhance economic opportunity.

**Definition/Intent:** The region's economy is highly dependent upon its transportation system for the circulation of goods, services, and passengers. An efficient transportation system promotes new business and encourages existing business. It also supports freight movement and intermodal transfer points within the region.

The transportation system needs to serve economic development interests; however, those interests have to be balanced with the need to maintain a high quality of life, which itself contributes to the region's comparative advantage as a place to conduct business.

**Reference:** Based on OTP (1992) Goal 3; Statewide Planning Goal 9: Economic Development; TEA 21 Metropolitan Planning Factor A.

## Objective #5: Public Involvement

Provide citizens with information to increase their awareness of transportation issues, encourage their involvement in resolving the issues, and assist them in making informed transportation choices.

**Definition/Intent:** This objective supports the need for early and continuing public participation in transportation planning, programming, and implementation. It also supports a proactive public involvement process that provides complete information, timely public notice, and full public access to key decisions. To understand and support *TransPlan* policies, residents need reliable information and opportunities to participate in the further development and implementation of the plan. Achievement of this objective ensures compliance with state and federal requirements for public involvement, including those set forth in the Statewide Planning Goal 1 and TEA 21.

**Reference:** Based on OTP (1992) Policy 4N; TEA 21 Public Involvement Requirements; Statewide Planning Goal 1: Citizen Involvement.

## Objective #6: Coordination/Efficiency

Coordinate among agencies to facilitate efficient planning, design, operation, and maintenance of transportation facilities and programs.

**Definition/Intent:** The primary intent of this objective is to ensure that public agencies involved with the region's transportation coordinate to meet the need for efficiency. A second aspect of this objective is to support opportunities for coordination between the public and private sectors, which results in transportation efficiencies. Although the infrastructure for the transportation system of the 21<sup>st</sup> century is largely in place, the system must be managed more efficiently as it is used more intensively. This objective supports the research, evaluation, and implementation of innovative management practices, land use patterns, and new technologies.

**Reference:** Based on *TransPlan* 1986 Policy PC3; OTP (1992) Policy 1B; Transportation Planning Rule (TPR) 660-12-050(2); TEA 21 Metropolitan Planning Factors F and G; Statewide Planning Goal 11: Public Facilities and Services.

## Objective #7: Policy Implementation

Implement a range of actions as determined by local governments, including land use, demand management, and system improvement strategies, to carry out transportation policies.

**Definition/Intent:** This objective supports the integration of land use, system improvements, and demand management strategies to meet the region's transportation needs. The region will continue to implement these three types of strategies and reliance on any one type of strategy will be avoided. This objective supports the need to prioritize implementation actions necessary to carry out the overall policy framework set forth in the *Metro Plan*. The range of *TransPlan* implementation actions provides local governments with the flexibility needed to implement the regional policies. Due to limited resources, not all *TransPlan* policies and implementation actions will be implemented simultaneously.

**Reference:** Based on *TransPlan* 1986 Planning and Coordination Policy section.

## Part Three: *TransPlan* Policies

Consistent with the *Metro Plan*, the following definition is used for *TransPlan* policies:

**A policy is a statement adopted as part of *TransPlan* to provide a consistent course of action, moving the community towards attainment of its goals.**

The *TransPlan* policies presented in this chapter are structured in the following categories:

1. Land Use
2. Transportation Demand Management
3. Transportation System Improvements
  - a) System-Wide
  - b) Roadways
  - c) Transit
  - d) Bicycle
  - e) Pedestrian
  - f) Goods Movement
  - g) Other Modes
4. Finance

A consolidated list of *TransPlan* policies is followed by expanded policy sections. Each section includes *Findings* that provide the factual basis for the policies. The policy *Definition/Intent* statements provide explanations for the policy statement, but do not represent adopted policy.

The *TransPlan* policies are direction statements that guide present and future decisions on how the goals will be achieved. The transportation policies represent an integrated and balanced approach to transportation planning in the Eugene-Springfield area. This integration was developed by considering the interaction among land use, demand management, and transportation system improvements strategies. Consistent with requirements in the state TPR, *TransPlan* policies support a coordinated network of transportation facilities adequate to serve state, regional, and local transportation needs. The policies are applicable to the entire Eugene-Springfield region and can be applied in a variety of ways, using a range of specific actions. Implementation actions are set forth in Chapter Three. These actions provide individual jurisdictions with the flexibility to implement *TransPlan* policies using methods most suitable to a particular circumstance. It is important to note that policy implementation is limited by considerations such as fiscal constraint and identification of competing concerns.

Not all *TransPlan* policies will apply to a specific transportation-related decision. For a decision where conformance with adopted policy is required, policies in *TransPlan* and other elements of the *Metro Plan* will be examined to determine which policies are relevant and can be applied. In the event that the application of policies leads to the identification of policies that support varying positions, decision makers will work to achieve a balance of all applicable policies. Whereas goals are timeless, some policies will expire as they are implemented. Amendments and future updates of *TransPlan* will ensure that policies are current.

# Consolidated List of *TransPlan* Policies

## Land Use Policies

### Land Use Policy #1: Nodal Development

Apply the nodal development strategy in areas selected by each jurisdiction that have identified potential for this type of transportation-efficient land use pattern.

### Land Use Policy #2: Support for Nodal Development

Support application of the nodal development strategy in designated areas through information, technical assistance, or incentives.

### Land Use Policy #3: Transit-Supportive Land Use Patterns

Provide for transit-supportive land use patterns and development, including higher intensity, transit-oriented development along major transit corridors and near transit stations; medium- and high-density residential development within ¼ mile of transit stations, major transit corridors, employment centers, and downtown areas; and development and redevelopment in designated areas that are or could be well served by existing or planned transit.

### Land Use Policy #4: Multi-Modal Improvements in New Development

Require improvements that encourage transit, bicycles, and pedestrians in new commercial, public, mixed-use, and multi-unit residential development.

### Land Use Policy #5: Implementation of Nodal Development

Within three years of *TransPlan* adoption, apply the ND, Nodal Development designation to areas selected by each jurisdiction, adopt and apply measures to protect designated nodes from incompatible development and adopt a schedule for completion of nodal plans and implementing ordinances.

## TDM Policies

### TDM Policy #1: TDM Program Development

Expand existing TDM programs and develop new TDM programs. Establish TDM bench marks and if the benchmarks are not achieved, mandatory programs may be established.

### TDM Policy #2: Parking Management

Increase the use of motor vehicle parking management strategies in selected areas throughout the Eugene-Springfield metropolitan area.

### TDM Policy #3: Congestion Management

Implement TDM strategies to manage demand at congested locations.

## TSI System-Wide Policies

### TSI System-Wide Policy #1: Transportation Infrastructure Protection and Management

Protect and manage existing and future transportation infrastructure.

### TSI System-Wide Policy #2: Intermodal Connectivity

Develop or promote intermodal linkages for connectivity and ease of transfer among all transportation modes.

### TSI System-Wide Policy #3: Corridor Preservation

Preserve corridors, such as rail rights-of-way, private roads, and easements of regional significance, that are identified for future transportation-related uses.

### TSI System-Wide Policy #4: Neighborhood Livability

Support transportation strategies that enhance neighborhood livability.

### TSI System-Wide Policy #5: *TransPlan* Project Lists

Adopt by reference as part of the *Metro Plan* the 20-Year Capital Investment Actions project lists contained in *TransPlan*. Project timing and estimated costs are not adopted as policy.

## TSI Roadway Policies

### TSI Roadway Policy #1: Mobility and Safety for all Modes

Address the mobility and safety needs of motorists, transit users, bicyclists, pedestrians, and the needs of emergency vehicles when planning and constructing roadway system improvements.

## **TSI Roadway Policy #2: Motor Vehicle Level of Service**

1. Use motor vehicle level of service standards to maintain acceptable and reliable performance on the roadway system. These standards shall be used for:
  - a. Identifying capacity deficiencies on the roadway system.
  - b. Evaluating the impacts on roadways of amendments to transportation plans, acknowledged comprehensive plans and land-use regulations, pursuant to the TPR (OAR 660-12-0060).
  - c. Evaluating development applications for consistency with the land-use regulations of the applicable local government jurisdiction.
2. Acceptable and reliable performance is defined by the following levels of service under peak hour traffic conditions: Level of Service E within Eugene's Central Area Transportation Study (CATS) area, and Level of Service D elsewhere.
3. Performance standards from the Oregon Highway Plan shall be applied on state facilities in the Eugene-Springfield metropolitan area.

In some cases, the level of service on a facility may be substandard. The local government jurisdiction may find that transportation system improvements to bring performance up to standard within the planning horizon may not be feasible, and safety will not be compromised, and broader community goals would be better served by allowing a substandard level of service. The limitation on the feasibility of a transportation system improvement may arise from severe constraints including but not limited to environmental conditions, lack of public agency financial resources, or land use constraint factors. It is not the intent of TSI Roadway Policy #2: Motor Vehicle Level of Service to require deferral of development in such cases. The intent is to defer motor vehicle capacity increasing transportation system improvements until existing constraints can be overcome or develop an alternative mix of strategies (such as: land use measures, TDM, short-term safety improvements) to address the problem.

## **TSI Roadway Policy #3: Coordinated Roadway Network**

In conjunction with the overall transportation system, recognizing the needs of other transportation modes, promote or develop a regional roadway system that

meets combined needs for travel through, within, and outside the region.

## **TSI Roadway Policy #4: Access Management**

Manage the roadway system to preserve safety and operational efficiency by adopting regulations to manage access to roadways and applying these regulations to decisions related to approving new or modified access to the roadway system.

## **TSI Transit Policies**

### **TSI Transit Policy #1: Transit Improvements**

Improve transit service and facilities to increase the system's accessibility, attractiveness, and convenience for all users, including the transportation disadvantaged population.

### **TSI Transit Policy #2: Bus Rapid Transit**

Establish a Bus Rapid Transit (BRT) system composed of frequent, fast transit service along major corridors and neighborhood feeder service that connects with the corridor service and with activity centers, if the system is shown to increase transit mode split along BRT corridors, if local governments demonstrate support, and if financing for the system is feasible.

### **TSI Transit Policy #3: Transit/High-Occupancy Vehicle (HOV) Priority**

Implement traffic management strategies and other actions, where appropriate and practical, that give priority to transit and other HOVs.

### **TSI Transit Policy #4: Park-and-Ride Facilities**

Expand the Park-and-Ride system within the metropolitan area and nearby communities.

## **TSI Bicycle Policies**

### **TSI Bicycle Policy #1: Bikeway System and Support Facilities**

Construct and improve the region's bikeway system and provide bicycle system support facilities for both new development and redevelopment/expansion.

### **TSI Bicycle Policy #2: Bikeways on Arterials and Collectors**

Require bikeways along new and reconstructed arterial and major collector streets.

### **TSI Bicycle Policy #3: Bikeway Connections to New Development**

Require bikeways to connect new development with nearby neighborhood activity centers and major destinations.

### **TSI Bicycle Policy #4: Implementation of Priority Bikeway Miles**

Give funding priority (ideally within the first 3 to 5 years after adoption of TransPlan subject to available

funding) to stand-alone bikeway projects that are included in the definition of “Priority Bikeway Miles” and that increase the use of alternative modes.

## **TSI Pedestrian Policies**

### **TSI Pedestrian Policy #1: Pedestrian**

#### **Environment**

Provide for a pedestrian environment that is well integrated with adjacent land uses and is designed to enhance the safety, comfort, and convenience of walking.

### **TSI Pedestrian Policy #2: Continuous and Direct Routes**

Provide for a continuous pedestrian network with reasonably direct travel routes between destination points.

### **TSI Pedestrian Policy #3: Sidewalks**

Construct sidewalks along urban area arterial and collector roadways, except freeways.

## **TSI Goods Movement Policies**

### **TSI Goods Movement Policy #1: Freight**

#### **Efficiency**

Support reasonable and reliable travel times for freight/goods movement in the Eugene-Springfield region.

## **TSI Other Modes Policies**

### **TSI Other Modes Policy #1: Eugene Airport**

Support public investment in the Eugene Airport as a regional facility and provide land use controls that limit incompatible development within the airport environs. Continue to use the Eugene Airport Master Plan as the guide for improvements of facilities and services at the airport.

### **TSI Other Modes Policy #2: High Speed Rail Corridor**

Support provision of rail-related infrastructure improvements as part of the Cascadia High Speed Rail Corridor project.

### **TSI Other Modes Policy #3: Passenger Rail and Bus Facilities**

Support improvements to the passenger rail station and inter-city bus terminals that enhance usability and convenience.

## **Finance Policies**

### **Finance Policy #1: Adequate Funding**

Support development of a stable and flexible transportation finance system that provides adequate resources for transportation needs identified in *TransPlan*.

### **Finance Policy #2: Operations, Maintenance, and Preservation**

Operate and maintain transportation facilities in a way that reduces the need for more expensive future repair.

### **Finance Policy #3: Prioritization of State and Federal Revenue**

Set priorities for investment of Oregon Department of Transportation (ODOT) and federal revenues programmed in the region’s Transportation Improvement Program (TIP) to address safety and major capacity problems on the region’s transportation system.

### **Finance Policy #4: New Development**

Require that new development pay for its capacity impact on the transportation system.

### **Finance Policy #5: Short-Term Project Priorities**

Consider and include among short-term project priorities, those facilities and improvements that support mixed-use, pedestrian-friendly nodal development and increased use of alternative modes.

### **Finance Policy #6: Eugene-Specific Finance Policy**

The City of Eugene will maintain transportation performance and improve safety by improving system efficiency and management before adding capacity to the transportation system under Eugene’s jurisdiction.

## Land Use Policies

*TransPlan* Land Use Policies encourage design and development of land use patterns that support the increased use of alternative modes of travel (e.g., transit, biking, walking, carpooling) and reduce the dependence on the automobile. Favorable impacts of implementing these policies with regard to improving transportation efficiency will be realized over a 40- to 50-year period. These policies support the fundamental principle of compact urban growth contained within the *Metro Plan* and Oregon Statewide Planning Goals.

## Land Use Findings

1. The OTP, 1992, recognizes that Oregon's land use development patterns have tended to separate residential areas from employment and commercial centers, requiring people to drive almost everywhere they go; that the results have been increased congestion, air pollution, and sprawl in the metropolitan areas and diminished livability; that these auto-dependent land use patterns limit mobility and transportation choices; and that reliance on the automobile has led to increased congestion, travel distances, and travel times.
2. Studies annotated in the *Land Use Measures Task Force Report Bibliography* have found that land use development patterns have an impact on transportation choices; that separation of land uses and low-density residential and commercial development over large areas makes the distance between destinations too far apart for convenient travel by means other than a car; and that people who live in neighborhoods with grid pattern streets, nearby employment and shopping opportunities, and continuous access to sidewalks and convenient pedestrian crossings tend to make more walking and transit trips.
3. The *Oregon Highway Plan* (OHP) (January 1999) states that focusing growth on more compact development patterns can benefit transportation by: reducing local trips and travel on state highways; shortening the length of many vehicle trips; providing more opportunities to walk, bicycle, or use available transit services; increasing opportunities to develop transit, and reducing the number of vehicle trips to shop and do business.
4. OTP policies emphasize reducing reliance on the automobile and call for transportation systems that support mixed land uses, compact cities, and connections among various transportation modes to make walking, bicycling and the use of public transit easier. The OTP provides that the state will encourage and give preference to projects and grant proposals that support compact or infill development or mixed-use projects. The OTP also contains actions to promote the design and development of infrastructure and land use patterns that encourage alternatives to the single-occupant automobile.
5. The Oregon Transportation Planning Rule [OAR 660-012-0060 (1)(c,d)(5)] encourages plans to provide for mixed-use, pedestrian-friendly development based on information that documents the benefits of such development and the Land Conservation and Development



Commission's policy interest in encouraging such development to reduce reliance on the automobile. The rule [OAR 660-012-0045 (4)(a and e)] requires local governments to adopt land use regulations that allow transit-oriented developments on lands along transit routes and require major developments to provide either a transit stop on site or connection to a transit stop when the transit operator requires such an improvement. The rule [OAR 660-012-0045 (3) ] also requires local governments to adopt land use regulations that provide for safe and convenient pedestrian and bicycle access within new developments and from these developments to adjacent residential areas and transit stops and to neighborhood activity centers.

6. A 24-member Citizen Task Force, representing a broad range of interests in the Eugene-Springfield area, created, evaluated, and refined the nodal development land use strategy over a seven-month period as part of the update of *TransPlan*. The Task Force intended the strategy to encourage development patterns that will support a multi-modal transportation system.
7. Nodal development is consistent with the policy direction of Policy 1B of the *Oregon Highway Plan* to coordinate land use and transportation decisions to efficiently use public infrastructure investments to:
  - ♦ Maintain the mobility and safety of the highway system,
  - ♦ Foster compact development patterns in communities,
  - ♦ Encourage the availability and use of transportation alternatives, and
  - ♦ Enhance livability and economic competitiveness.
8. Nodal development is consistent with the Special Transportation Area (STA) designation defined in the draft OHP. The designation is intended to guide planning and management decisions for state highway segments inside nodal development areas.
9. Nodal development supports the fundamental principles, goals, and policies of the adopted *Metro Plan* to achieve compact urban growth, increase residential densities, and encourage mixed-use developments in designated areas. The *Land Use Measures Strategies Document* found that nodal development also supports increased use of alternative modes of transportation and increased opportunities for people to live near their jobs and to make shorter trips for a variety of purposes.
10. Based on an analysis of the *Regional Travel Forecasting Model* results, an overall outcome of nodal development implementation will be that the percentage of person trips under one mile can be increased to approximately 15.9 percent of all trips; and, on a regional basis, that trip lengths will be slightly longer in 2015 than under existing conditions, but this will be offset, in part, by reduced trip lengths within nodal development areas.
11. Based on an analysis of the *Regional Travel Forecasting Model* results, investments in non-auto modes, particularly BRT, and implementation of nodal development strategies will improve transportation choices by helping to increase the percentage of non-auto trips from

14.1% to 17.0% by the year 2015. Increases in the percentage of households and workers with access to ten-minute transit service will result in a 49 percent increase in the percentage of trips taken by bus.

12. The *Market Demand Study for Nodal Development*, ECONorthwest and Leland Consulting Group, 1996, recommended that the public strategy for nodal development should be flexible and opportunistic and include use of financial incentives, targeted infrastructure investments, public-private partnerships, and an inviting administrative atmosphere.
13. During the public review of the nodal development strategy, many comments were received that identified the need for incentives for developers, builders, property owners, and neighborhoods to ensure that nodal developments would be built consistent with design guidelines. The type of support and incentives suggested ranged from public investments in infrastructure to technical assistance and economic incentives.

### ***Land Use Policy #1: Nodal Development***

Apply the nodal development strategy in areas selected by each jurisdiction that have identified potential for this type of transportation-efficient land use pattern.

**Policy Definition/Intent:** Nodal development supports mixed land uses in designated areas to increase opportunities for people to live near their jobs and to make shorter trips for a variety of purposes. Nodal development also supports the use of alternative modes of transportation. Each jurisdiction will select the most appropriate implementation actions to carry out this policy.

This policy refines and expands existing *Metro Plan* concepts and policy direction that provide for mixed-use development and higher average residential densities in certain areas of the Eugene-Springfield region. The nodal development strategy is consistent with the definition of STAs, included in the adopted OHP. STAs include central business districts, transit-oriented development areas, and other activity or business centers that emphasize non-auto travel.

This policy is not intended to limit the types of nodal development patterns. Nodal development areas may vary in the amount, type, and orientation of commercial, civic, and employment uses; building size; amount and types of residential uses; and commercial intensity. The nodes will be pedestrian-friendly environments with a mix of land uses, including public open spaces that are pedestrian-, transit-, and bicycle-oriented. Nodes will have commercial cores that contain a compatible mix of retail, office, employment, and civic uses. The amount and types of commercial and civic uses in the core should be consistent with the type of nodal development center. The core should be adjacent to a frequently serviced transit stop. Nodal development centers will include a mix of housing types that achieve at least an average density that is within the medium-density range for residential uses.

This policy supports the growth of downtown Eugene and Springfield as commercial, residential, civic, and employment centers. The intent of this policy is to support development of the downtowns as vital urban centers by encouraging a compatible mix of uses, including housing. In doing so, more people may choose to live near their jobs, accomplish more trip objectives without needing to travel away from the downtowns, and use transit for external trips.

This policy supports the growth and diversification of employment centers by allowing a mix of new commercial, governmental, and light industrial uses and, where appropriate, residential uses in close proximity.

**Reference:** Summary Description of Proposed Nodal Development Areas (August 1995); *Policy Makers' Decision Package for Draft Plan Direction* (Decision Package), November 1996, Strategy 1; *Metro Plan* Transportation Element Policy 2; Statewide Planning Goal 2: Land Use, Goal 10: Housing.

### ***Land Use Policy #2: Support for Nodal Development***

Support application of the nodal development strategy in designated areas through information, technical assistance, or incentives.

**Policy Definition/Intent:** The intent of this policy is to encourage nodal development through public support and incentives, recognizing that there is public benefit to the transportation and land use efficiencies of nodal development. Although a market exists for this type of development, nodal development is relatively new to this region and may involve more perceived risk than typical development. Many developers, builders, and lenders lack knowledge and experience with nodal development. Consequently, it is important that public bodies be supportive partners and help mitigate uncertainties and perceived risks. Examples of support include design guidelines, streamlined review processes, marketing assistance, and public infrastructure improvements.

**Reference:** Based on Decision Package, November 1996, Strategies 1 and 12; *Market Demand Study for Nodal Development*.

### ***Land Use Policy #3: Transit-Supportive Land Use Patterns***

Provide for transit-supportive land use patterns and development, including higher intensity, transit-oriented development along major transit corridors and near transit stations; medium- and high-density residential development within ¼ mile of transit stations, major transit corridors, employment centers, and downtown areas; and development and redevelopment in designated areas that are or could be well served by existing or planned transit.

**Policy Definition/Intent:** The intent of this policy is to encourage more concentrated development and higher density housing in locations that are or could be served by high levels of transit service. By doing so, transit will be more convenient for a greater number of businesses and people and, in turn, the higher levels of transit will be supported by more riders.

**Reference:** Based on *Metro Plan 1987* Transportation Policies 2c, 2f, and 2e; TPR 660-12-045(4)(g); Statewide Planning Goal 2: Land Use.

### ***Land Use Policy #4: Multi-Modal Improvements in New Development***

Require improvements that encourage transit, bicycles, and pedestrians in new commercial, public, mixed-use, and multi-unit residential development.

**Policy Definition/Intent:** This policy supports efforts to improve the convenience of using transit, biking, or walking to travel to, from, and within newly developed and redeveloped areas. This policy recognizes the importance of providing pedestrian and bikeway connections within the confines of individual developments to provide direct, safe, and convenient internal pedestrian and bicycle circulation. This policy supports implementation of code amendments, such as those made through the Transportation Rule Implementation Project (TRIP) in Eugene. Note that private industrial development is not covered under this policy.

**Reference:** Based on *Metro Plan 1987* Transportation Policy 5; Decision Package, November 1996; TPR 660-12-045(3)(b); Statewide Planning Goal 2: Land Use.

### ***Land Use Policy #5: Implementation of Nodal Development***

Within ~~one~~ three years of TransPlan adoption, apply the ND, Nodal Development designation to areas selected by each jurisdiction, adopt and apply ~~interim~~ measures to protect designated nodes from incompatible development and adopt a schedule for completion of nodal plans and implementing ordinances.

**Policy Definition/Intent:** This policy was added at the request of the Department of Land Conservation and Development Commission. The nodal development strategy anticipates a significant change in development patterns within proposed nodes. Development of these areas under existing plan designations and zoning provisions

**could result in development patterns inconsistent with nodal development. This policy documents a commitment by the elected officials to apply the new /ND nodal development Metro Plan designation and new zoning regulations to priority nodal development areas within three years of TransPlan adoption, subject to available funding.**

**Reference:** Based on DLCD testimony; Joint Adopting Official review.

## **Transportation Demand Management Policies**

*TransPlan* transportation demand management (TDM) policies direct the development and implementation of actions that encourage the use of modes other than single-occupant vehicles to meet daily travel needs. The TDM policies support changes in travel behavior to reduce traffic congestion and the need for additional road capacity and parking and to support desired patterns of development.

### ***TDM Findings***

1. TDM addresses federal ISTEA and state TPR requirements to reduce reliance on the automobile, thus helping to postpone the need for expensive capital improvements. The need for TDM stems from an increasing demand for and a constrained supply of road capacity, created by the combined effects of an accelerated rate of population growth (41% projected increase from 1995 to 2015) and increasing highway construction and maintenance costs; for example, the City of Eugene increased the Transportation systems development charges by a total of 15 percent to account for inflation from 1993-1996.
2. The *Regional Travel Forecasting Model* revealed that average daily traffic on most major streets is growing by 2-3 percent per year. Based on *1994 Commuter Pack Survey* results, half of the local residents find roads are congested at various times of the day; and the vast majority finds roads are congested during morning and evening rush hours.
3. The *COMSIS TDM Strategy Evaluation Model*, used in August, 1997 to evaluate the impact of TDM strategies, found that vehicle miles traveled (VMT) and vehicle trips are reduced up to 3 percent by voluntary strategies (e.g., employer-paid bus pass program) and up to 10 percent by mandatory strategies (e.g., mandatory employer support); that requiring employers to increase the cost of employee parking is far more effective than reducing employee transit costs; and that a strong package of voluntary strategies has a greater impact on VMT and vehicle trips than a weak package of mandatory strategies.
4. Lane Transit District (LTD) system ridership has increased 53 percent since the first group pass program was implemented in 1987 with University of Oregon students and employees.
5. The OHP recognizes that TDM strategies can be implemented to reduce trips and impacts to major transportation facilities, such as freeway interchanges, postponing the need for investments in capacity-increasing projects.
6. The study, *An Evaluation of Pricing Policies for Addressing Transportation Problems* (ECONorthwest, July 1995), found that implementation of congestion pricing in the Eugene-Springfield area would be premature because the level of public acceptance is low and the costs of implementation are substantial; and that parking pricing is the only TDM pricing strategy that would be cost-effective during the 20-year planning period.

### ***TDM Policy #1: TDM Program Development***

Expand existing TDM programs and develop new TDM programs. Establish TDM bench marks and if the benchmarks are not achieved, mandatory programs may be established.

**Policy Definition/Intent:** This policy supports expansion and development of a broad spectrum of local and regional TDM programs at varying levels of implementation. TDM programs will focus on reducing trips for nonwork purposes, as well as for work commutes. Voluntary participation in TDM programs will be encouraged through marketing and incentives to target audiences, including the general public, developers, employers, employees, school administrators, and students. An adequate funding program must be developed to support implementation of TDM programs. This policy also supports the exploration of opportunities to establish a market-based, user-oriented approach to TDM through the use of transportation pricing measures.

**Reference:** *TransPlan* 1986, Policies AM3, AM7, TSM2; Decision Package, November 1996, Strategy 2; TPR 660-12-045(5)(b).

### ***TDM Policy #2: Parking Management***

Increase the use of motor vehicle parking management strategies in selected areas throughout the Eugene-Springfield metropolitan area.

**Policy Definition/Intent:** Parking management strategies address both the supply and demand for vehicle parking. They contribute to balancing travel demand within the region among the various modes of transportation available. To promote parking equity in the region, consideration should be given to applying parking management strategies at a region-wide level, in addition to downtown centers.

**Reference:** *TransPlan* 1986 Parking Policy section; Decision Package, November 1996, Strategy 4; TPR 660-12-045(5)(c).

### ***TDM Policy #3: Congestion Management***

Implement TDM strategies to manage demand at congested locations.

**Policy Definition/Intent:** Encouraging the use of alternative modes will become more important as the region grows and traffic congestion levels increase. A variety of strategies can be employed to help maintain mobility in congested locations as the area develops. TDM strategies implemented to manage demand at congested locations will be coordinated with other types of congestion management strategies, such as access management. This policy supports selective application of mandatory TDM strategies to manage demand at congested locations. For example, local jurisdictions could be

allowed to require employers to designate an employee transportation coordinator and to implement programs that encourage employees to use alternative modes.

**Reference:** Based on Decision Package, November 1996, Strategy 2.



## **Transportation System Improvements: System-Wide Policies**

The *TransPlan* Transportation System Improvement System-Wide Policies contain policy direction that is applicable to planning and implementation for all transportation system modes in the Eugene-Springfield area. In general, the transportation system improvement policies support choices in modes of travel and desired patterns of development through efficient use of the existing system infrastructure and design and implementation of appropriate system improvements.

### ***TSI System-Wide Findings***

1. The number of vehicles, VMT, and use of the automobile are all increasing while use of alternatives is decreasing. Between 1970 and 1990, the number of vehicles in Lane County increased by 83 percent, while the number of households increased by 62 percent. Between 1980 and 1990, VMT grew at a rate seven times that of the population growth. The *Regional Travel Forecasting Model* projects that, by the year 2015, without implementation of proposed *TransPlan* projects, non-commercial VMT will increase 52% while the percentage who bike will drop from 3.7% to 3.3%, walk from 8.9% to 7.9%, and the percentage who bus will increase only slightly from 1.8% to 1.9%.
2. The OHP recognizes that access management strategies can be implemented to reduce trips and impacts to major transportation facilities, such as freeway interchanges, and that communities with compact urban designs that incorporate a transportation network of arterials and collectors will reduce traffic impacts on state highways, postponing the need for investments in capacity-increasing projects.
3. *Oregon Highway Plan* (January 1999) policy supports investment in facilities that improve intermodal linkages as a cost-effective means to increase the efficient use of the existing transportation system.
4. Current literature and research speaks to the relationship between street design and travel behavior, finding that neighborhood impacts, such as through-traffic and speeding on neighborhood streets, are affected by street design. For example, research by Richard Dowling and Steven Colman reported in the article, *Effects of Increased Highway Capacity: Results of a Household Travel Behavior Survey*, 1998, found that drivers' number one preferred response to congestion was to find a faster route if the current one becomes congested; and Calthorpe and Duany/Platter-Zybecks and Anton Nelleson have found that the layout and design of buildings and streets will influence user behavior and that streets can be designed to reduce travel speeds and reduce cut-through trips.

## ***TSI System-Wide Policy #1: Transportation Infrastructure Protection and Management***

Protect and manage existing and future transportation infrastructure.

**Policy Definition/Intent:** This policy calls for the protection and management of transportation facilities for all modes, within the limits of available funding, in a way that sustains their long-term capacity and function. Given the limited funding for future transportation projects and operations, maintenance and preservation activities, the need to protect and manage existing and future transportation investments and facilities is crucial. Strategies related to access management, TDM, and land use can be implemented to reduce trips and impacts to major transportation facilities, such as freeway interchanges, thereby postponing the need for investments in capacity-increasing projects.

**Reference:** TPR 660-12-045(2), TPR 660-12-060 (Plan and Land Use Regulation Amendments); OTP (1992) Policy 1B; ISTEA Section 450.316(a) Metropolitan Planning Organization (MPO) Planning Factor 4.

## ***TSI System-Wide Policy #2: Intermodal Connectivity***

Develop or promote intermodal linkages for connectivity and ease of transfer among all transportation modes.

**Policy Definition/Intent:** An intermodal transportation system is one that includes all forms of transportation in a unified, connected manner. An intermodal trip is one that involves two or more modes between the trip origin and destination. Intermodal linkages are the transfer points along the way, such as Park-and-Ride lots. In transit, intermodal transfers allow providers to serve a greater segment of the population. For freight, intermodal transfers allow shippers to take advantage of the economies of each mode, such as truck and rail, to achieve the most cost-effective and timely deliveries of goods.

**Reference:** Based on OTP (1992) Policy 1F.

## ***TSI System-Wide Policy #3: Corridor Preservation***

Preserve corridors, such as rail rights-of-way, private roads, and easements of regional significance, that are identified for future transportation-related uses.

**Policy Definition/Intent:** This policy supports the preservation of corridors not in public ownership that connect existing streets or paths or provide alternate routes to existing streets or paths.

**Reference:** Based on OTP (1992) Action 1B.4; ISTEA Section 450.316(a) MPO Planning Factor 10.

#### ***TSI System-Wide Policy #4: Neighborhood Livability***

Support transportation strategies that enhance neighborhood livability.

**Definition/Intent:** Transportation-related impacts on neighborhood livability include excessive intrusion of regional vehicle movement on local residential streets, excessive vehicle speeds, and excessive traffic noise. Strategies aimed at improving flow on arterials, such as access management measures, may draw traffic from neighborhood streets that, based on travel characteristics, should be properly using the arterial.

Local governments will implement strategies to address neighborhood traffic impacts, but personal attitudes and behavior are the major factors in determining how residents travel around the region and the impact this travel has on neighborhoods. Choosing to shop locally, walking or cycling children to school, riding the bus to work, combining trips, driving slowly on residential streets, and avoiding short cuts through neighborhoods are examples of how individuals can help to reduce neighborhood traffic impacts.

**Reference:** Based on *TransPlan* 1986 Policy LU5; OTP (1992) Policy 1D.

#### ***TSI System-Wide Policy #5: TransPlan Project Lists***

Adopt by reference as part of the Metro Plan the 20-Year Capital Investment Actions project lists contained in *TransPlan*. Project timing and estimated costs are not adopted as policy.

**Definition/Intent:** This policy defines the adopted portions of the *TransPlan* 20-year Capital Investment Action project lists. Consistent with the requirements of Goal 11, Administrative Rule OAR660, Division 11. This policy was added to make it clear that the project lists in *TransPlan*, along with the policies in *TransPlan*, are adopted by ordinance as part of Metro Plan. An adopted project list is a requirement of the Transportation Planning Rule (TPR) (OAR 660-012-0020). The fiscally constrained project list identifies projects as being of higher priority than those on the future project lists. The TPR is structured so that issues not considered at the plan level are addressed during the Project Development Phase. OAR 660-012-0050 Transportation Project Development addresses the concerns raised here. Many of the details of the projects are not known at this time and will be addressed during the Project Development phase of project implementation. The Project Development Process contains specific requirements for public involvement, notice, and findings of compliance with applicable land use and environmental rules.

**Reference:** This policy was added after Draft *TransPlan* Planning Commission review based on advice from legal counsel.

## **Transportation System Improvements: Roadway Policies**

*TransPlan* Roadway Policies are relevant to the region's roadway system, which is comprised of arterial and collector streets. The policies refer to a multi-modal roadway system with infrastructure that serves the needs of all modes. The automobile continues to be the dominant form of passenger travel and much of the region's roadway system was designed to accommodate increasing automobile use. However, roadways serve the transit system and most modern roadways are built to serve bicycle and pedestrian travel. Roadways also play a role in the movement of freight and are the backbone of commerce in the region. In serving these varied needs, the region must continue to move towards a multi-modal roadway system that responds to the needs of all forms and purposes of travel.

### ***TSI Roadway Findings***

1. The *Regional Travel Forecasting Model* forecasted increased traffic congestion on roadways over the next 20 years, ranging from almost two to over four times the existing congestion levels.
2. Level of service (LOS) standards are a nationally accepted means for measuring the performance of roadway facilities. LOS analysis methods are standardized through the Transportation Research Board's *Highway Capacity Manual*.
3. The OHP establishes performance standards for all state highways in Oregon. OAR 660-012-0015 requires coordination of transportation system plans with the state.

### ***TSI Roadway Policy #1: Mobility and Safety for all Modes***

Address the mobility and safety needs of motorists, transit users, bicyclists, pedestrians, and the needs of emergency vehicles when planning and constructing roadway system improvements.

**Policy Definition/Intent:** This policy supports the design and construction of systems and facilities that accommodate multiple modes. It also supports consideration of the needs of emergency vehicles in the design and construction of system improvements.

**Reference:** Based on OTP (1992) Policy 1A; TEA 21 Metropolitan Planning Factors F and G.

## ***TSI Roadway Policy #2: Motor Vehicle Level of Service***

1. Use motor vehicle level of service standards to maintain acceptable and reliable performance on the roadway system. These standards shall be used for:
  - a. Identifying capacity deficiencies on the roadway system.
  - b. Evaluating the impacts on roadways of amendments to transportation plans, acknowledged comprehensive plans and land-use regulations, pursuant to the TPR (OAR 660-12-0060).
  - c. Evaluating development applications for consistency with the land-use regulations of the applicable local government jurisdiction.
2. Acceptable and reliable performance is defined by the following levels of service under peak hour traffic conditions: Level of Service E within Eugene’s Central Area Transportation Study (CATS) area, and Level of Service D elsewhere.
3. Performance standards from the OHP shall be applied on state facilities in the Eugene-Springfield metropolitan area.

In some cases, the level of service on a facility may be substandard. The local government jurisdiction may find that transportation system improvements to bring performance up to standard within the planning horizon may not be feasible, and safety will not be compromised, and broader community goals would be better served by allowing a substandard level of service. The limitation on the feasibility of a transportation system improvement may arise from severe constraints including but not limited to environmental conditions, lack of public agency financial resources, or land use constraint factors. It is not the intent of TSI Roadway Policy #2: Motor Vehicle Level of Service to require deferral of development in such cases. The intent is to defer motor vehicle capacity increasing transportation system improvements until existing constraints can be overcome or develop an alternative mix of strategies (such as: land use measures, TDM, short-term safety improvements) to address the problem.

**Policy Definition/Intent:** *Level of service* is a concept that is used to assess roadway system performance and to describe operational conditions from the perspective of motorists. Detailed descriptions of LOS and its application are provided in Appendix B.

The policy sets standards for acceptable levels of roadway performance (LOS) and supports maintaining a system of streets to meet those standards. By defining acceptable levels of service, the policy provides direction for identifying roadway system deficiencies. It does not, however, determine what actions should be taken to address deficiencies. Such actions are guided by the full range of *TransPlan* policies including policies on Land Use, TDM, Transportation System Improvements (TSI), and Transit.

For state highways, performance standards contained in the adopted Oregon Highway Plan are used to evaluate the need for roadway capacity improvements.

**Reference:** *TransPlan* 1986 Plan Assumptions. Additions to policy based on advice from legal council.

### ***TSI Roadway Policy #3: Coordinated Roadway Network***

In conjunction with the overall transportation system, recognizing the needs of other transportation modes, promote or develop a regional roadway system that meets combined needs for travel through, within, and outside the region.

**Policy Definition/Intent:** The regional roadway system must meet the travel needs of motorists, transit users, bicyclists, pedestrians, and commercial vehicles. Characteristics of such a roadway system include adequate capacity and connections to roads entering the region. *TransPlan* roadways will be coordinated with the Lane County Transportation System Plan (TSP) roadways and ODOT corridor studies. All roadway system improvements will also be consistent with other adopted policies in *TransPlan*.

**Reference:** Based on TPR 660-12-020; TEA 21 Metropolitan Planning Factor E.

### ***TSI Roadway Policy #4: Access Management***

Manage the roadway system to preserve safety and operational efficiency by adopting regulations to manage access to roadways and applying these regulations to decisions related to approving new or modified access to the roadway system.

**Policy Definition/Intent:** Access management is balancing access to developed land while ensuring movement of traffic in a safe and efficient manner. This policy supports local access management ordinances called for in the TPR.

The TPR (OAR 660-012-0045 (2)) states: “Local governments shall adopt land use or subdivision ordinance regulations, consistent with applicable federal and state requirements, to protect transportation facilities, corridors, and sites for their identified functions. Such regulations shall include:

(a) Access control measures, for example, driveway and public road spacing, median control and signal spacing standards, which are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities;”

These regulations are adopted by individual jurisdictions. ODOT has adopted Access Management policies and regulations in the recently adopted Oregon Highway Plan. To varying degrees, Eugene, Springfield, and Lane County address access management in current land use codes.

**Reference:** Joint Adopting Official review.

## Transportation System Improvements: Transit Policies

The *TransPlan* transit policies are designed to support improvement of the transit system to make it a more viable transportation alternative for a greater segment of the population. The policies focus on enhancements to the convenience of the transit system through improved facilities, more frequent service, and faster service. These policies are also intended to create a transit system that supports and is integrated with planned land use patterns.

### *TSI Transit Findings*

1. The *1990 U.S. Census of Population* reported that about 10 percent of all households in the Eugene-Springfield area did not own a vehicle; these residents have limited transportation choices.
2. Transit services are particularly important to the transportation disadvantaged population: persons who are limited in meeting their travel needs because of age, income, location, physical or mental disability, or other reasons. The Americans with Disabilities Act (ADA) requires fixed-route systems like LTD to provide a comparable level of service to the elderly and persons with disabilities who are unable to successfully use the local bus service. LTD's *Americans with Disabilities Act Paratransit Plan, 1994-1995 Update*, January 18, 1995, was found to be in full compliance with the ADA by the Federal Transit Administration.
3. The role of urban public transit in meeting trip needs has increased within the metropolitan area since 1970. In 1971, there were 2,260 LTD passenger trips on a weekday and, in 1995, ridership had increased to 20,000 per day, or 1.8% of all metropolitan trips. The *Regional Travel Forecasting Model* forecasts transit use to increase to 2.7% of trips by 2015 with proposed *TransPlan* projects and policy implementation.
4. The *Urban Rail Feasibility Study Eugene/Springfield Area* (July 1995) concluded that projected 2015 ridership for an urban rail system was too low to be competitive with other cities seeking federal rail transit funding; and that BRT could significantly improve transit service for substantially less capital investment and lower operational costs than urban rail.
5. OHP policy supports investment in Park-and-Ride facilities as a cost-effective means to increase the efficient use of the existing transportation system.

### *TSI Transit Policy #1: Transit Improvements*

Improve transit service and facilities to increase the system's accessibility, attractiveness, and convenience for all users, including the transportation disadvantaged population.

**Policy Definition/Intent:** Continued improvements to the transit system, including enhancements to the existing transit service, exploration of transit fare alternatives that increase ridership and new and improved transit facilities for passengers, will make

transit a more attractive transportation alternative and encourage increased use of transit. This policy also supports maintaining existing facilities in good condition.

**Reference:** Based on TEA 21 Metropolitan Planning Factor C.

### ***TSI Transit Policy #2: Bus Rapid Transit***

Establish a Bus Rapid Transit (BRT) system composed of frequent, fast transit service along major corridors and neighborhood feeder service that connects with the corridor service and with activity centers, if the system is shown to increase transit mode split along BRT corridors, if local governments demonstrate support, and if financing for the system is feasible.

**Policy Definition/Intent:** BRT is, in essence, the use of buses to emulate the positive characteristics of a rail system, but at a fraction of the cost of a rail system. The BRT system will include:

- Exclusive busways along the majority of each corridor,
- Faster boarding through low-floor, multiple door vehicles,
- Minimum ten minute frequency during peak hours,
- Increased convenience and comfort,
- Limited stops,
- Improved travel time through reduction of impact from normal traffic congestion through bus priority treatment
- A connected system of BRT corridor and neighborhood routes

BRT, when combined with other system improvement, land use, and demand management strategies, is expected to increase the share of riders who use public transportation. BRT is also expected to help the region maintain conformity with federal air quality standards. BRT, combined with nodal development, is a key strategy in the regions compliance with alternative performance measures for the Transportation Planning Rule. Commitment by the region to full system build out of BRT within 20 years is essential to meeting the alternative performance measures. The full system will include 61 miles of BRT corridor service. The majority of each corridor will include exclusive busways. When funding or traffic conditions restrict implementation of exclusive busways within a corridor, priority should be given to improvements providing the greatest benefit to travel timesavings. The BRT strategy will be implemented to the extent that planning and engineering studies show that the system would increase the use of transit, is supported by the community, and can be funded. As BRT is implemented, LTD, Springfield, Eugene, Lane County, and ODOT will consider neighborhood impacts when designing elements of specific segments.

**Reference:** Based on Decision Package, November 1996, Strategy 5; TEA 21 Metropolitan Planning Factor C.



### ***TSI Transit Policy #3: Transit/High-Occupancy Vehicle Priority***

Implement traffic management strategies and other actions, where appropriate and practical, that give priority to transit and other HOVs.

**Policy Definition/Intent:** Various traffic management techniques, such as transit signal priority, bus queue jumpers, and exclusive bus lanes, can be used to improve transit travel time, reduce operating costs, and make transit a more attractive transportation alternative. Implementation of priority treatment for transit and other HOVs must not impair bicycle and pedestrian mobility. Local jurisdictions will determine when and where it is appropriate to give priority to transit and HOVs.

**Reference:** Based on *TransPlan* 1986 Policy TSM3, AM2.

### ***TSI Transit Policy #4: Park-and-Ride Facilities***

Expand the Park-and-Ride system within the metropolitan area and nearby communities.

**Policy Definition/Intent:** Park-and-Ride lots provide access to the transit system for people who cannot conveniently access the bus system on foot. Common reasons for using Park-and-Ride lots are that there is no bus service near a person's home, the nearby service is not convenient, or a car is needed before or after the bus trip (such as to drop a child off at day care). Regular Park-and-Ride users are almost always commuters (to work or to school) who use the service daily. The destination of Park-and-Ride customers is almost always to a location where parking is expensive and/or in short supply. Increased use of the Park-and-Ride system will reduce traffic congestion and parking demand in the city centers and other intensely developed areas. Expansion of the Park-and-Ride system in outlying communities will be consistent with the Lane County TSP and small city TSPs.

**Reference:** *TransPlan* 1986 Policy AM5, IC2.

## Transportation System Improvements: Bicycle Policies

The *TransPlan* bicycle policies address the need to improve the region's bicycle system and associated facilities to increase the choice of modes available for travel in the region. The policies are focused on directing bicycle system improvements, such as expansion of the existing regional network, the provision of safety improvements, and the addition of adequate support facilities. The policies also respond to the region's need to comply with federal and state requirements that call for a greater emphasis on the use of alternative modes of transportation, including bicycles.

### *TSI Bicycle Findings*

1. In 1995, there were 126 miles of bikeways in the metropolitan area. Implementation of proposed *TransPlan* projects would approximately double the lane miles for bicycles.

Over the past 20 years, Eugene and Springfield have built an extensive bikeway system. The focus over the next 20 years is on the construction of "Priority Bikeway Projects" which consist of those projects that are along an essential core route on which the overall system depends, fill in a critical gap in the existing bicycle system, or overcome a barrier where no other nearby existing or programmed bikeway alternatives exist, or significantly improve bicycle users safety in a given corridor.

2. OAR 660-012-0045 (3) requires local governments to adopt land use regulations to require bikeways along new and reconstructed arterial and major collector streets and to connect new development with nearby neighborhood activity centers and major destinations.

### *TSI Bicycle Policy #1: Bikeway System and Support Facilities*

Construct and improve the region's bikeway system and provide bicycle system support facilities for both new development and redevelopment/expansion.

**Policy Definition/Intent:** Over the past 20 years, local jurisdictions have invested in a system of designated bikeways that provide access to many regional destinations. This policy supports the continued construction of bikeway facilities that provide regional connectivity and access to neighborhoods, schools, and parks, as well as recreational, retail, and employment areas. The bicycle projects included in *TransPlan* are significant components of the regional bikeway system because they fill gaps in the existing system, provide access to neighborhoods or activity centers, improve overall system safety, or overcome significant barriers, such as rivers and highways.

Bikeways include multiple-use paths, striped lanes or shoulders, and signed routes on local streets. All streets in the metropolitan area should be designed to safely accommodate bicyclists. If a street cannot safely accommodate bicycle travel and reconstruction is not feasible, an alternate parallel bikeway should be designated. This

policy also supports the construction of multiple-use bicycle/pedestrian paths along the Willamette River within the Willamette River Greenway and along the McKenzie River and other major drainageways where practicable. Land use activities along these corridors should be done in a manner that allows the possibility of future bikeway construction.

In conjunction with bikeway system improvements, adequate bicycle system support facilities should be provided, including secure bicycle parking areas (e.g., covered racks, cages, and lockers), signage, and lighting. In particular, bicycle support facilities should be provided at government offices, downtowns, employment areas, shopping centers, parks, libraries, athletic stadiums, and schools, and along heavily used bikeways.

**Reference:** Based on TPR 660-12-045(3 and 6).

### ***TSI Bicycle Policy #2: Bikeways on Arterials and Collectors***

Require bikeways along new and reconstructed arterial and major collector streets.

**Policy Definition/Intent:** In compliance with the TPR, this policy requires the provision of bikeways, normally bike lanes, on arterial and major collector streets. Bicycle lanes can be provided on existing streets through the reallocation of road space, including narrowing motor vehicle travel lanes and removing on-street parking. In special cases, circumstances such as safety issues or physical limitations may prevent the provision of on-street bike lanes. In these cases, alternate parallel routes shall be provided as part of the same project to ensure access to residences and services found on the collector and arterial streets.

**The 1999 Eugene Arterial and Collector Street Plan (ACSP) describes the public involvement process in the design of Eugene projects, including adding bicycle lanes to existing streets (pp. 44-45). When bike lanes are proposed to be added to existing streets, staff would work with residents, property owners and the neighborhood association to conduct a design charrette or similar process for citizen input. Various options would be evaluated for implementing the bike lanes while enhancing the maximum amount of on-street parking, and addressing other city and neighborhood goals. Design standards in the ACSP would be used as desirable guidelines –for example, width of bicycle lanes and parking areas, etc. The process would focus on reaching consensus on optimum design for safety, mobility and livability.**

**Reference:** Based on *TransPlan* 1986 Policy I7; TPR 660-12-045(3)(b)(B); OTP Policy 2D, Action 2D.1, Eugene ACSP.

### ***TSI Bicycle Policy #3: Bikeway Connections to New Development***

Require bikeways to connect new development with nearby neighborhood activity centers and major destinations.

**Policy Definition/Intent:** This policy recognizes the importance of providing bicycle connectivity between new development, neighborhood activity centers, and major destinations. When new development occurs, connectivity to the regional bikeway system must be provided. In cases where the existing or planned street network does not adequately provide bicycle connectivity, paved bikeways should be provided within residential developments and should extend to neighborhood activity centers or to an existing bikeway system within one-half mile of residential developments. Major destinations may include, but are not limited to, nodal development centers, schools, shopping centers, employment centers, transit stations, and parks. This policy does not imply that a developer would be required to provide bikeways through undeveloped adjoining properties.

**Reference:** Based on TPR 660-12-045(3)(b).

### ***TSI Bicycle Policy #4: Implementation of Priority Bikeway Miles***

Give funding priority (ideally within the first 3 to 5 years after adoption of TransPlan subject to available funding) to stand-alone bikeway projects that are included in the definition of “Priority Bikeway Miles” and that increase the use of alternative modes.

**Policy Definition/Intent:** This policy supports consideration and programming of stand-alone “priority bikeway miles” bikeway facilities in the first 3-5 years following adoption of TransPlan. Stand-alone bike projects are those listed in TransPlan not associated with roadway projects (Multi-Use Paths Without Road Projects and On-Street Lanes or Routes Without Roadway Projects.)

A key alternative measure for demonstrating reduced reliance on the auto is the building of Priority Bikeway Miles. Priority bikeway projects consist of those projects that:

- ♦ Are along an essential core route on which the overall bicycle system depends; and
- ♦ Fill in a critical gap in the existing bicycle system; or
- ♦ Overcome a barrier where no other nearby existing or programmed bikeway alternatives exist (e.g., river, major street, highway); or
- ♦ Significantly improves bicycle users’ safety in a given corridor.

The intent of this policy is to maximize the impact of bicycle projects in TransPlan by implementing the most important bike projects early in the period following adoption of TransPlan. This policy also provides additional policy direction in support of Finance Policy #5: Short-Term Project Priorities.

**Reference:** Based on TPR 660-12-0040(2)(d). Also see Finance Policy #5.  
*TransPlan*

## Transportation System Improvements: Pedestrian Policies

Walking is still the most important mode of travel. All trips, whether by car, bus, or bike, involve at least two pedestrian trips: one at the beginning and one at the end. Without pedestrian facilities, the transportation system could not function. Pedestrian facilities are critical to provide access to neighborhood destinations, including schools, parks, recreation, and shopping. The *TransPlan* pedestrian policies focus on closing gaps and improving the quality of the pedestrian system in the region. These policies are closely related to *TransPlan* land use policies that support pedestrian-oriented design.

### *TSI Pedestrian Findings*

1. OAR 660-012-0045 (3) requires local governments to adopt land use regulations to provide for a pedestrian environment that is well integrated with adjacent land uses and designed to enhance the safety, comfort, and convenience of walking; a continuous pedestrian network with reasonably direct travel routes between destination points; and sidewalks along urban arterial and collector roadways, except freeways.

### *TSI Pedestrian Policy #1: Pedestrian Environment*

Provide for a pedestrian environment that is well integrated with adjacent land uses and is designed to enhance the safety, comfort, and convenience of walking.

**Policy Definition/Intent:** This policy supports the provision of pedestrian connections between adjacent land uses, improved pedestrian access to transit stops and stations, safe and convenient pedestrian street crossings, and pedestrian amenities, including lighting. In more developed areas, such as downtowns, pedestrian design features improve the accessibility of destinations.

**Reference:** Based on TPR 660-12-045.

### *TSI Pedestrian Policy #2: Continuous and Direct Routes*

Provide for a continuous pedestrian network with reasonably direct travel routes between destination points.

**Policy Definition/Intent:** This policy supports an active program to develop pedestrian pathways (e.g., sidewalks), especially in proximity to major activity centers. A continuous pedestrian network is free of gaps and deadends and overcomes physical barriers that inhibit walking. Direct routes between destination points are important because out-of-direction travel discourages walking. “Reasonably direct” means either a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for likely users.

**Reference:** Based on TPR 660-12-045(3)(d)(B).

### ***TSI Pedestrian Policy #3: Sidewalks***

Construct sidewalks along urban area arterial and collector roadways, except freeways.

**Policy Definition/Intent:** This policy supports the construction of sidewalks during roadway construction or reconstruction, as well as the prioritized retrofitting of corner sidewalks with curb ramps, and infill of missing sidewalk sections. Specific design standards for sidewalks along collectors and arterials and local street sidewalk policies and requirements are established by local jurisdictions.

**Reference:** Based on TPR 660-12-045(3)(b)(B).

## **Transportation System Improvements: Goods Movement Policies**

*TransPlan* supports the integration of goods movement considerations into the regional transportation planning process. Goods movement of all types makes a significant contribution to the region's economy and wealth and contributes to residents' quality of life. Truck routes, rail corridors, aviation facilities, and pipelines must all function cohesively if the region's goods movement system is to operate efficiently. There are no maritime port or navigation facilities in the *TransPlan* study area. The region seeks to maintain and enhance its competitive advantage in freight distribution through efficient use of a flexible, seamless, and multi-modal transportation network that offers competitive choices for freight movement. Goods movement is directly supported by TSI System-Wide and TSI Roadway policies.

### ***TSI Goods Movement Findings***

1. The OTP recognizes that goods movement of all types makes a significant contribution to the region's economy and wealth and contributes to residents' quality of life. OTP Policy 3A promotes a balanced freight transportation system that takes advantage of the inherent efficiencies of each mode.
2. There are no maritime port or navigation facilities in the metropolitan area.
3. Goods movement is directly supported by system-wide and roadway transportation system improvements.

### ***TSI Goods Movement Policy #1: Freight Efficiency***

Support reasonable and reliable travel times for freight/goods movement in the Eugene-Springfield region.

**Policy Definition/Intent:** This policy supports a high degree of mobility for goods movement within and through the region in freight transportation corridors and high-quality access between freight transportation corridors and the region's markets, inter-modal facilities, and industrial developments. This policy supports the development of collaborative strategies between public agencies and freight transportation providers to improve the efficiency of roadway, rail, air, and pipeline goods movement.

**Reference:** Based on OTP (1992) Policy 3A; TEA 21 Metropolitan Planning Factor E.

## Transportation System Improvements: Other Modes Policies

This section sets forth policy for other modes, including air, rail, and inter-city bus service. Collaboration between the public and private sectors is imperative for effective implementation of policies that directly impact private transportation providers. These other modes are supported by the TSI System-Wide policies.

### *TSI Other Modes Findings*

1. The Eugene Airport is located outside the urban growth boundary (UGB) to protect it from incompatible development as well as to reduce airport-related impacts on development within the UGB. The area of the Airport designated Airport Operations in the *Eugene Airport Master Plan* receives municipal water, wastewater, fire, and police services.
2. The *Pacific Northwest High Speed Rail Southern Terminus Study*, Wilbur Smith Associates, 1995, found that rail-related infrastructure improvements needed along the corridor include improved signals, grade crossings, track, and depots. These improvements are important to the success of high speed rail because Eugene-Springfield is the southern terminus to the high speed rail corridor.
3. OTP Policy 1F provides for a transportation system with connectivity among modes within and between urban areas, with ease of transfer among modes and between local and state transportation systems.

### *TSI Other Modes Policy #1: Eugene Airport*

Support public investment in the Eugene Airport as a regional facility and provide land use controls that limit incompatible development within the airport environs. Continue to use the *Eugene Airport Master Plan* as the guide for improvements of facilities and services at the airport.

**Policy Definition/Intent:** The Eugene Airport/Mahlon Sweet Field is the major airport that provides commercial passenger, cargo, mail, and general aviation services to the metropolitan area. This airport also provides major services to Lane County residents outside of the metropolitan area. The airport is located outside the urban growth boundary (UGB), to protect the airport from incompatible development or development that would have incompatible operational characteristics, as well as to reduce airport-related impacts on development within the airport environs.

**Reference:** Based on TPR 660-12-045(2)(c); *Metro Plan 1987 Transportation Element Policies 8-17*.



### ***TSI Other Modes Policy #2: High Speed Rail Corridor***

Support provision of rail-related infrastructure improvements as part of the Cascadia High Speed Rail Corridor project.

**Policy Definition/Intent:** This policy demonstrates local jurisdiction support for improvements to the passenger rail system. High speed rail corridor development is a cooperative effort involving the states of Oregon and Washington, the Province of British Columbia, and Burlington Northern Railroad, Southern Pacific Railroad, and Amtrak. Rail-related infrastructure improvements needed along the corridor include improved signals, grade crossings, track, and depots. As the corridor's southern terminus, the provision of a station and train servicing facilities and connections to other transportation modes are issues for the Eugene-Springfield region that contribute to the overall success of the corridor.

**Reference:** *Pacific Northwest High Speed Rail Southern Terminus Study*, July 1995.

### ***TSI Other Modes Policy #3: Passenger Rail and Bus Facilities***

Support improvements to the passenger rail station and inter-city bus terminals that enhance usability and convenience.

**Policy Definition/Intent:** This policy promotes the growth of inter-city bus and passenger rail facilities and services. Amtrak provides passenger rail service through the region and Greyhound is the primary provider of inter-city bus service. Intermodal connections play an important role in the usability and convenience of passenger rail and bus service.

**Reference:** Based on *TransPlan* 1986 Policy IC1; based on OTP (1992) Action 3B.2.

## **Finance Policies**

The finance policies will guide the development and allocation of funding for transportation services, facilities, and projects. Characteristics of the desired transportation finance system include:

1. Incorporation of federal, state, local, and private funding;
2. Funding for operations and maintenance, preservation, and modernization of the transportation system for all transportation modes and jurisdictions;
3. Funding for incentives to implement the nodal development strategy;
4. Funding for the development, implementation, and operations of TDM programs;
5. Funding for efficient and effective system improvements (OTP Policy 4B);
6. Funding for the improvement of collector and arterial streets within the Eugene-Springfield UGB to urban standards;
7. Modernization and extension of the user pays concept to reflect the full costs and benefits of uses of the transportation system and to reinforce the relationship between the user fees and uses of the related revenues (OTP Policy 4C); and
8. Provision of equity among competing users, payers, beneficiaries, and providers of the transportation system (OTP Policy 4F).

A cost-effective transportation system will provide adequate levels of accessibility and mobility to users, while minimizing the overall cost of the system and therefore reducing the need for public investment. Certain situations require increased investments in one area to save a greater amount of capital cost in another area. However, *TransPlan* places emphasis on the preservation and efficient use of existing facilities as the preferred approach to provide an adequate transportation system.

## ***Finance Findings***

1. Transportation costs are rising while revenues are shrinking and this trend is expected to continue. The *1999 Oregon Highway Plan* estimated total 20-year highway needs of about \$29 billion, but projected revenues of only about \$14 billion.
2. *TransPlan* estimates that operations, maintenance, and preservation of the metropolitan transportation system will cost \$1.266 billion in 1997 dollars to maintain at current levels to the year 2021, while revenues for this purpose, including a regularly increasing state gas tax and federal forest receipts at current non-guaranteed levels after the guarantee expires, are estimated at \$1.031 billion, leaving a conservative estimated shortfall of about \$235 million over the planning period before the implementation of fiscal constraint strategies.
3. The projects proposed in *TransPlan* demonstrate that nearly all of the region's travel over the next 20 years will rely on existing streets, highways, and bicycle and pedestrian facilities, emphasizing the importance of preservation and maintenance of these facilities.

4. Historically, the State Highway Trust Fund (SHTF) and Federal Forest Receipts, significant sources of transportation revenues, have funded operations and maintenance and preservation of the regional transportation system. Currently, SHTF revenues are not increasing with inflation and Federal Forest Receipts are declining.
5. According to estimates prepared for the *TransPlan* Finance Committee, about 130 miles of roads (about 15 percent of the system) are currently in need of either resurfacing or reconstruction with an estimated cost of \$61 million in 1995 dollars.
6. Funding allocations of State cigarette tax revenues designated for special need transit services are guided by the Special Transportation Fund Advisory Committee per ORS 391.800-391.830 and OAR 732-05, 732-10, 732-20 governing the Special Transportation Fund Program.
7. Currently, systems development charge (SDC) methodologies charge new development only for the city's portion of the arterial-collector system; metro area state and county facilities are excluded from the calculation of SDC rates; and assessments only partially fund projects that are improving existing facilities to urban standards.
8. Focus groups that convened during the *TransPlan* update process expressed the preference for mixed-use development to be encouraged and facilitated rather than required. Offering financial incentives and other support for nodal development is more in line with public preferences than regulatory measures.
9. Under the Transportation Efficiency Act (TEA 21), 10 percent of Surface Transportation Program funds allocated to the state must be used for transportation enhancement activities, including construction of facilities for bicycles and pedestrians, but a local match is required. State funding for bikeways is primarily limited to ODOT Highway Funds, which are used mainly for adding bicycle lanes to existing and new streets, but may be used for other bicycle projects in the right-of-way. Local jurisdictions may also fund bikeways through the local road construction and maintenance budget and from general funds, park district funds, special bond levies, and SDCs. Regarding transit, *TransPlan* anticipates that discretionary federal grant funds will pay for up to 80 percent of the capital cost of the BRT system, based on trends in federal funding for LTD capital projects over the last ten years.

### ***Finance Policy #1: Adequate Funding***

Support development of a stable and flexible transportation finance system that provides adequate resources for transportation needs identified in *TransPlan*.

**Policy Definition/Intent:** This policy supports development of a stable set of revenue sources to adequately fund the full range of regional transportation needs for all modes, including operations and maintenance, preservation, and modernization. This policy also supports the creation of funding for incentives to implement nodal development and funding for the development, implementation, and operation of TDM programs.

The current structure and level of transportation funding is inadequate to meet the needs of either the individual publicly funded modes of transportation or the system as a whole. Many transportation revenue sources are restricted to expenditure on particular types of projects either by mode or activity. Local jurisdictions may seek changes in current restrictions on transportation funding. The current shortfall in revenues available for road preservation activities is evidence of a mismatch between revenue availability and need.

**Reference:** Based on OTP (1992) Policy 4A; Decision Package, November 1996, Strategies 10, 13, and 14; *TransPlan* 1986 Policy I3 (Criteria C) and Street and Highway Element Category of Short-Range Need.

### ***Finance Policy #2: Operations, Maintenance, and Preservation***

Operate and maintain transportation facilities in a way that reduces the need for more expensive future repair.

**Policy Definition/Intent:** This policy emphasizes the importance of adequate resources to operate and maintain the existing transportation system at a level that avoids more costly reconstruction. Preservation and efficient use of existing facilities is preferred versus expanding the transportation system when there is a choice. The impact of this policy is limited by the fact that some transportation revenue sources are dedicated to modernization activities.

Nearly all of the region's travel during the next 20 years and beyond will rely on the existing system of streets, highways, and bicycle and pedestrian facilities. Therefore, it is critical to ensure that current and future funding and resource allocation decisions address the ongoing operation, maintenance, and preservation of this system. To minimize costs, it is important to maintain and preserve the system at a level such that at least 80 percent of the system's pavement condition is rated fair or better. If this happens, more expensive preservation activities, such as reconstruction of a facility, are postponed.

**Reference:** Based on *TransPlan* 1986 Policy I4; Decision Package, November 1996, Strategy 8; TEA 21 Metropolitan Planning Factor G.

### ***Finance Policy #3: Prioritization of State and Federal Revenue***

Set priorities for investment of Oregon Department of Transportation (ODOT) and federal revenues programmed in the region's Transportation Improvement Program (TIP) to address safety and major capacity problems on the region's transportation system.

**Policy Definition/Intent:** This policy supports the development and application of a process for prioritizing regional system improvements funded by state and federal revenues. Safety and major capacity issues will be emphasized in this process. Local jurisdiction funding sources, including federal payments to the County road fund, are

allocated through local agency Capital Improvement Programs (CIPs) and are not subject to a regional prioritization process.

**Reference:** Based on *TransPlan* 1986 Policies I2, I3, and I13; TEA 21 Metropolitan Planning Factor F; Decision Package, November 1996, Strategy 11.

#### ***Finance Policy #4: New Development***

Require that new development pay for its capacity impact on the transportation system.

**Policy Definition/Intent:** This policy supports expanding SDC methodologies to address new developments' impacts on state, county, and transit facilities. Currently, SDC methodologies adopted by the cities of Eugene and Springfield charge new development only for the City's portion of the arterial-collector system. Additional charges to mitigate onsite or adjacent impacts may be necessary.

**Reference:** Finance Committee.

#### ***Finance Policy #5: Short-Term Project Priorities***

Consider and include among short-term project priorities, those facilities and improvements that support mixed-use, pedestrian-friendly nodal development and increased use of alternative modes.

**Policy Definition/Intent:** This policy supports consideration and programming of facilities and improvements that support nodal development and the increased use of alternative modes. Examples of such investments include funding incentives for implementation of nodal development, funding of TDM programs, and improvements made to the transit and bike systems.

**Reference:** Based on TPR 660-12-0040(2)(d).

#### ***Finance Policy #6: Eugene-Specific Finance Policy***

The City of Eugene will maintain transportation performance and improve safety by improving system efficiency and management before adding capacity to the transportation system under Eugene's jurisdiction.

**Policy Definition/Intent:** Use the following priorities for developing the Eugene Capital Improvement Program (CIP) and Eugene projects for the Metropolitan Transportation Improvement Program (MTIP). Implement higher priority measures unless a lower priority measure is clearly more cost-effective or unless it clearly better supports safety, growth management, or other livability and economic viability considerations. Plans

must document the justification which supports using lower priority measures before higher priority measures. This policy does not apply to any other jurisdiction or agency.

1.     Protect the existing system.  
The highest priority is to preserve the functionality of the existing transportation system by means such as access management, comprehensive plans, transportation demand management, improved traffic operations, and alternative modes.
2.     Improve the efficiency and capacity of existing transportation facilities.  
The second priority is to make minor improvements to existing highway facilities such as widening highway shoulders or adding auxiliary lanes, providing better access for alternative modes (e.g., bike lanes, sidewalks, bus shelters), extending or connecting local streets, and making other off-system improvements.
3.     Add capacity to the existing system.  
The third priority is to make major improvements to existing transportation facilities such as adding general purpose lanes and making alignment corrections to accommodate legal-sized vehicles.
4.     Add new facilities to the system.  
The lowest priority is to add new transportation facilities such as a new roadway.

**Reference:** Eugene City Council action.

# ***TransPlan* Chapter 3: Plan Implementation**

## **Table of Contents**

Chapter Overview .....	2
Part One: Capital Investment Actions .....	3
Summary of <i>TransPlan</i> Needs Analysis .....	3
Capital Investment Action Implementation Process .....	4
Overview of Capital Investment Action Project Lists .....	7
Capital Investment Actions: Roadway Projects .....	11
Capital Investment Actions: Transit Projects .....	34
Capital Investment Actions: Bicycle Projects .....	38
Part Two: Financial Plan .....	55
Federal and State Regulations for Financial Constraint .....	55
Future Cost and Revenue Estimate Methodologies .....	55
Transit System Costs and Revenues .....	58
Bicycle and Pedestrian System Costs and Revenues .....	58
Flexibility of Federal Surface Transportation Revenues .....	60
Assessment of Revenue Shortfall .....	60
Strategies to Address Revenue Shortfall .....	63
Development of Constrained Plan .....	67
Part Three: Air Quality Conformity .....	74
Requirements .....	74
Analysis .....	75
Part Four: Planning and Program Actions .....	76
Land Use Planning and Program Actions .....	77
Transportation Demand Management Planning and Program Actions .....	82
Transportation System Improvements Planning and Program Actions .....	88
Part Five: Parking Management Plan .....	97
TPR Requirements for Parking Space Reduction .....	97
Capital Investment Actions .....	97
Planning and Program Actions .....	98

# Chapter Overview

Chapter Three is comprised of actions that implement the regional transportation policy framework set forth in Chapter Two and elements related to plan implementation that are required by federal and state legislation.

- ♦ **Part One: Capital Investment Actions** presents transportation system improvement (TSI) projects for motor vehicles, transit, bicycles, pedestrians, goods movement, and other modes that require significant capital investment.
  - ⇒ **The *TransPlan* Financially Constrained 20-Year Capital Investment Action project lists will be adopted and incorporated by amendment into the *Metro Plan*.**
- ♦ **Part Two: Financial Plan** describes total Capital Investment Action project costs, anticipated revenues from existing sources, the expected gap in revenues, potential yields from new revenue sources, factors to consider in determining project priorities, and the Financially Constrained *TransPlan*.
- ♦ **Part Three: Air Quality Conformity** follows the Financial Plan. This section summarizes the air quality conformity analysis required by federal legislation.
- ♦ **Part Four: Planning and Program Actions** presents a range of regionally significant planning, administrative, and support actions that might be used to implement *TransPlan* policies. The Planning and Program Actions are not adopted, meaning they are not binding or limiting to any implementing jurisdiction.
- ♦ **Part Five: Parking Management Plan** presents parking management strategies and demonstrates how the region will achieve the state requirement to reduce parking spaces per capita by 10 percent.



## Part One: Capital Investment Actions

**Capital Investment Actions** are TSI projects for motor vehicles, transit, bicycles, pedestrians, goods movement, and other modes that require significant capital investment. *TransPlan Chapter Two TSI System-Wide Policy #1 Transportation Infrastructure Protection and Management* calls for "... the protection and management of transportation facilities for all modes...in a way that sustains their long-term capacity and function." This policy is combined with *TransPlan* policies and implementation actions for transportation demand management (TDM), land use, and transit. Its purpose is to guide the management of existing and future transportation infrastructure in ways that will reduce the need to construct new roadway capacity improvements. The effects of these management policies and implementation actions on travel demand have been included in the *TransPlan* technical analysis that was conducted to identify existing and future transportation system needs. As a result, the Capital Investment Actions Project Lists reflect *TransPlan*'s balanced approach to long-range transportation planning. The projects selected for inclusion as Financially Constrained 20-Year Capital Investment Actions establish a network of facilities that meet overall transportation needs for the 20-year planning period.

### Summary of *TransPlan* Needs Analysis

Transportation needs for the Eugene-Springfield area were assessed using standard methods typically employed in regional transportation planning. Appendix C outlines the overall update process, including a description of the development and evaluation of alternative plan concepts.

The analysis of needs was based on population and employment growth forecasts consistent with the *Eugene-Springfield Metropolitan Area General Plan (MetroPlan)* and state-wide forecasts. The population and employment forecasts were used to establish overall demand for transportation.

As described in more detail in Appendix C, a wide range of strategies were identified to address this demand, including land use, TDM, and TSI strategies. Different combinations of these strategies were formulated as alternative plan concepts and tested using a computer-based travel-forecasting model. The alternative plan concepts ranged from a Base Case consisting of trends to an alternative designed to meet the vehicle miles traveled reduction targets of the Transportation Planning Rule.

The alternatives development and evaluation included consideration of state and local needs consistent with the Oregon Transportation Plan, *Metro Plan*, and state and local improvement programs. Surveys were conducted to provide data on travel behavior and input on a wide range of alternative strategies. *TransPlan* stakeholders and the region's planning commissioners reviewed the results of this analysis with final direction coming from the region's elected bodies. This direction established the framework for development of the February 1998 Draft *TransPlan*.

Transportation needs associated with the movement of goods and services were identified as part of the technical analysis and public involvement process during the *TransPlan* update.

Commercial vehicle movements on the regional transportation network were estimated using the regional travel-forecasting model. The segments of the national highway system within the Eugene-Springfield area were used as part of this analysis. A focus group of local transportation providers was conducted to obtain input on the alternative strategies being considered for *TransPlan*.

The needs of the transportation disadvantaged are assessed under a separate planning process leading to the development of the Metro-Area Paratransit Plan. This plan has been adopted by Lane Council of Governments, the Eugene-Springfield Metropolitan Planning Organization (MPO), and Lane Transit District (LTD). Strategies and recommendations in this plan are consistent with the *TransPlan* update. Implementation of this plan is carried out in coordination with implementation of *TransPlan* through the regional Transportation Improvement Program (TIP). The Paratransit plan is currently being updated. It will provide strategies for improvements to the existing RideSource service. Amendments to *TransPlan* will be made as necessary to maintain consistency between the two planning efforts.

## **Capital Investment Action Implementation Process**

The Financially Constrained 20-Year Capital Investment Action project lists will be adopted, making them legislatively binding. However, the specific timing, design, and financing provisions of *TransPlan*'s recommended projects are not formally adopted. The project lists are not intended to serve as an exclusive long-range programming document in the manner of the regional TIP, nor do they formally approve or commit any funding. Maps that illustrate the regional roadway, transit, and bicycle projects are included in Appendix A. The maps are illustrative and are not adopted.

After a project has been identified as a Capital Investment Action in *TransPlan*, the responsible agency begins the process of project refinement and programming. Programming refers to development of local agency capital improvement programs (CIPs), the Eugene-Springfield Area TIP at the regional level, and the Oregon Department of Transportation's (ODOT) Six-Year Statewide Transportation Improvement Program (STIP). Projects that use federal funds or that are regionally significant for air quality purposes must be included in the TIP and the STIP. Some funding sources in *TransPlan* are beyond immediate local control, such as state and federal funding. Local input into state and federal funding programs is advisory, and, therefore, the availability of funds for particular projects may not necessarily coincide with *TransPlan*.

The CIP's are approved by local and appointed officials on an annual basis. Public hearings are held prior to adoption to allow the public to comment on the proposed expenditures. Media advertisements, press releases, and notifying interested parties are used to inform the public about the CIP public hearings.

Over the past 3 to 5 years ODOT and the Oregon Transportation Commission have endeavored to place a higher degree of decision-making on state projects and policies at the local level. Local policy advice has been facilitated through the formation of Area Commissions on Transportation (ACT). These area commissions are chartered by the Oregon Transportation

Commission and are meant to provide a more direct communication link between local communities and the OTC.

Local policy makers have discussed the formation of an ACT in Lane County, however, it was felt that much of the function of an ACT overlaps with existing processes used in Lane County for regional discussions. The process currently in place for prioritizing projects on a countywide basis, including projects adopted as part of TransPlan is as follows:

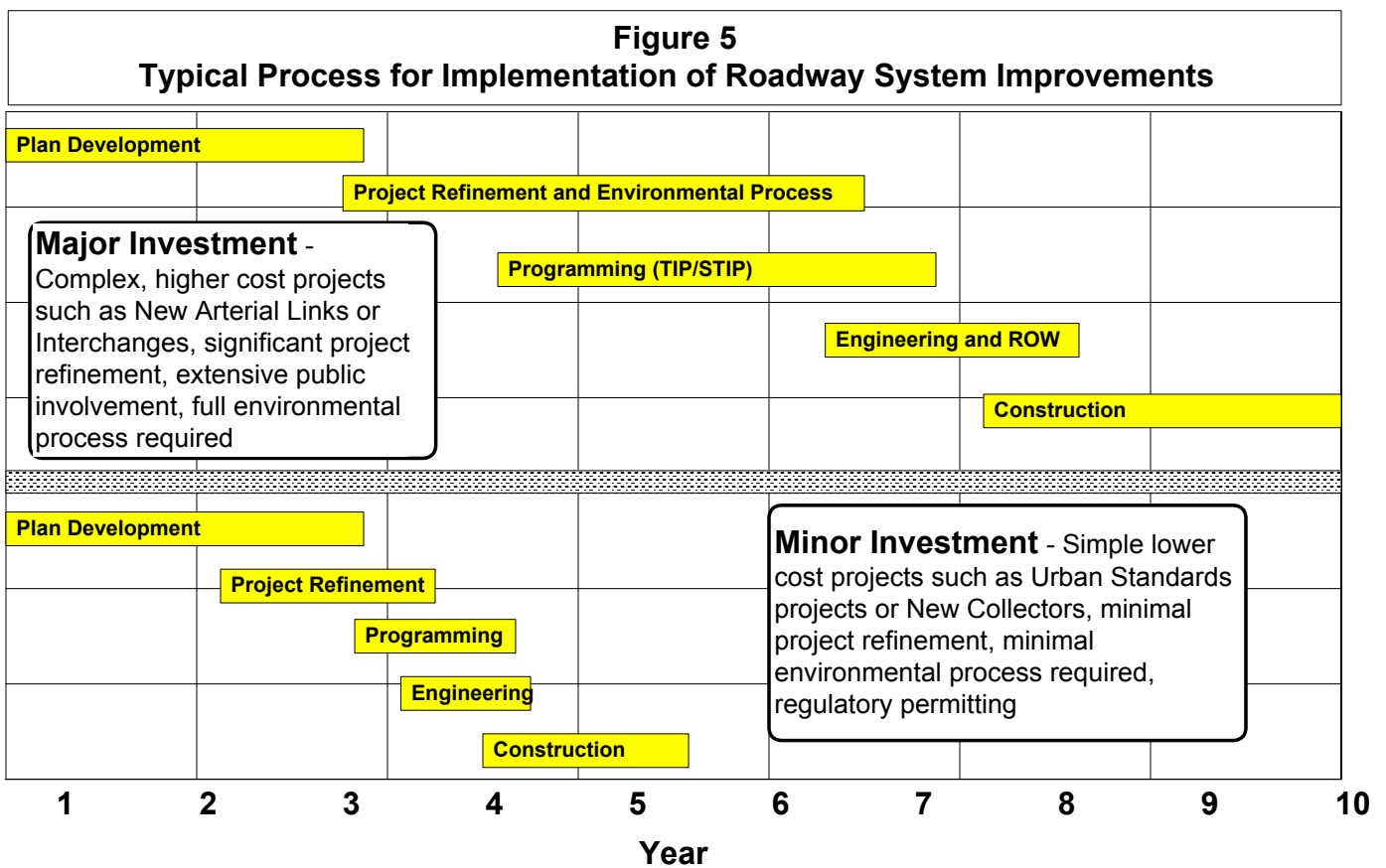
1. MPC adopts Eugene- Springfield metro area priorities based on TPC recommendation (prior to this meeting, MPC members optionally get direction on project priorities from their respective Boards and Councils).
2. MPC forwards metro priority list to Board of County Commissioners with the understanding that the Board of County Commissioners will not reorder the metro priorities, only blend rural priorities into the list.
3. Lane County Public Works, on behalf of the Board of County Commissioners, sends notice to small cities, ports or other organizations explaining that the County will be assembling a county-wide ODOT STIP priority list and requesting input.
4. Small cities, etc. send project priorities to Lane County Public Works.
5. The Transportation Planning Committee (TPC) develops a “blended” rural and metro list for review. Lane County Public Works staff or small city administrators would represent the non-metro jurisdictions.
6. Lane County representatives take countywide priority list to MPC for review and discussion (prior to this meeting, MPC members optionally get direction on the countywide project priorities from their respective Boards and Councils).
7. The Board of County Commissioners adopts blended county-wide priority list.
8. One County Commissioner serves as the Lane County area representative at the ODOT Region 2 roundtable priority setting meeting. This representative may be one of the two Lane County representatives to MPC.

TIP projects are prioritized by the Metropolitan Policy Committee following the process outlined above and adopted into the STIP. Federal public involvement guidelines state that there must be reasonable opportunity for public comment prior to approval. Media advertisements, press releases, and notifying interested parties are used to inform the public about the TIP public hearings. ODOT conducts a public meeting in the Eugene-Springfield area to provide information and gather comments from the public prior to adoption of the STIP by the Oregon Transportation Commission (OTC). The public is invited to make comments directly to the OTC prior to adoption.

Project refinement and programming can vary depending on the complexity of the project. Depending upon the scope of the project, environmental analyses and public hearings may be needed. Engineering requirements and right-of-way needs vary depending on the type of project. After right-of-way is acquired and final plans and contract documents are prepared, construction can begin. Figure 5 describes the typical process taken between the time a transportation need is identified and when project construction is complete. **Major projects** (complex, higher cost projects such as many Added Freeway Lanes or New Arterial Links or

Interchanges that require significant project refinement and a full environmental process), can take as long as ten years to complete (more if there are several project phases). **Minor projects** (simple, lower-cost projects such as many Urban Standards projects, New Collectors, or Studies that require little project refinement and minimal environmental process) may be completed within two to five years.

While local jurisdictions vary in their public involvement process, each agency has developed a program for involving the citizens affected by transportation projects and provide opportunity for public input on project alternatives and design decisions. Depending on the size or impact of the project, the citizen involvement process for project implementation may include advisory committees, neighborhood meetings, open houses, mailings to affected property owners and interested parties, or public hearings.



## Overview of Capital Investment Action Project Lists

The Capital Investment Actions are presented in five tables/lists:

- 1a. Financially Constrained 20-Year Capital Investment Actions: Roadway Projects
- 1b. Future (Beyond 20 Years) 20-Year Capital Investment Actions: Roadway Projects
2. Financially Constrained 20-Year Capital Investment Actions: Transit Projects
- 3a. Financially Constrained 20-Year Capital Investment Actions: Bicycle Projects
- 3b. Future (Beyond 20 Years) Capital Investment Actions: Bicycle Projects

### *Project Implementation Phases*

The Roadway and Bicycle project lists are subdivided into Financially Constrained and Future implementation phases. The Financially Constrained project lists include **Programmed** and **Unprogrammed** projects:

- ♦ **Programmed** (0-5 years) projects have been identified in a local agency's CIP, the regional TIP or the STIP. These projects have funding sources identified that will enable them to proceed to project construction.
- ♦ **Unprogrammed** (6-20 years) projects may not have specific funding sources identified, but are expected to be funded with reasonable assumptions about expected revenues.

Future (beyond 20 years) projects are not planned for construction during the 20-year planning period. These projects are not part of the financially constrained plan. However, these projects could be implemented earlier if additional funding is identified.

As described in the Capital Investment Action Implementation Process on page 4, in all cases, inclusion of a project in a particular phase does not represent a commitment to complete the project during that phase. It is expected that some projects may be accelerated and others postponed due to changing conditions, funding availability, public input, or more detailed study performed during programming and budgeting processes.

The columns/fields of information common to each table are defined below.

#### ***Column 1: Name***

The name of the Capital Investment Action helps to identify the location of the project. Most Capital Investment Actions are named after the roadway on which the project is located.

#### ***Column 2: Geographic Limits***

The geographic limits define the geographic beginning and ending points of the project.

### ***Column 3: Description***

The description field provides a summary overview of each Capital Investment Action.

### ***Column 4: Jurisdiction***

Project jurisdictions shown in *TransPlan* identify the agency or agencies that presently have responsibility for the street, highway, or bicycle facility; have indicated a commitment to assist in a project; or have an intergovernmental agreement to assume some responsibility for a road during the planning period.

In some cases, multiple jurisdictions are indicated because different sections of a project are the responsibility of different agencies. In other cases, multiple jurisdictions are shown because changes in jurisdictional responsibility are expected or because more than one agency may participate in the project's funding. Because project timing and financing is not binding, the jurisdictional listing does not represent a commitment by a particular agency to construct that project.

LTD is the lead agency in all transit projects and thus the Jurisdiction field is not provided on the Transit Projects lists.

### ***Column 5: Estimated Cost***

This field provides a determination of planning cost estimates. The estimated costs are not precise engineering estimates, but are used as planning estimates to assist in determining the financial impacts. Cost estimates are provided in 1997 dollars, consistent with revenue estimates used in the plan.

### ***Column 6: Length***

The project length is calculated in miles for roadway and bicycle projects. The project length is one of the factors used in determining the estimated cost. This field is not provided on the Transit Projects lists.

### ***Column 7: Number***

The project number uniquely identifies each project. For roadway and bicycle projects, the project number facilitates locating the project on the maps for roadways and bicycles in Appendix A. The project numbers are based on ten geographic districts:

- ◆ Projects 100-199 are located in District 1 (Central Eugene).
- ◆ Projects 200-299 are located in District 2 (Southeast Eugene).
- ◆ Projects 300-399 are located in District 3 (Southwest Eugene).
- ◆ Projects 400-499 are located in District 4 (Northwest Eugene-Bethel/Danebo).
- ◆ Projects 500-599 are located in District 5 (River Road/Santa Clara).
- ◆ Projects 600-699 are located in District 6 (Northeast Eugene-Willakenzie/Ferry Street Bridge).

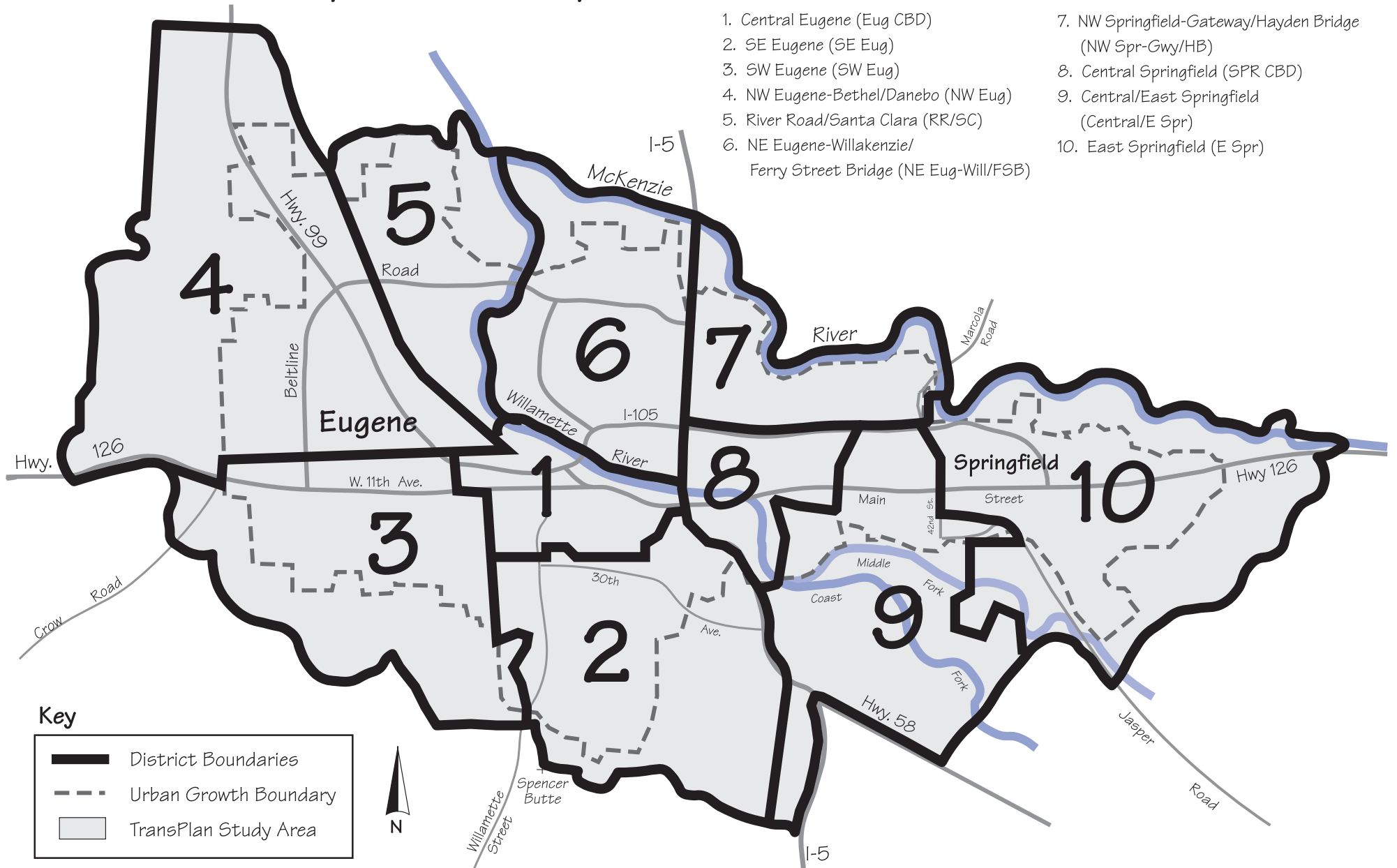
- ♦ Projects 700-799 are located in District 7 (Northwest Springfield-Gateway/Hayden Bridge).
- ♦ Projects 800-899 are located in District 8 (Central Springfield).
- ♦ Projects 900-999 are located in District 9 (Central/East Springfield).
- ♦ Projects 0-99 are located in District 10 (East Springfield).

In some instances, a roadway project is coordinated with an on-street bicycle project. Where the roadway project and the bicycle project are contiguous, the project numbers are identical.

The following map of Geographic Districts is useful for determining the geographic location of roadway and bicycle projects.

**Figure 6**

# Eugene-Springfield Metropolitan Area Geographic Districts Map





## Capital Investment Actions: Roadway Projects

The following project categories are included in the Capital Investment Action Roadway Projects list:

1. **New Arterial Link or Interchange** – These projects add new links or interchanges to the arterial or freeway systems in the region. Projects typically consist of any required right-of-way acquisition, general roadway construction, and addition of pedestrian and bicycle facilities either adjacent or parallel to the roadway.
2. **Added Freeway Lanes or Major Interchange Improvements** – These projects add capacity to existing freeways or freeway interchanges in the region. Projects typically consist of added freeway lanes or interchange reconstruction and expansion.
3. **Arterial Capacity Improvements** – These projects add capacity to existing arterials in the region. Projects typically consist of improvements to traffic control, the safety of the corridor, additional turn lanes, or reconstruction, including additional lanes.
4. **New Collectors** – All new collector projects will generally be constructed to the implementing jurisdiction's urban standards.
5. **Urban Standards** – Projects with this description consist of rebuilding an existing roadway to upgrade it to urban standards, with curbs, sidewalks, and bicycle facilities.
6. **Study** – These types of projects are detailed studies that identify and offer solutions to specific problems related to multi-modal traffic flow and safety along the corridor. Improvements identified by these studies are expected to be added to the *TransPlan* project list through the amendment process.

The above table summarizes the total estimated cost of roadway projects by category,

Summary of Capital Investment Actions Roadway Projects (\$ Thousands)						
Project Category	Status	Total Cost	EUGENE	LANE CO.	ODOT	SPRINGFIELD
New Arterial Link or Interchange	<i>Future</i>	\$40,705	\$0	\$5,705	\$35,000	\$0
	<i>Programmed</i>	\$28,799	\$1,116	\$10,400	\$17,283	\$0
	<i>Unprogrammed</i>	\$82,772	\$0	\$0	\$71,272	\$11,500
Added Freeway Lanes or Major Interchange Improvements	<i>Future</i>	\$164,672	\$0	\$0	\$164,672	\$0
	<i>Programmed</i>	\$21,449	\$0	\$5,500	\$15,949	\$0
	<i>Unprogrammed</i>	\$54,805	\$0	\$0	\$54,805	\$0
Arterial Capacity Improvements	<i>Future</i>	\$4,530	\$0	\$0	\$4,530	\$0
	<i>Programmed</i>	\$2,246	\$0	\$500	\$1,746	\$0
	<i>Unprogrammed</i>	\$7,870	\$2,000	\$2,000	\$1,470	\$2,400
New Collectors	<i>Unprogrammed</i>	\$57,949	\$23,620	\$0	\$0	\$34,329
Urban Standards	<i>Future</i>	\$22,206	\$0	\$0	\$16,706	\$5,500
	<i>Programmed</i>	\$22,681	\$9,176	\$11,765	\$0	\$1,740
	<i>Unprogrammed</i>	\$61,920	\$26,885	\$18,325	\$1,600	\$15,110
Study	<i>Programmed</i>	\$3,375	\$0	\$0	\$3,375	\$0
	<i>Unprogrammed</i>	\$3,050	\$1,450	\$0	\$1,600	\$0
Nodal Development Implementation	-	\$7,000	\$5,400	-	-	\$1,600
<b>TOTAL:</b>		<b>\$586,029</b>	<b>\$69,647</b>	<b>\$54,195</b>	<b>\$390,008</b>	<b>\$72,179</b>

jurisdiction, and status.

*\*Note: The total estimated cost for Eugene does not include construction costs for potential system improvements on major corridors that arise from corridor studies.*

These totals include several joint projects for which a specific jurisdiction has been identified as the lead. The exact financial obligation for each agency on joint projects will be determined as projects are implemented.

The Capital Investment Action Roadway Projects are part of the regional roadway system. The regional roadway system is comprised of streets with a functional classification of arterial or collector. A map that shows functional classifications of the regional roadway system is provided in Appendix A. Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Other criteria used to identify roadways that make up the regional roadway system include service and connection to regional facilities and the amount of existing and projected use by various modes.

Several major transportation corridors within the Eugene-Springfield area require additional, corridor-level analyses to address existing and future capacity, safety, and operational problems over the next 20-30 years. In some cases, the costs of addressing anticipated problems on these corridors are included in the Capital Investment Action project lists, with the understanding that some of these projects are *placeholders* pending further study and public input. In other cases, the specific project-level solutions have not yet been proposed, so the project list includes only the estimated cost of the corridor study itself. Specific projects that are developed as a result of the corridor-level analyses will require an amendment to *TransPlan* in order to be added to the Capital Investment Action project lists.

Many of the corridors that require further study are state facilities, while others are local jurisdiction facilities. While each corridor presents unique challenges, all of them have at least two or more of the following characteristics in common:

- Use as the means for cross-regional travel, often connecting to important regional attractions (shopping, airport, downtowns, freight transfer sites, etc.);
- High traffic volume and traffic congestion;
- Need for both short- and long-range investments;
- Issues requiring complex, multi-project, high-cost solutions;
- Project scale that may require major investment studies or environmental impact studies, including extensive public involvement; and
- Long lead times necessary before construction can begin.

The following corridors are anticipated to require further study and major investments:

1. Interstate 5
2. Interstate 105/Oregon 126 (Eugene-Springfield Highway)
3. Beltline Road (Highway 99 to Interstate 5)
4. Main Street/McKenzie Highway (20th Street to 70th Street)
5. McVay Highway (Franklin Boulevard to 30th Avenue interchange)
6. Franklin Boulevard (Glenwood section)
7. West 11th Avenue (Beltline to Chambers)

8. Coburg Road (Crescent to Oakway)
9. 18th Avenue (Bertelsen to Agate)
10. Southeast Eugene corridor (Willamette, Amazon Parkway, Patterson/Hilyard, from 13th to 33rd Avenue)
11. Beltline Road/Pioneer Parkway (Beltline to Hayden Bridge Road)
12. Ferry Street Bridge (long-range capacity needs)
13. South Bank Street Improvements (Mill Street to Hilyard Street)
14. West Eugene Transportation Improvements

In the case of the West 11th Avenue and Coburg Road corridors (items #7 and #8), studies are proposed to address access, safety, and operational problems. In the case of 18th Avenue and the Southeast Eugene corridors (items #9 and #10), studies are proposed to address major capacity issues, as well as safety, access, and operational problems. In the case of Interstate 5 (item #1), a comprehensive study of I-5 interchanges from the McKenzie River south to 30th Avenue is proposed to address major capacity, safety, access and operational problems. The extent of further study that each corridor requires will depend on the level of analysis completed to date, the level of specificity of any proposed solutions, and the level of environmental analysis required for a project to proceed. Examples of typical studies prepared prior to construction of a system improvement include the Beltline/I-5 refinement study, the Ferry Street Bridge Study, the West Eugene Parkway Environmental Impact Study, and the Jasper Extension design study.

## ***Chapter 3: Table 1a-Financially Constrained 20-Year Capital Investment Actions: Roadway Projects***

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	----------------------	-------------	--------------	-------------------	--------	--------

### ***Project Category: New Arterial Link or Interchange***

#### ***Status: Programmed***

Jasper Road Extension	Main Street to Jasper Road	Construct 4-lane arterial; phasing to be determined; improve RR X-ing at Jasper Rd; at grade interim improvement; grade separation long-range improvement	Lane County	\$10,400,000	3.2	66
Terry Street	Royal Avenue to Roosevelt Boulevard	Construct new 2 to 3-lane urban facility	Eugene	\$1,116,000	0.44	487
West Eugene Parkway, (1A)	Seneca Road to Beltline Road	W 11th - Garfield: 4-lane new construction	ODOT	\$17,283,000	1.3	336
<b><i>Status Sub-Total</i></b>				<b><i>\$28,799,000</i></b>		

#### ***Status: Unprogrammed***

Centennial Boulevard	28th Street to 35th Street	Construct 3-lane urban	Springfield	\$3,000,000	0.5	930
----------------------	----------------------------	------------------------	-------------	-------------	-----	-----

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Pioneer Parkway Extension	Harlow Road to Beltline Road	4-5 lane minor arterial	Springfield	\$8,500,000	1	768
West Eugene (1B)	Garfield Street to Seneca Road	W 11th - Garfield: 4-lane new construction, continued	ODOT	\$34,231,000	1.3337	Parkway,
West Eugene Parkway (2A)	West 11 <sup>th</sup> Avenue to Beltline Road	Construct two lanes of future 4-lane roadway	ODOT	\$30,496,000	2.56	338
West Eugene Parkway (2B)	West 11 <sup>th</sup> Avenue to Beltline Road	Construct remaining two lanes	ODOT	\$6,545,000	2.56	339

*Status Sub-Total*                      **\$82,772,000**

***Project Category Sub-Total***                      **\$111,571,000**

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: Added Freeway Lanes or Major Interchange Improvements***

***Status: Programmed***

Beltline Highway	Royal Avenue to Roosevelt Boulevard	Overcrossing at Royal, continue widening to 4 lanes south to railroad structure, construct Roosevelt extension from Beltline to Danebo, full at grade signal controlled intersection of Beltline and Roosevelt (ODOT: W. 11th N. city limits stage 2)	ODOT	\$14,699,000	409	
I-5	@ Beltline Highway	ROW Purchase	ODOT	\$1,250,000	0	606
Delta/Beltline Interchange		Interim/safety improvements; replace/revise existing ramps; widen Delta Highway bridge to 5 lanes	Lane County	\$5,500,000	0	638
<b><i>Status Sub-Total</i></b>				<b><i>\$21,449,000</i></b>		

***Status: Unprogrammed***

I-5	@ Beltline Highway	Reconstruct interchange and I-5, upgrade Beltline Road East to 5 lane urban facility, and construct I-5 bike and pedestrian bridge.	ODOT	\$53,300,000	0	606
-----	--------------------	---	------	--------------	---	-----

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
I-105	Washington/Jefferson	Extend third SB lane over Street Bridge	ODOT bridge to 6th Ave exit	\$1,505,000	0.25	151

*Status Sub-Total*      **\$54,805,000**

***Project Category Sub-Total***      **\$76,254,000**

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

## *Project Category: Arterial Capacity Improvements*

### *Status: Programmed*

Beltline Highway	@ I-5	Safety improvements	ODOT	\$1,746,000	0	607
Bloomberg Connector	McVay Highway to 30th Avenue	Modification of connection of McVay Highway to 30th Avenue	Lane County, ODOT	\$500,000	0.4	297

**Status Sub-Total                    \$2,246,000**

### *Status: Unprogrammed*

42nd Street	@ Marcola Road	Traffic control improvements	Springfield	\$200,000	0	712
6th/7th Intersection Improvement	Garfield Street to Washington/Jefferson Street	Provide improvements such as additional turn lanes and signal improvements; intersections include 6th/7th Avenues at: Garfield, Chambers, Washington/Jefferson Street Bridge	ODOT, Eugene	\$520,000	0	133
Beltline Highway	@ Coburg Road	Construct ramp and signal improvements	ODOT	\$500,000	0	622
Centennial Boulevard	@ 28th Street	Traffic control improvements	Springfield	\$200,000	0	924
Centennial Boulevard	@ 21st Street	Traffic control improvements	Springfield	\$200,000	0	927
Centennial Boulevard	Prescott Lane to Mill Road	Reconstruct section to 4-5 lanes	Springfield	\$1,000,000	0.3	818
Eugene-Springfield Highway (SR-126)	@ Mohawk Boulevard Interchange	Add lanes on ramps	ODOT	\$250,000	0.68	821
Harlow Road	@ Pheasant Boulevard	Traffic control improvements	Springfield	\$200,000	0	744
Irving Road @ NW Expressway	Gansborough entrance to Prairie Road	Construct overpass over NW Expressway and railroad. Signalize access on north side.	Lane County	\$2,000,000	0.3	530
Main Street	@ 48th Street	Traffic control improvements	Springfield	\$200,000	0	69



<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Main Street	@ Mountaingate Drive	Traffic control improvements	Springfield	\$200,000		75
Q Street	@ Pioneer Parkway	Traffic control improvements	Springfield	\$200,000	0	774
S 42nd Street	@ Daisy Street	Signal improvement	ODOT, Springfield	\$200,000	0	951
Traffic Control Improvements	Various Locations	Traffic signals, intersection upgrades, turn pockets, etc.	Eugene	\$2,000,000	--	
				<b><i>Status Sub-Total</i></b>		<b><i>\$7,870,000</i></b>
				<b><i>Project Category Sub-Total</i></b>		<b><i>\$10,116,000</i></b>

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

## *Project Category: New Collectors*

### *Status: Unprogrammed*

19th Street	Yolanda Avenue to Hayden Bridge Road	Extend existing street as 2-lane collector	Springfield	\$891,000	0.33	703
30th Street	Main Street to Centennial Boulevard	New collector street	Springfield	\$904,500	0.67	915
36th Street	Yolanda Avenue to Marcola Road	Extend existing street as 2-lane collector per Local Street Plan.	Springfield	\$1,701,000	0.63	709
54th Street	Main Street to Daisy Street	New 2-lane collector	Springfield	\$756,000	0.28	87
79th Street	Main Street to Thurston Road	New 2 to 3-lane collector	Springfield	\$1,000,000	0.37	18
Avalon Street	Greenhill Road to Terry Street	New major collector	Eugene	\$810,000	0.3	432
Cardinal Way	Game Farm Road to MDR north-south connector	Upgrade 2 to 3-lane urban facility	Springfield	\$1,242,000	0.46	721
Daisy Street Extension	46th Street to 48th Street	New 2 to 3-lane urban facility, traffic control improvements	Springfield	\$929,000	0.27	24
Future Collector A	Gilham to County Farm Road @ Locke Street	New neighborhood collector	Eugene	\$1,890,000	0.7	651
Future Collector C1	Linda Lane - Jasper Road Extension	New 2 to 3-lane urban collector	Springfield	\$1,350,000	0.5	33
Future Collector C2	Jasper Road - Mountaingate	New 2 to 3-lane urban collector	Springfield	\$3,510,000	1.3	36
Future Collector C3	Jasper Road Extension - East Natron	New 2 to 3-lane urban collector	Springfield	\$1,890,000	0.7	39
Future Collector C4	East-west in Mid-Natron site	New 2 to 3-lane urban collector	Springfield	\$1,620,000	0.6	42
Future Collector C5	Loop Rd in South Natron Site	New 2 to 3-lane urban collector	Springfield	\$2,700,000	1	45
Future Collector C6	Mt Vernon Road - Jasper Road Extension	New 2 to 3-lane urban collector	Springfield	\$2,700,000	1	48

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Future Collector C7	North-south in mid-Natron site	New 2 to 3-lane urban collector	Springfield	\$1,512,000	0.56	51
Future Collector E	Bailey Hill Road to Bertelsen Road	New major collector	Eugene	\$2,700,000	1	318
Future Collector F	Royal Avenue to Terry Street	New major collector	Eugene	\$1,890,000	0.7	429
Future Collector H	Future Collector G to Royal Avenue	New major collector	Eugene	\$1,350,000	0.5	435
Future Collector J	Awbrey Lane to Enid Road	New major collector	Eugene	\$2,160,000	0.8	441
Future Collector O	Barger Drive to Avalon Street	New neighborhood collector	Eugene	\$1,800,000	0.5	447
Future Collector P	Avalon Street to Future Collector F	New neighborhood collector	Eugene	\$4,500,000	1.11	449
Glacier Drive	55th Street to 48th Street	Develop new, 2-lane urban facility	Springfield	\$1,840,000	0.92	57
Glenwood Boulevard Extension	I-5 to Laurel Hill Drive	New collector	Eugene	\$2,565,000	0.95	254
Hyacinth Street	Irvington Drive to Lynnbrook Drive	New neighborhood collector	Eugene	\$600,000	0.16	537
Kinsrow Avenue	Centennial Boulevard to Garden Way	New neighborhood collector	Eugene	\$800,000	0.2	659
Lakeview/Parkview	Gilham Road to County Farm Road	New neighborhood collector	Eugene	\$1,755,000	0.65	644
Legacy Street	Barger Drive to Avalon Street	New major collector	Eugene	\$800,000	0.2	445
McKenzie-Gateway MDR Loop Collector	Within MDR site	New 2 to 3-lane collector into MDR site	Springfield	\$2,160,000	0.8	756
MDR Site	North-south within MDR site	Construct new 3-lane north-south collector	Springfield	\$1,440,000	0.4	762
Mountaingate Drive	Main Street to South 58th Street	New 3-lane collector	Springfield	\$2,430,000	0.9	78
Mt Vernon Road	Jasper Road Extension to Mountaingate Drive	Extend existing street as 2-lane collector	Springfield	\$540,000	0.2	81
V Street	31st Street to Marcola Road	New 2 to 3-lane collector	Springfield	\$1,755,000	0.65	777
Vera Drive/Hayden Bridge Road	15th Street to 20th Street	New 2 to 3-lane urban collector	Springfield	\$918,000	0.34	780

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Yolanda Avenue	31st Street to 34th Street	Extend existing street as 2-lane collector	Springfield	\$540,000	0.2	783
				<b><i>Status Sub-Total</i></b>	<b><i>\$57,948,500</i></b>	
				<b><i>Project Category Sub-Total</i></b>	<b><i>\$57,948,500</i></b>	

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

## *Project Category: Urban Standards*

### *Status: Programmed*

18th Avenue	Bertelsen Road to Willow Creek Road	Upgrade to 2-lane urban facility	Eugene, Lane County	\$1,065,000	0.71	303
Ayres Road	Delta Highway to Gilham Road	Upgrade to 2 to 3-lane urban facility	Eugene	\$1,262,000	0.52	603
Bertelsen Road	18th Avenue to Bailey Hill Road	Upgrade to 2 to 3-lane urban facility	Eugene	\$1,035,000	0.6	315
Coburg Road	Kinney Loop to Armitage Park	Reconstruct to 3-lane urban facility to UGB, turn lane @ park entrance, rural	Lane County	\$2,380,000	1.19	625
Delta Highway	Ayres Road to Beltline Road	Upgrade to 3-lane urban facility	Eugene	\$900,000	0.91	635
Dillard Road	43rd Street to Garnet Street	Upgrade to 2-lane urban facility	Eugene	\$450,000	0.34	233
Fox Hollow Road	Donald Street to UGB	Upgrade to 2-lane urban facility	Eugene, Lane County	\$841,000	0.5	245
Garden Way	Sisters View Avenue to Centennial Boulevard	Upgrade to 2 to 3-lane urban facility	Eugene	\$1,715,000	0.75	657
Goodpasture Island Road	Delta Highway to Happy Lane	Upgrade to 2-lane urban facility	Eugene	\$413,000	0.19	664
Greenhill Road	North Boundary of Airport to Airport Road	Closing of existing road and realignment of east boundary of airport property	Lane County, Eugene	\$3,000,000	2.06	486
Irvington Road	River Road to Prairie Road	Upgrade to 2 to 3-lane urban facility	Lane County	\$2,880,000	1.44	533
Prairie Road	Carol Lane to Irvington Drive	Reconstruct to 3-lane urban facility	Lane County	\$825,000	0.35	472
Royal Avenue	Terry Street to Greenhill Road	Upgrade to 3-lane urban facility	Lane County, Eugene	\$2,680,000	1.01	481
Shelton-McMurphey	Lincoln St. to Pearl St.	Upgrade to urban facility	Eugene	\$1,495,000	0.4	450
Seward St. Connection	Wayside to Manor	Upgrade to local urban standards	Springfield	\$40,000	0.25	787
Gateway/Harlow	Gateway/Harlow Intersection	Intersection improvements	Springfield	\$1,300,000	0.5	785
Gateway/Game Farm Rd. East	Gateway/Game Farm Rd. East intersection	Intersection improvements	Springfield	\$400,000	0.25	786

*Status Sub-Total*

**\$22,681,000**

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
<b><i>Status: Unprogrammed</i></b>						
28th Street	Main Street to Centennial Boulevard	Widen/provide sidewalks and bike lanes; provide intersection and signal improvements at Main Street	Springfield	\$1,050,000	0.7	909
31st Street	Hayden Bridge Road to U Street	Upgrade to 2 to 3-lane urban facility	Lane County	\$1,275,000	0.85	765
35th Street	Commercial Avenue to Olympic Street	Upgrade to 3-lane urban facility	Springfield	\$920,000	0.46	918
42nd Street	Marcola Road to Railroad Tracks	Reconstruct to 3-lane urban facility	Springfield	\$2,060,000	1.03	713
48th Street	Main Street to G Street	Upgrade to 2-lane urban facility	Springfield	\$720,000	0.48	3
52nd Street	G Street to Eugene-Springfield Highway (SR 126)	Upgrade to 2-lane urban facility	Springfield	\$300,000	0.2	6
69th Street	Main Street to Thurston Road	Widen on east side of roadway	Springfield	\$840,000	0.56	15
Agate Street	30th Avenue to Black Oak Road	Upgrade to 2-lane urban facility	Eugene	\$585,000	0.39	215
Aspen Street	West D Street to Centennial Boulevard	Reconstruct to 2 to 3-lane urban facility	Lane County, Springfield	\$750,000	0.5	809
Baldy View Lane	Deadmond Ferry Road to the end of dedicated right-of-way	Upgrade to urban standards	Springfield	\$420,000	0.28	715
Bethel Drive	Roosevelt Boulevard to Highway 99	Upgrade to 2-lane urban facility	Eugene	\$2,500,000	1.68	414
Centennial Blvd.	March Chase to I-5	Upgrade to urban facility (north side)	Eugene	\$400,000	0.4	697
Commercial Street	35th Street to 42nd Street	Upgrade to 3-lane urban facility	Springfield	\$1,620,000	0.81	933
County Farm Loop	North-to-South Section	Upgrade to 3-lane urban facility	Lane County, Eugene	\$825,000	0.55	631
County Farm Loop	West-to-East Section	Upgrade to 2-lane urban facility	Lane County, Eugene	\$795,000	0.53	632
Deadmond Ferry Road	Baldy View Lane to McKenzie River	Upgrade to urban standards	Springfield	\$1,095,000	0.73	724
Division Avenue	Division Place to River Avenue	Upgrade to 2 to 3-lane urban facility	Eugene	\$1,720,000	0.86	509
Elmira Road	Bertelsen Road to	Upgrade to 2-lane urban	Eugene	\$1,815,000	1.21	420

Highway 99

facility

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
G Street	48th Street to 52nd Street	Upgrade to 2-lane urban facility	Springfield	\$465,000	0.31	54
Game Farm Road North	Coburg Road to I-5	Upgrade to 2 to 3-lane urban facility	Eugene, Lane County	\$2,150,000	1.3	654
Game Farm Road South	Game Farm Road East to Harlow Road	Upgrade to 2-lane urban facility	Lane County, Springfield	\$1,395,000	0.93	737
Gilham Road	Northernmost New Collector to Ayres Road	Upgrade to 2-lane urban facility	Eugene	\$690,000	0.46	662
Greenhill Road	Barger Drive to West 11th Avenue	Upgrade to 2 to 3-lane urban facility	Lane County, Eugene	\$5,000,000	2.5	454
Greenhill Road	Barger Drive to Airport Road	Rural widening and intersection modifications	Lane County	\$2,000,000	2	485
Hayden Bridge Road	Yolanda Avenue to Marcola Road	Reconstruct to 2-lane urban facility	Lane County	\$2,310,000	1.54	747
Hunsaker Lane / Beaver Street	Division Avenue to River Road	Upgrade to 2-lane urban facility	Lane County	\$1,710,000	1.14	527
Jeppesen Acres Road	Gilham Road to Providence Street	Upgrade to 2-lane urban facility	Eugene	\$525,000	0.35	670
Laura Street	Scotts Glen Drive to Harlow Road	Widen to 3-lane urban facility	Springfield	\$800,000	0.4	750
Maple Street	Roosevelt Boulevard to Elmira Road	Upgrade to 2-lane urban facility	Eugene	\$210,000	0.14	469
Old Coburg Road	Game Farm Road to Chad Drive	Upgrade to 3-lane urban facility	Eugene	\$525,000	0.35	680
River Avenue	River Road to Division Avenue	Upgrade to 2 to 3-lane urban facility	Eugene	\$1,700,000	0.85	542
River Road	Carthage Avenue to Beacon Drive	Widen to 3-lane urban facility	Lane County	\$900,000	0.38	545
S. 28th Street	Main Street to Millrace	Upgrade to 3-lane urban facility	Springfield	\$2,000,000	0.67	945
S. 32nd Street	Main Street to Railroad	Upgrade to 3-lane urban facility	Springfield	\$800,000	0.4	948
S. 42nd Street	Main Street to Jasper	Reconstruct to 2 to 3-lane urban facility; curbs, sidewalks and bike lanes	ODOT	\$1,600,000	0.8	954

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Street Lighting	Various Locations	Add street lighting on Arterials/collectors	Eugene	\$1,000,000	--	
Thurston Road	72nd Street to UGB	Upgrade to 3-lane urban facility	Springfield	\$1,220,000	0.61	98
Van Duyn Road	Western Drive to Harlow Road	Reconstruct to 2-lane urban facility	Eugene	\$375,000	0.25	696
Wilkes Drive	River Road to River Loop 1	Upgrade to 3-lane urban facility	Lane County	\$1,365,000	0.91	554
Willow Creek Road	18th Avenue to UGB	Upgrade to 2-lane urban Facility	Eugene	\$1,590,000	1.06	342
Bailey Hill Road	Bertelsen to UGB	Upgrade to urban facility	Eugene	\$3,200,000	1.2	343
Dillard Road	Garnet to UGB	Upgrade to urban facility	Eugene	\$2,000,000	1.0	298
South Willamette	Spencer Crest to UGB	Upgrade to urban facility	Eugene	\$400,000	0.2	299
Summit Drive	Fairmont to Floral Hill Dr.	Upgrade to urban facility	Eugene	\$500,000	0.3	452
Glenwood Blvd	Franklin Blvd to I-5	Upgrade to urban facility	Springfield	\$800,000	0.5	836
Traffic Calming	Various Locations	Neighborhood traffic calming to address problems on residential streets, including collectors	Eugene	\$1,000,000	--	101
Services for New Development	Various Locations	New public streets and improvements to existing streets Initiated by private development and consistent with adopted CIP	Eugene	\$4,000,000	--	102

***Status Sub-Total***                      ***\$61,920,000***

***Project Category Sub-Total***                      ***\$84,601,000***



Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

## *Project Category: Study*

### *Status: Programmed*

I-5 @ Beltline Study & Design	@ Interchange	Project development work	ODOT	\$3,375,000 --		606
-------------------------------	---------------	--------------------------	------	----------------	--	-----

*Status Sub-Total*      **\$3,375,000**

### *Status: Unprogrammed*

I-5 Interchange Study	Willamette River south to 30 <sup>th</sup> Avenue	Comprehensive study of I-5 interchanges	ODOT	\$750,000 --		250
18th Avenue	Bertelsen Road to Agate Street	Corridor study to determine improvements	Eugene	\$250,000	4.71	118
Chambers Street	8th Avenue to 18th Avenue	Corridor Study to determine improvements	Eugene	\$250,000	0.8	136
Coburg Road	Crescent Avenue to Oakway Road	Access management/ safety-operational study	Eugene	\$100,000	2.24	619
Ferry Street Bridge	Oakway Road to Broadway	Long-Range Capacity Refinement Plan	Eugene	\$250,000	1.08	139
South Bank Street Improvements	Mill Street to Hilyard Street	Develop refinement plan for street system	Eugene, ODOT	\$250,000	1	178
W 11th Avenue	Beltline Road to Chambers Street	Access Management, Safety, and Operational Study	Eugene	\$100,000	2.74	332
Willamette Street/Amazon Parkway/Patterson Street/Hilyard Street	13th Avenue to 33rd Avenue	Corridor study to determine improvements	Eugene	\$250,000	5.55	187
Main Street/ Highway 126	I-5 to UGB	Access management plan	ODOT/Springfield	\$100,000	6.0	838
Eugene-Springfield Hwy.	I-5 to Main	Corridor Study	ODOT/Springfield	\$150,000	6.5	835
Main St. and 52nd St./Hwy 126 Int.	52nd to Main	Interchange Plans	ODOT/Springfield	\$100,000	1.5	96
Beltline	River Rd to Coburg Rd	Facility Plan Study	ODOT	\$500,000	3.46	555

*Status Sub-Total*      **\$3,050,000**

***Project Category Sub-Total***      **\$6,425,000**

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
-------------	--------------------------	--------------------	---------------------	-----------------------	---------------	---------------

***Project Category: Nodal Development Implementation***

Planning	Various Locations	Planning for implementation Of Nodal Development zoning	Eugene/Springfield	\$5,000,000	--	--
Eugene Nodal Development Infrastructure Funding	Various Locations	Differential Nodal Development Infrastructure Cost*	Eugene	\$2,000,000	--	--

***Status Sub-Total*** ***\$7,000,000***

***Project Category Sub-Total*** ***\$7,000,000***

***Total Capital Projects: Roadway Projects*** ***\$353,915,500***

\* For the Royal and Chase Gardens nodal development areas, allocate \$2,000,000 for differential nodal development infrastructure costs. Sources of funding include a mix of local discretion STP, SDCs, "locally controlled revenue source," and other funding sources.

The amount required for differential nodal development infrastructure costs will be vastly more when all the Eugene priority nodal development areas are included in this line item. Amend this line item at the first update to list the estimated differential cost of nodal development infrastructure for the priority nodal development areas over the entire fiscally constrained planning period.

Springfield will use the next three years of experience to develop an estimate of costs uniquely associated with nodal development in Springfield on those nodes that are selected and protected pursuant to LCDC's approval of alternative performance measures. This estimate would be included in the first update of the plan, subject to available funding.

## ***Chapter 3: Table 1b-Future (Beyond 20-Years) Capital Investment Actions: Roadway Projects***

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
<b><i>Project Category: New Arterial Link or Interchange</i></b>						
<b><i>Status: Future</i></b>						
Beaver Street Arterial	Hunsaker Lane to Wilkes Drive	R.O.W Acquisition. General construction.	Lane County	\$1,700,000	0.84	503
Eugene-Springfield Highway (SR-126)	at Main Street	Construct interchange	ODOT	\$9,000,000	0	27
Division Avenue	Delta Highway to Beaver Street	New frontage road w/ Willamette River Bridge	Lane County	\$4,005,000	0.89	512
Eugene-Springfield Highway (SR-126)	at 52nd Street	Construct interchange	ODOT	\$9,000,000	0	30
Beltline Highway	West 11th Avenue to Roosevelt Boulevard	Continue widening to 4 lanes; new RR Xing, interchange @ WEP, grade separation @ Roosevelt and turn lanes on West 11th Ave (ODOT: West 11th North City Limits Stage 3)	ODOT	\$17,000,000	1.14	312

***Status Sub-Total***                      ***\$40,705,000***

***Project Category Sub-Total***                      ***\$40,705,000***

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: Added Freeway Lanes or Major Interchange Improvements***

***Status: Future***

I-5	30th Avenue/McVay Highway	Interchange reconstruction to improve operations and safety, reconstruct ramps and bridges to modern standards, and provide for 6 lanes on I-5.	ODOT	\$15,000,000		257
I-105	Washington/Jefferson Street Bridge	Add lane to NB on-ramp from 6th Ave, extend third NB lane over bridge to Delta Highway exit ramp	ODOT	\$5,805,000	0.75	154
Eugene-Springfield Highway (SR-126)	I-5 to Mohawk Boulevard	Widen to 6 lanes	ODOT	\$20,124,000	2.6	728
Eugene-Springfield Highway (SR-126)	Pioneer Parkway/Q Street	Interchange improvements	ODOT	\$15,000,000	0	727
I-105	Delta Highway to Coburg Road	Widen to 6 lanes	ODOT	\$9,210,600	1.19	647
I-105	Coburg Road to I-5	Widen to 6 lanes	ODOT	\$11,842,200	1.53	648

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
I-5	I-105 to Highway 58 (Goshen)	Widen remaining sections to 6 lanes	ODOT	\$35,000,000	5.66	260
I-5	@ Glenwood Interchange	Reconfigure interchange, address weaving, provide 6 lanes on freeway	ODOT	\$10,000,000		256
I-5	@ Willamette River/Franklin Boulevard Interchange	Interchange reconstruction to create one full interchange to improve operations and safety, reconstruct ramps and bridges to modern standards, and provide for 6 lanes on I-5	ODOT	\$25,000,000		150
Beltline Highway	River Road to Delta Highway	Widen to 6 lanes; construct new or widen existing Willamette River Bridges; revise Division/River Ave ramps; reconstruct/relocate Division Ave from Division Place to Beltline	ODOT	\$13,390,200	1.73	506
I-105	Washington/Jefferson Street Bridge	Add lane to 6 <sup>th</sup> Ave. off-ramp	ODOT	\$4,300,000	0.25	151

***Status Sub-Total***                      ***\$164,672,000***

***Project Category Sub-Total***                      ***\$164,672,000***

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
<b><i>Project Category: Arterial Capacity Improvements</i></b>						
<b><i>Status: Future</i></b>						
W. 11th Avenue	Green Hill Road to Danebo Avenue	Upgrade to 5-lane urban facility	ODOT, Eugene, Lane County	\$4,530,000	1.51	333
<b><i>Status Sub-Total</i></b>				<b><i>\$4,530,000</i></b>		
<b><i>Project Category Sub-Total</i></b>				<b><i>\$4,530,000</i></b>		

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

## ***Project Category: Urban Standards***

### ***Status: Future***

48 <sup>th</sup> Street	Main Street to Daisy Street	Upgrade to urban facility	Springfield	\$300,000		901
Jasper Road	57 <sup>th</sup> /58 <sup>th</sup> intersection	Intersection improvements	Springfield	\$200,000	0.5	100
Highway 99	Roosevelt Boulevard to Garfield Street	Upgrade to urban facility	ODOT	\$4,955,500	1.14	148
McVay Highway	I-5 to Franklin Boulevard	Upgrade to 3-lane urban facility; intersection improvements at I-5 and Franklin Boulevard	ODOT	\$6,500,000	1.5	833
Jasper Road	S. 42nd Street to Jasper Road Extension	Upgrade to 2 to 3-lane urban facility; intersection improvement at 42nd Street and Jasper Road	ODOT	\$5,250,000	3.5	60
Franklin Blvd.	Jenkins Drive to Mill St.	Upgrade to urban facility	Springfield/ODOT	\$5,000,000	1.2	839

***Status Sub-Total***                      ***\$22,205,500***

***Project Category Sub-Total***                      ***\$22,205,500***

***Total Future Capital Projects: Roadway***                      ***\$232,112,500***

## Capital Investment Actions: Transit Projects

The following project categories are included in the Capital Investment Action Transit Projects list:

- 1. Buses and Bus Maintenance** - These projects include new buses for expansion of service, replacement buses, expansion of bus maintenance facilities, and bus components such as radios, automated passenger counters, and fareboxes.
- 2. Bus Rapid Transit** - These projects include the planning, engineering, and construction of the Bus Rapid Transit (BRT) corridors.
- 3. Stops and Stations** - These projects include transit stations, Park-and-Ride lots, bus shelters, and other passenger boarding improvements.

The following table summarizes total estimated cost for transit projects by implementation phase.

<b>Summary of Capital Investment Actions</b>	
<b>Transit Projects</b>	
<i>Project Category</i>	<i>Total Estimated Cost</i>
Buses and Bus Maintenance	\$46,155,000
Bus Rapid Transit	\$100,000,000
Stops and Stations	
General	\$14,000,000
In Nodal Development Areas	\$10,500,000
<b>Total Transit Capital Projects</b>	<b>\$170,655,000</b>

The Capital Investment Action Transit Projects are integrated with the Planning and Program Actions for transit that implement the proposed BRT system. See page 91 for a description of the Bus Rapid Transit Implementation Process.



## ***Chapter 3: Table 2 - Financially Constrained 20-Year Capital Investment Actions: Transit Projects***

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Estimated Cost</b>	<b>Number</b>
-------------	------------------------------	--------------------	---------------------------	---------------

### ***Project Category: Buses and Bus Maintenance***

Bus Purchases		New & replacement buses	\$41,155,000	1110, 1315
Expansion of Operating Base	Glenwood near Franklin Blvd	Expansion of existing operation and maintenance	\$5,000,000	1320
<b><i>Project Category Sub-Total</i></b>			<b><i>\$46,155,000</i></b>	

Name	Geographic Limits	Description	Estimated Cost	Number
<b><i>Project Category: Bus Rapid Transit</i></b>				
Bus Rapid Transit	Various corridors totaling 61 miles	Express bus corridors	\$95,500,000	1115
Bus Rapid Transit Stations in Nodes	Various	Transfer Station	\$4,500,000	1318
<b><i>Project Category Sub-Total</i></b>			<b><i>\$100,000,000</i></b>	

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Estimated Cost</b>	<b>Number</b>
-------------	--------------------------	--------------------	-----------------------	---------------

## ***Project Category: Stops and Stations***

### ***Project Type: General Stops and Stations***

9 Park and Ride Lots	To be determined	Park-and-Ride lots along major corridors	\$9,000,000	1105, 1305, 1345
Autzen Station	Vicinity of Autzen Stadium	Transfer station and Park-and-Ride lot	\$1,000,000	1140
LCC Station Expansion	Lane Community College	Expand LCC Station	\$500,000	1125
Passenger Boarding Improvements	Various locations	Pads, Benches & Shelters	\$1,500,000	1130, 1330, 1355
11th & Beltline Station	Vicinity of 11th Ave and Beltline Highway	Transfer station, possibly Park-and-Ride lot	\$1,000,000	1340
Gateway & Beltline Station	Vicinity of Gateway and Beltline Hwy	Transfer station, possibly Park-and-Ride lot	\$1,000,000	1350

***Project Type Sub-Total \$14,000,000***

### ***Project Type: Stops and Stations in Nodal Development Areas***

Passenger Boarding Improvements	Various locations	Pads, Benches & Shelters	\$1,500,000	1130, 1330, 1355
Springfield Station	Downtown Springfield	New transit station	\$5,000,000	1135
Barger & Beltline Station	Vicinity of Barger Rd and Beltline Highway	Transfer station	\$1,000,000	1310
Churchill Station	Vicinity of 18th Avenue and Bailey Hill Road	Transfer station	\$1,000,000	1335
Coburg & Beltline Station	Vicinity of Coburg Rd and Beltline Highway	Transfer station	\$1,000,000	1120
Mohawk & Olympic Station	Vicinity of Mohawk Blvd and Olympic	Transfer station	\$1,000,000	1325

***Project Type Sub-Total \$10,500,000***

***Project Category Sub-Total \$24,500,000***

***Total Capital Projects: Transit System \$170,655,000***

## Capital Investment Actions: Bicycle Projects

The Capital Investment Action Bicycle Project Lists are organized by project status – Programmed, Unprogrammed, or Future. The following project categories are included in the lists:

1. **Multi-Use Paths Without Road Project** – These projects will be constructed independent of a Roadway Project.
2. **Multi-Use Paths With Road Project** – These projects are new off-road facilities designated for non-motorized, bicycle, and pedestrian use only. The project number provided refers to the associated Roadway Project.
3. **On-Street Lanes or Routes With Road Project** – These bicycle projects will be constructed in conjunction with a Roadway Project. The project number provided refers to the associated Roadway Project.
4. **On-Street Lanes or Routes Without Road Project** – These projects consist of adding a striped bike lane to the roadway or adding *Bicycle Route* signs along the designated corridor. Projects in this category will be constructed independent of a Roadway Project.

For many bicycle projects, a \$0 shows in the Estimated Cost field. These bicycle projects may require no capital expenditure because they can be implemented with operating funds or they are planned for construction as part of a roadway project. Thus, the cost estimates are included as part of the roadway project cost estimate.

The following table summarizes the total estimated cost of bicycle projects by project category, status, and jurisdiction.

Project Category	Status	Total Cost	EUGENE	LANE COUNTY	ODOT	SPRINGFIELD	WILLAMA-LANE
Multi-Use Paths Without Road Project	<i>Future</i>	\$ 13,624	\$ 3,279	\$ 5,565	\$ -	\$ 4,280	\$ 500
	<i>Programmed</i>	\$ 4,715	\$ 4,100	\$ -	\$ -	\$ 615	\$ -
	<i>Unprogrammed</i>	\$ 10,018	\$ 4,378	\$ -	\$ 205	\$ 5,435	\$ -
Multi-Use Paths With Road Project	<i>Future</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<i>Programmed</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<i>Unprogrammed</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
On-Street Lanes or Routes With Road Project	<i>Future</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<i>Programmed</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<i>Unprogrammed</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
On-Street Lanes or Routes Without Road Project	<i>Future</i>	\$ 675	\$ 675	\$ -	\$ -	\$ -	\$ -
	<i>Programmed</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<i>Unprogrammed</i>	\$ 4,456	\$ 3,273	\$ 752	\$ 164	\$ 267	\$ -
<b>TOTAL:</b>		<b>\$ 33,488</b>	<b>\$ 15,705</b>	<b>\$ 6,317</b>	<b>\$ 369</b>	<b>\$ 10,597</b>	<b>\$ 500</b>

These totals include several joint projects for which a specific jurisdiction has been identified as the lead. Once again, corresponding roadway projects have absorbed some of the cost. The exact financial obligation for each agency on joint projects will be determined as projects are implemented.

*TransPlan* serves as the bicycle plan for Eugene. The *Springfield Bicycle Plan* (1998) serves as the bicycle master plan for Springfield. To the extent that the cities of Eugene and Springfield wish to adopt, amend, or maintain bicycle master plans, those plans must be consistent with *TransPlan*. All bikeways and other bicycle system improvements will be designed to meet standards specified in the *Oregon Bicycle and Pedestrian Plan* (1995), whenever possible.

## *Chapter 3: Table 3a-Financially Constrained 20-Year Capital Investment Actions: Bicycle Projects*

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

### *Project Category: Multi-Use Paths Without Road Project*

#### *Status: Programmed*

42nd Street Pathway	Marcola Road to Railroad Tracks	Multi-Use Path	Springfield	\$615,000	1.10	795
East Bank Trail	Owosso Bridge to Greenway Bridge	Multi-Use Path	Eugene	\$1,500,000	2.02	641
Fern Ridge Path #2	Terry Street to Green Hill Road	Multi-Use Path	Eugene	\$2,600,000	2.01	423

#### *Status Sub-Total*

***\$4,715,000***

#### *Status: Unprogrammed*

5th Avenue	Garfield Street to Chambers Street	Route, Multi-Use Path	Eugene	\$36,000	0.21	127
5th Avenue Connector (WEP)	Garfield Street to McKinley Street	Multi-Use Path	ODOT	\$205,000	0.36	130
Avalon Street (A)	Candlelight Drive to Beltline Path	Multi-Use Path/Route	Eugene	\$74,500	0.36	403
Booth Kelly Road	28th Street to Weyerhauser Truck Road	Multi-Use Path	Springfield	\$245,000	2.14	921
By Gully Extension	Mill Street to 5th Street	Multi-Use Path	Springfield, Willamalane	\$80,000	0.11	812
Delta Ponds Path	East Bank Trail to Robin Hood Lane	Multi-Use Path and Bridge	Eugene	\$1,372,000	1.06	637
Garden Way / Knickerbocker Bridge Connector	Canoe Canal to N. Bank Trail	Multi-Use Path	Eugene	\$205,000	0.14	660
I-5 Path	Harlow Road to Chad	Multi-Use Path	Eugene	\$716,000	0.89	668
McKenzie River Path	42nd Street to 52nd Street	Multi-Use Path and Striped Lane	Springfield	\$2,620,000	1.55	753
Millrace Path (Eug.) (C)	Moss Street to Rail underpass	Multi-Use Path	Eugene	\$933,000	0.51	169
Millrace Path (Spr.)	28th Street to 32nd Street	Multi-Use Path	Springfield	\$150,000	0.40	859

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Millrace Path (Spr.)	S. 2nd Street to S. 28th Street	Multi-Use Path	Springfield	\$2,340,000	1.60	840
Oakmont Park	Oakway Road to Coburg Road	Route, Multi-Use Path	Eugene	\$67,000	0.27	678
Q Street Channel	Centennial Loop to Garden Way Path	Multi-Use Path	Eugene	\$565,200	1.42	682
Spring Boulevard (B)	29th Avenue to 30th Avenue	Multi-Use Path	Eugene	\$205,000	0.22	281
Valley River Connector (B)	Valley River Way to North Bank Trail	Multi-Use Path	Eugene	\$102,000	0.12	692
Westmoreland Park Path	Fillmore Street to Taylor Street	Multi-Use Path	Eugene	\$102,000	0.41	181

*Status Sub-Total*

**\$10,017,700**

***Project Category Sub-Total***

**\$14,732,700**

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: Multi-Use Paths With Road Project***

***Status: Programmed***

West Eugene Parkway Path (1A)	Beltline Road to Seneca Road	Multi-Use Path	ODOT	\$0	1.65	340
-------------------------------	------------------------------	----------------	------	-----	------	-----

***Status Sub-Total*** ***\$0***

***Status: Unprogrammed***

I-5 Bike Bridge	Willakenzie Road to Postal Way	Bridge	ODOT	\$0	0.15	666
-----------------	--------------------------------	--------	------	-----	------	-----

West Eugene Parkway Path (2A)	Terry Street to Beltline Rd	Multi-Use Path	ODOT	\$0	0.88	338
-------------------------------	-----------------------------	----------------	------	-----	------	-----

***Status Sub-Total*** ***\$0***

***Project Category Sub-Total*** ***\$0***



Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: On-Street Lanes or Routes With Road Project***

***Status: Programmed***

11th Avenue	Terry Street to Danebo Avenue	Striped Lane	ODOT	\$0	0.49	398
18th Avenue	Bertelsen Road to Willow Creek Road	Striped Lane	Eugene, Lane County	\$0	0.85	303
Ayres Road	Delta Highway to Gilham Road	Striped Lane	Eugene	\$0	0.52	603
Beaver Street Arterial	Hunsaker Lane to Wilkes Drive	Striped Lane	Lane County	\$0	0.92	503
Bertelsen Road	18th Avenue to Bailey Hill Road	Striped Lane	Eugene	\$0	0.60	315
Coburg Road	Kinney Loop to Armitage Bridge	Striped Lane/Shoulder	Lane County	\$0	0.87	625
Delta Highway	Ayres Road to Green Acres Road	Striped Lane	Eugene	\$0	0.68	635
Dillard Road	43rd Street to Garnet Street	Striped Lane	Eugene	\$0	0.39	233
Division Avenue	Delta Highway to Beaver Street (new frontage road)	Striped Lane	Lane County	\$0	0.47	512
Fox Hollow Road	Donald Street to Cline Road	Striped Lane	Eugene, Lane County	\$0	0.50	245
Goodpasture Island Road	Delta Highway to Happy Lane	Striped Lane	Eugene	\$0	0.33	664
Irvington Road	River Road to Prairie Road	Striped Lane	Lane County	\$0	1.44	533
Prairie Road	Carol Lane to Irvington Drive	Striped Lane	Lane County	\$0	0.38	472
Roosevelt Boulevard	Beltline Road to Danebo Avenue	Striped Lane	ODOT	\$0	0.24	475
Royal Avenue	Terry Street to Greenhill Road	Striped Lane	Lane County, Eugene	\$0	1.01	481
West Eugene Parkway (1A)	Seneca Road to Beltline Road	Striped Lane	ODOT	\$0	1.65	336

***Status Sub-Total***

***\$0***

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
<b><i>Status: Unprogrammed</i></b>						
28th Street	Main Street to Centennial Boulevard	Striped Lane	Springfield	\$0	0.70	909
31st Street	Hayden Bridge to U Street	Striped Lane	Lane County	\$0	0.57	765
35th Street	Commercial Avenue to Olympic Street	Striped Lane	Springfield	\$0	0.57	918
51st/52nd Street	Main Street to High Banks Road	Route, Striped Lane	Springfield	\$0	1.20	6
69th Street	Main Street to Thurston Road	Striped Lane	Springfield	\$0	0.55	15
Aspen Street	West D Street to Menlo Loop	Striped Lane	Lane County, Springfield	\$0	0.58	809
Beltline Road East	Gateway Street to Game Farm Road	Striped Lane	ODOT	\$0	0.70	718
Bethel Drive	Roosevelt Boulevard to Highway 99	Striped Lane or Route	Eugene	\$0	1.69	414
Commercial Street	35th Street to 42nd Street	Striped Lane	Springfield	\$0	0.70	933
County Farm Loop	West-to-East section	Striped Lane	Lane County, Eugene	\$0	0.56	632
County Farm Loop	North-to-South section	Striped lane	Lane County, Eugene	\$0	0.53	631
Daisy Street	46th Street to 48th Street	Striped Lane	Springfield	\$0	0.06	24
Elmira Road	Bertelsen Road to Highway 99	Route	Eugene	\$0	1.21	420
Future Collector H	Future Collector G to Royal Avenue	Striped Lane or Route	Eugene	\$0	0.47	435
Future Collector O	Barger Drive to Future Collector G	Striped Lane or Route	Eugene	\$0	0.49	447
Game Farm Road North	I-5 to Crescent Avenue	Striped Lane	Lane County	\$0	1.01	606
Game Farm Road North	Coburg Road to Crescent Avenue	Striped Lane	Lane County	\$0	1.30	654
Game Farm Road South	Beltline Road to Harlow Road	Striped Lane	Lane County, Springfield	\$0	0.90	737
Gilham Road	Honeywood Street to Torr Avenue	Striped Lane or Route	Eugene	\$0	1.03	662
Glenwood Boulevard	Judkins to Glennwood Drive	Striped Lane	Springfield	\$0	0.42	827

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Greenhill Road	Barger Drive to W. 11th Avenue	Striped Lane	Lane County, Eugene	\$0	2.74	454
Hayden Bridge Road	Yolanda Avenue to Marcola Road	Striped Lane	Lane County	\$0	1.30	747
Hayden Bridge Road	Yolanda Avenue to Marcola Road	Striped Lane	Lane County	\$0	0.54	796
Hunsaker Lane / Beaver Street	Division Avenue to River Road	Striped Lane	Lane County	\$0	1.11	527
Jasper Road (B)	Mt. Vernon Road to UGB South	Striped Lane	ODOT	\$0	2.20	63
Lakeview/Parkview	Gilham Road to County Farm Road	Striped Lane or Route	Eugene	\$0	0.79	644
Laura Street	Scotts Glen Drive to Harlow Road	Striped Lane	Springfield	\$0	0.40	750
Maple Street	Elmira Avenue to Roosevelt Boulevard	Route	Eugene	\$0	0.15	469
Old Coburg Road	Game Farm Road to Chad Drive	Striped Lane or Route	Eugene	\$0	0.34	680
River Avenue	River Road to Division Avenue	Striped Lane	Eugene	\$0	0.85	542
S. 28th Street	Main Street to Millrace	Striped Lane	Springfield	\$0	0.51	945
S. 32nd Street	Main Street to Railroad Crossing	Striped Lane	Springfield	\$0	0.39	948
S. 42nd Street	Main Street to Jasper	Striped Lane	ODOT	\$0	0.80	954
Van Duyn Road	Western Drive to Harlow Road	Route	Eugene County	\$0	0.25	696
Weyerhauser Haul Road	48th Street to 57th Street	Striped Lane	Springfield	\$0	0.91	57
Wilkes Drive	River Road to River Loop 1	Striped Lane	Lane County	\$0	0.99	554
West Eugene Parkway (1B)	Highway 99 to Seneca Rd	Striped Lane	ODOT	\$0	0.64	337
West Eugene Parkway (2A)	West 11 <sup>th</sup> to Beltline	Striped Lane	ODOT	\$0	2.38	338

*Status Sub-Total*

*\$0*

*Project Category Sub-Total*

*\$0*

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: On-Street Lanes or Routes Without Road Project***

***Status: Programmed***

14th Street	S. A Street to G Street	Striped Lane	Springfield	\$0	0.55	803
28th Street	Centennial Boulevard to Olympic Street	Striped Lane	Springfield	\$0	0.26	912
58th Street	High Banks Road to Thurston Road	Striped Lane	Springfield	\$0	0.17	9
7th Avenue	Bailey Hill Road to McKinley Street	Striped Lane or Route	Eugene	\$0	0.90	306
Bailey Hill Road	5th Avenue to W. 11th Avenue	Striped Lane	Eugene	\$0	0.27	309
Centennial Boulevard	5th Street to 28th Street	Striped Lane	Springfield	\$0	1.63	815
McKinley Street	5th Avenue to 7th Avenue	Route	Eugene	\$0	0.19	163
Mohawk Boulevard	G Street to Marcola Road	Striped Lane	Springfield	\$0	0.96	843
Roosevelt Boulevard	Danebo Avenue to Terry Street	Striped Lane	Eugene	\$0	0.51	478

***Status Sub-Total***

***\$0***

***Status: Unprogrammed***

10th Avenue	Lincoln Street to High Street	Striped Lane	Eugene	\$0	0.45	103
11th Avenue	Chambers Street to Lincoln Street	Striped Lane	Eugene	\$30,000	1.04	106
13th Avenue	Chambers Street to Lawrence Street	Striped Lane	Eugene	\$30,000	0.96	109
18th Avenue	Alder Street to Agate Street	Striped Lane	Eugene	\$0	0.73	115
1st Avenue	Bertelsen Road to Seneca Road	Striped Lane or Route	Eugene	\$0	1.12	491
21st Street	Main Street to Olympic Street	Striped Lane	Springfield	\$0	0.92	906
24th Avenue	Chambers Street to Jefferson Street	Striped Lane or Route	Eugene	\$60,000	0.82	121
28th Avenue	Friendly Street to Tyler Street	Striped Lane	Eugene	\$0	0.70	203

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
29th Avenue	Pearl Street to Portland Street	Striped Lane	Eugene	\$90,000	0.15	206
2nd Avenue	Polk Street to Van Buren Street	Route	Eugene	\$0	0.25	124
30th Avenue / Amazon Parkway	Agate Street to 29th Avenue	Striped Lane	Eugene	\$528,000	0.91	209
33rd Avenue	Willamette Street to Hilyard Street	Striped Lane or Route	Eugene	\$0	0.55	212
3rd/4th Connector	Lincoln Street to High Street	Striped Lane or Route	Eugene	\$0	0.43	180
42nd Street	Marcola Road to Railroad Tracks	Striped Lane	Springfield	\$0	1.10	713
5th Street	Centennial Boulevard to G Street	Striped Lane	Springfield	\$0	0.35	806
66th Street	Main Street to Thurston Road	Striped Lane	Springfield	\$0	0.55	12
Augusta Street	I-5 Ramp to Floral Hill Drive	Striped Lane or Route	Eugene	\$0	0.98	218
Candlelight Drive / Danebo Avenue	Barger Avenue to Royal Avenue	Route	Eugene	\$0	1.01	417
Centennial Boulevard Overpass	Centennial boulevard @ I-5	Add sidewalk to bridge and approaches, modify guardrail, striped lane	ODOT, Eugene, Springfield	\$50,000	0.00	610
Chambers Street	24th Avenue to 28th Avenue	Striped Lane	Eugene	\$0	0.42	224
Clinton Drive / Debrick Road	Cal Young Road to Willagillespie Road	Route	Eugene	\$0	0.51	616
Dillard Road	Garnet Street to UGB	Striped Lane	Eugene	\$570,000	1.83	234
Donald Street	39th Avenue to Fox Hollow Road	Route	Eugene	\$0	0.62	236
East/ West Amazon Drive	Hilyard Street to Fox Hollow Road/Dillard Road	Striped Lane	Eugene	\$0	1.08	239
Emerald Street/29th Avenue	24th Avenue to Laurelwood Golf Course and University Street	Route	Eugene	\$0	0.82	242
Franklin Boulevard	Glenwood Boulevard to Springfield Bridges	Striped Lane	Eugene, ODOT	\$264,000	0.54	824
Friendly Street	18th Avenue to 28th Avenue	Striped Lane or Route	Eugene	\$40,000	0.98	251
G Street	5th Street to 28th Street	Striped Lane or Route	Springfield	\$9,500	1.60	899

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Game Farm South	Beltline to Deadmond Ferry Road	Striped Lane	Springfield	\$0	0.12	738
Garfield Street	Roosevelt Boulevard to 14th Avenue	Striped Lane	Eugene	\$132,000	1.29	145
Golden Gardens	Jessen Drive to Barger Drive	Route	Eugene	\$0	0.50	451
Greenhill Road	Barger Drive to Airport Road	Shoulder	Lane County	\$209,000	1.47	457
Greenhill Road	Crow Road to W. 11th Avenue	Striped Lane/Shoulder	Lane County	\$38,000	0.26	453
Grove Street	Silver Lane to Howard Avenue	Striped Lane or Route	Lane County	\$0	0.16	515
High Street	3rd Avenue to 5th Avenue	Striped Lane or Route	Eugene	\$0	0.25	185
Hilliard Lane	N. Park Avenue to W. Bank Trail	Route	Lane County	\$0	1.09	518
Horn Lane	N. Park Avenue to River Road	Striped Lane or Route	Lane County	\$144,000	0.75	521
Howard Avenue	River Road to N. Park Avenue	Striped Lane or Route	Lane County	\$0	0.96	524
Ivy Street	67th Street to 70th Street	Route	Springfield	\$0	0.30	99
Kinsrow Avenue	Centennial Boulevard to the East	Route	Eugene	\$0	0.30	672
Lake Drive / N. Park Avenue	Maxwell Road to Northwest Expressway	Striped Lane or Route	Lane County	\$171,000	0.91	536
Lincoln Street / Lawrence Street	5th Avenue to 18th Avenue	Route, Striped Lane	Eugene	\$0	1.14	160
Main Street and S. A Street	Springfield Bridges to East UGB	Striped Lane	ODOT, Springfield	\$0	8.50	830
McVay Highway	I-5 to 30th Avenue	Striped Lane	ODOT	\$114,000	0.71	834
Mill Street	10th to 15th Avenue	Route	Eugene	\$400,000	0.38	166
Mill Street	S. A Street to Fairview Drive	Striped Lane	Springfield	\$0	0.99	837
Minda Drive/Sally Way	Norkenzie Road to Norwood Street	Route	Eugene	\$0	0.51	674
Monroe Street/Fairgrounds	1st Avenue to Fern Ridge Path	Striped Lane or Route	Eugene	\$75,000	1.16	172
N. 36th Street	Main Street to Commercial Street	Striped Lane or Route	Springfield	\$100,000	0.30	939

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
N. Park Avenue	Maxwell Road to Horn Lane	Striped Lane or Route	Lane County	\$190,000	1.02	539
Nugget, 15th, 17th, 19th in Glenwood		Route	Springfield	\$0	1.58	845
Oakmont Way	Oakway Road to Coburg Road	Striped Lane or Route	Eugene	\$0	0.30	676
Olympic Street (A)	21st Street to Mohawk Boulevard	Striped Lane	Springfield	\$0	0.26	942
Polk Street	6th Avenue to 24th Avenue	Striped Lane	Eugene	\$400,000	1.39	175
Potato Hill Summit Route (in future subdivision)	Length of Potato Hill route	Route	Springfield	\$0	1.52	84
Prairie Road	Maxwell Road to Highway 99	Striped Lane	Eugene	\$58,000	0.15	495
Rainbow Drive	West "D" Street to Centennial Boulevard	Striped Lane	Springfield	\$0	0.55	848
S. 67th Street	Ivy Street to Main Street	Striped Lane or Route	Springfield	\$42,000	0.30	92
S. 70th Street	Main Street to Ivy Street	Striped Lane	Springfield	\$115,000	0.60	94
Seavey Loop Road / Franklin Boulevard	Coast Fork of Willamette River to I-5	Route or Shoulder	Lane County	\$0	2.44	957
Seneca Road	W.11th Avenue to 7th Place	Striped Lane	Eugene	\$0	0.27	324
Silver Lane	Grove Street to River Road	Striped Lane	Eugene	\$0	0.89	548
Spring Boulevard (A)	Fairmount Boulevard to 29th Avenue	Route	Eugene	\$0	1.07	278
Springfield Bridges	Franklin Boulevard to Mill Street	Striped Lane	ODOT	\$0	0.68	857
Summit Street	Fairmount Boulevard to Floral Hill Drive	Route	Eugene	\$0	0.31	287
Tandy Turn / Lariat Meadows	Coburg Road to Oakway Road	Route	Eugene	\$0	0.48	686
Thurston Road	Billings Road to Highway 126	Route or Shoulder	Lane County	\$0	1.61	96
Torr Avenue	Gilham Road to Locke Road	Striped Lane or Route	Eugene	\$0	0.66	688
Tyler Street	24th Avenue to 28th Avenue	Route	Eugene	\$0	0.37	290

<b>Name</b>	<b>Geographic Limits</b>	<b>Description</b>	<b>Jurisdiction</b>	<b>Estimated Cost</b>	<b>Length</b>	<b>Number</b>
Valley River Way (A)	Valley River Drive to Valley River Connector	Striped Lane	Eugene	\$200,000	0.23	694
Van Duyn Road / Bogart Road	Western Drive to Willakenzie Road	Route	Eugene	\$0	0.61	698
Walnut Avenue	15th Avenue to Fairmont Boulevard	Route	Eugene	\$0	0.36	295
Weyerhaeuser Haul Road	Booth Kelly Road to Main Street	Striped Lane	Springfield	\$0	0.46	90
Willamette Street	18th Avenue to 32nd Avenue	Striped Lane	Eugene	\$396,000	1.30	296
Willamette Street	11th Avenue to 18th Avenue	Striped Lane	Eugene	\$0	0.76	184
Yolanda Avenue	31st Street to Hayden Bridge Road	Striped Lane	Springfield	\$0	0.80	784

*Status Sub-Total*

**\$4,455,500**

*Project Category Sub-Total*

**\$4,455,500**

*Total Capital Projects: Bicycle Projects*

**\$19,188,200**



## *Chapter 3: Table 3b-Future (Beyond 20-Years) Capital Investment Actions: Bicycle Projects*

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
<b><i>Project Category: Multi-Use Paths Without Road Project</i></b>						
<b><i>Status: Future</i></b>						
16th Avenue Connector	Fern Ridge Path to Jefferson Street	Multi-Use Path	Eugene	\$37,000	0.09	112
Augusta Street Path	Laurel Hill Park to 30th Avenue	Multi-Use Path	Eugene	\$933,000	0.79	221
Coast Fork Willamette path	Harbor Drive to Clearwater Park	Multi-Use Path	Willamalane	\$0	3.39	21
Deertrail Path	Sundance Street to 35th Avenue	Multi-Use Path, Route	Eugene	\$0	1.85	230
Delta Highway Path	Goodpasture Island Road to Willagillespie Road	Multi-Use Path	Eugene	\$1,719,000	0.47	636
EWEB Path Extension	31st Street to Marcola Road	Multi-Use Path	Willamalane, Springfield	\$0	0.72	731
Fern Ridge Path #3	Royal Avenue to Fern Ridge Reservoir	Multi-Use Path	Lane County	\$5,565,000	0.91	426
Game Bird Park Path	Flamingo Avenue to N. Cloverleaf Loop	Multi-Use Path	Willamalane	\$500,000	0.10	734
Jessen Path	Green Hill Road to Beltline Road	Multi Use Path	Eugene	\$0	1.81	463
McKenzie-Gateway Path	Game Farm Road S. to Deadmond Ferry Road	Multi-Use Path	Springfield	\$0	1.70	759
South Bank Trail (A)	I-5 to Springfield Bridges	Multi-Use Path	Springfield	\$1,800,000	1.22	851
South Bank Trail (B)	Springfield Bridges to Seavey Loop Road	Multi-Use Path	Springfield	\$2,480,000	1.59	854
South Hills Trail	Bailey Hill Road to Willamette Street	Multi-Use Path	Eugene	\$0	5.47	327
Springfield-Mt. Pisgah Connector	Jasper Road to Buford Park Road	Route, Multi-Use Path, Bridge	Willamalane, Springfield	\$0	2.78	960
Upper Amazon Path	Hilyard Street to Canyon Drive	Multi-Use Path	Eugene	\$590,000	1.95	293
West Bank Trail (B)	Beltline to Hileman Co. Park	Multi-Use Path	Eugene	\$0	3.75	551
Willamette McKenzie Trail	Beltline Road to Armitage Park	Multi-Use Path	Eugene, Lane County	\$0	4.99	699
Meadowview Bike Path	Meadowview School to Fern Ridge Path	Multi-Use Path	Eugene	\$0		496

***Status Sub-Total*** ***\$13,624,000***

***Project Category Sub-Total*** ***\$13,624,000***

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: Multi-Use Paths With Road Project***

***Status: Future***

Beltline Path	Roosevelt Boulevard to W. 11th Avenue	Multi-Use Path	ODOT	\$0	1.13	411
---------------	---------------------------------------	----------------	------	-----	------	-----

*Status Sub-Total* **\$0**

***Project Category Sub-Total*** **\$0**

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: On-Street Lanes or Routes With Road Project***

***Status: Future***

Division Avenue	Delta Highway to Beaver Street (new frontage road)	Striped Lane	Lane County	\$0	0.47	512
Beaver Street Arterial	Hunsaker Lane to Wilkes Drive	Striped Lane	Lane County	\$0	0.92	503
McVay Highway	I-5 to Franklin Boulevard	Striped Lane	ODOT	\$0	1.50	833
W. 11th Avenue	Greenhill Road to Terry Street	Striped Lane	ODOT, Eugene, Lane	\$0	1.06	333
Jasper Road	S. 42nd Street to Mt. Vernon Road	Striped Lane	ODOT	\$0	1.42	60
Franklin Blvd.	Jenkins Drive to Mill St.	Striped Lane	Springfield/ODOT	\$0	1.2	839

***Status Sub-Total*** ***\$0***

***Project Category Sub-Total*** ***\$0***

Name	Geographic Limits	Description	Jurisdiction	Estimated Cost	Length	Number
------	-------------------	-------------	--------------	----------------	--------	--------

***Project Category: On-Street Lanes or Routes Without Road Project***

***Status: Future***

Bethel Connector	Rikhoff to Park Avenue	Multi-Use Path	Eugene	\$0	0.15	490
Broadway / Franklin Boulevard	Mill Street to East of I-5	Striped Lane	Eugene	\$0	1.91	182
Jefferson Street	13th Avenue to 18th Avenue	Striped Lane	Eugene	\$93,000	0.35	263
Jefferson Street	18th Avenue to 28th Avenue	Striped Lane	Eugene	\$238,000	0.89	157
Lorane Highway (A)	Bailey Hill Road to Chambers Street	Shoulder	Lane County	\$0	4.32	321
Portland Street / 27th Avenue	Willamette Street to 29th Avenue	Route	Eugene	\$89,000	0.89	275
Spyglass Drive	Cal Young Road to Oakway Road	Route, Accessway	Eugene	\$155,000	1.00	684
W. 11th Avenue	Chambers Street to Danebo Avenue	Striped Lane	Eugene, ODOT	\$0	3.00	334
Jefferson/ Washington	5 <sup>th</sup> to 13 <sup>th</sup>	Striped Lane	Eugene	\$100,000	0.53	

***Status Sub-Total*** ***\$675,000***

***Project Category Sub-Total*** ***\$675,000***

***Total Capital Projects: Bicycle Projects*** ***\$14,299,000***

## Part Two: Financial Plan

This section provides the Financial Plan for *TransPlan*. It presents:

- A summary of the **federal and state regulations for financial constraint**,
- A summary of **future cost and revenue estimate methodologies**,
- **Forecasts of revenue from existing sources**,
- An **assessment of the revenue shortfall**,
- A list of **strategies to address the shortfall**, and
- Development of the Constrained Plan.

### Federal and State Regulations for Financial Constraint

Both federal and state legislation set forth guidelines that seek to ensure that the needs identified in *TransPlan* are balanced with resources expected to be available over the planning period. Guidelines in the federal Transportation Equity Act for the 21<sup>st</sup> Century (TEA 21) state that *TransPlan* must include:

A financial plan that demonstrates how the adopted long-range transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs.

Furthermore:

The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted long-range transportation plan if reasonable additional resources beyond those identified in the financial plan were available. For the purpose of developing the long-range transportation plan, the metropolitan planning organization and State shall cooperatively develop estimates of funds that will be available to support plan implementation.

The state Transportation Planning Rule (TPR) requires that a transportation financing program be developed as part of *TransPlan*, which includes:

1. A list of planned transportation facilities and major improvements required to support the land uses in the acknowledged comprehensive plan (*Metro Plan*),
2. A general estimate of the timing for planned transportation facilities and major improvements,
3. Determination of rough cost estimates for the transportation facilities and major improvements identified in the transportation system plan (TSP).

Transportation costs can be viewed in many different ways, by jurisdiction, by mode, and by expenditure. Table 4 summarizes costs and revenues by transportation system (roadway, transit, and bicycle and pedestrian), by expenditure (OM&P and capital improvements), and by jurisdiction.

## **Future Cost and Revenue Estimate Methodologies**

The estimation of future costs and revenues was guided by two ODOT reports. The Oregon Roads Finance Study (ORFS) estimated transportation system needs at the state level in 1993, and provided unit costs for the estimation of O&M, preservation, and capital needs for this region. ODOT developed *Financial Assumptions for the Development of Metropolitan Transportation Plans* in 1995 (updated in 2000), providing estimates of future federal and state revenues.

### ***Roadway System Costs***

Roadway costs were divided into three categories:

1. Operations and Maintenance,
2. Preservation, and
3. Modernization.

O&M generally includes activities necessary to keep the transportation system safe and in repair. Preservation activities generally extend the useful life of a facility, and are larger in cost and scope than O&M. Modernization consists of major capital improvements that bring facilities to urban standards, or add capacity.

For the purpose of estimating operations and maintenance costs, the roadway system inventories were summarized in lane miles by functional class and pavement type. O&M unit costs from the ORFS were applied to these inventories. The unit costs were adjusted for inflation to reflect 1995 unit costs, and increased by 9 percent to account for administration costs.

With respect to preservation costs, jurisdictions coordinated condition-rating criteria so the categories were similar throughout the area. The percentages of the system in need of resurfacing or reconstruction were applied to system totals by functional class in centerline miles. This yielded an estimate of current preservation need.

To estimate modernization costs, data from Eugene, Springfield, and Lane County public works departments and the ORFS were used as the bases for developing unit cost assumptions for roadway improvement projects.

Proposed projects were categorized according to *facility type* and *project type*. Actual construction cost data for a range of projects, as well as current unit cost assumptions, were obtained from local jurisdictions. These data were analyzed and average per-lane-mile unit costs

were calculated for various facility/project types. On state highways and on facility types where local cost data were limited, per-lane-mile unit costs from the ORFS were used. This information was supplemented through direct conversation with local transportation officials regarding recent costs for smaller-scale projects such as traffic signals, intersection improvements, long-range capacity studies, etc.

Local and state transportation officials via the Transportation Planning Committee (TPC) reviewed a final set of unit-cost assumptions. Minor adjustments were made during this review and final unit-cost assumptions were incorporated into the *TransPlan* Capital Projects database to provide for a uniform and automated method of project cost calculation.

Where project-specific cost analysis data were available from more detailed studies (i.e., I-5/Beltline Highway) these cost estimates were entered directly into the project database.

Total roadway costs for the planning horizon through Fiscal year 2021 are estimated to be approximately \$1.312 billion. For details about which capital projects have been included in this total, see the Capital Investment Action project lists beginning on page 11.

### ***Roadway System Revenues***

Federal and state revenue projections were provided by ODOT in a document titled *Financial Assumptions for the Development of Metropolitan Transportation Plans* in 1995 (updated most recently in 2000). Most of the revenue projections of federal and state funds used in *TransPlan* are based on the projections provided in this document. The *TransPlan* financial analysis is based on the latest ODOT projections available. Other local roadway revenue estimates were developed by an interjurisdictional staff team.

The estimate of **State Highway Trust Fund** revenues is based on the assumptions that the state gas tax would increase an average of 1.25¢ per gallon per year beginning in 1999, and that the TPR requirements for reducing vehicle miles traveled (VMT) per capita would not be met.

The estimate of **federal forest receipts** was provided by Lane County staff. The revenue is assumed to continue at federal guarantee levels through 2004, and at current levels absent the guarantee afterwards. The assumption through 2004 is that the revenue will first be used to cover Lane County O&M and preservation and Metro Road Partnership commitments, with the balance going to Lane County modernization. Based on Lane County projections of O&M and preservation (OM&P) need, forest receipt revenue fails to cover that need as soon as the guarantee expires.

Some revenues such as **assessments** and **systems development charges (SDCs)**, may only be used for capital projects. These two revenues sources fund most of the city collector and arterial roadway projects that involve urban standards. Other revenues are flexible and may be used for any road-related purpose including O&M and capital projects. Revenues are summarized with the costs in Table 4.

## **Transit System Costs and Revenues**

Transit system finances are largely independent of other transportation systems, and are therefore analyzed separately. Revenues and expenses are consistent with LTD's long-range financial plan. The capital costs and revenues are consistent with the long-range capital plan. Assumptions about grant revenue amounts are significantly different than they are in the Capital Plan as they have been reduced to cover only the first phase of the BRT project.

### ***Transit System Costs***

Transit capital cost estimates are based on the assumptions that the BRT project will proceed with primary focus on the development of an east-west pilot corridor, that Park-and-Ride facilities will be added on major corridors as the need is identified and suitable sites are selected, and that fleet expansion and vehicle replacement will continue at a rate determined by service level needs. BRT project implementation could begin as early as Fiscal year 2001.

Transit costs include the first phase of the BRT project, which is currently estimated to cost between \$20 and \$30 million. BRT includes many potential elements that will need to be carefully reviewed and evaluated. Until this engineering work is completed and decisions are made on the extent and timing of the long-term development of the BRT corridors, it is very difficult to provide a more accurate cost estimate for the BRT system.

### ***Transit System Revenues***

Transit revenue estimates are based on assumptions that overall federal grant funds in support of capital projects will decline, that fare revenue will continue to increase as it has over the last two years, and that payroll tax receipts will increase due to growth in employment and wages.

It is anticipated that discretionary federal grant funds will pay for up to 80 percent of the capital cost of the BRT system. This expectation is consistent with the District's previous success in obtaining federal funds. During the past ten years, the District has been awarded discretionary federal funds for a new operating facility (\$7 million in federal funding), a new central station, (\$10 million), buses (\$3 million), and supporting equipment (\$2 million). In addition, there is considerable enthusiasm at the federal level for LTD's BRT project, as it is seen as a low-cost and effective alternative to light-rail. This enthusiasm should translate into funding support. Therefore this revenue source meets the legal requirement that it is reasonably expected to exist.

## **Bicycle and Pedestrian System Costs and Revenues**

The *TransPlan* bicycle element estimates costs for bicycle projects that are independent of the road projects such as multiple-use paths and bridges and new on-street paths that do not happen to coincide with a roadway project. On-street bicycle lanes comprise a majority of the bicycle facilities recommended in *TransPlan* and will for the most part be funded as a component of future roadway improvements or reconstruction. Signing designated bicycle routes is relatively inexpensive and is normally funded under the roadway maintenance budget.



## ***Bicycle and Pedestrian System Costs***

A total of approximately \$20 million in bike projects have been identified in the fiscally constrained *TransPlan*. Most of the cost is in multiple use path, or bridge projects. Costs have also been estimated for other road-related bike projects that have not been included in road project costs.

Additional path, bridge, or connector projects have been designated in *TransPlan* as being future projects, meaning that they are either strictly for recreational use, that land use activities such as active gravel mining currently do not allow them to be built, or that funds have not yet been identified for their completion. However, many of these projects could be built within the *TransPlan* planning horizon if additional funding sources emerge.

OM&P of the bike and pedestrian system within the road right-of-way is included in the costs for the street and highway system. There currently is no dedicated source of revenue or other special revenues for this work. A transportation utility fee could be used to provide revenues for the OM&P of the off-street system.

## ***Bicycle and Pedestrian System Revenues***

### **Federal Funding**

Currently under TEA 21, 10 percent of Surface Transportation Program (STP) funds allocated to the state must be used for transportation enhancement activities, including construction of facilities for bicycles and pedestrians. TEA 21's predecessor, ISTEA, has been the primary funding source for off-street projects built in the Eugene-Springfield area since its authorization in 1991. Federal enhancement funds received for bicycle projects in Eugene and Springfield have totaled \$4,803,000 since 1992. The City of Eugene is expected to receive \$937,000 in TEA 21 enhancement funds. If TEA 21 is reauthorized with an enhancement program, based on historical funding levels for this area, it is assumed that sufficient revenues will be available to fund the identified bicycle and pedestrian projects. A major issue for local jurisdictions is identifying the required local match.

### **State Funding**

State funding for bikeways is primarily limited to money from the ODOT Highway Fund. This funding is used mainly for adding bicycle lanes to existing and new streets. These funds may also be used for bicycle projects that are independent of other road construction as long as the project is within highway right-of-way. Highway Funds cannot be spent on paths in parks or anywhere else outside the highway, road, or street right-of-way.

Recently, ODOT funded independent bikeway projects in conjunction with highway modernization projects, including the Beltline path from Royal Avenue to Highway 99. It is expected that ODOT will finance the construction of the bike paths associated with later phases of Beltline and the West Eugene Parkway. It is also expected that ODOT will participate in the construction of the planned I-5 path and bike bridge. These projects are estimated to cost \$3.6 million.

## **Other Funding**

Although State Highway Fund and TEA 21 money provides the basic funding source for bikeways, local jurisdictions may also provide revenues from local sources such as general funds, park district funds, special bond levies, and systems development charges, as well as through the local road construction and maintenance budget.

## **Flexibility of Federal Surface Transportation Revenues**

Federal STP funds are not restricted to roadway projects. They have been used in this region for TDM, bike, and transit projects. Local jurisdictions have the authority to allocate some of these revenues to local projects.

## **Assessment of Revenue Shortfall**

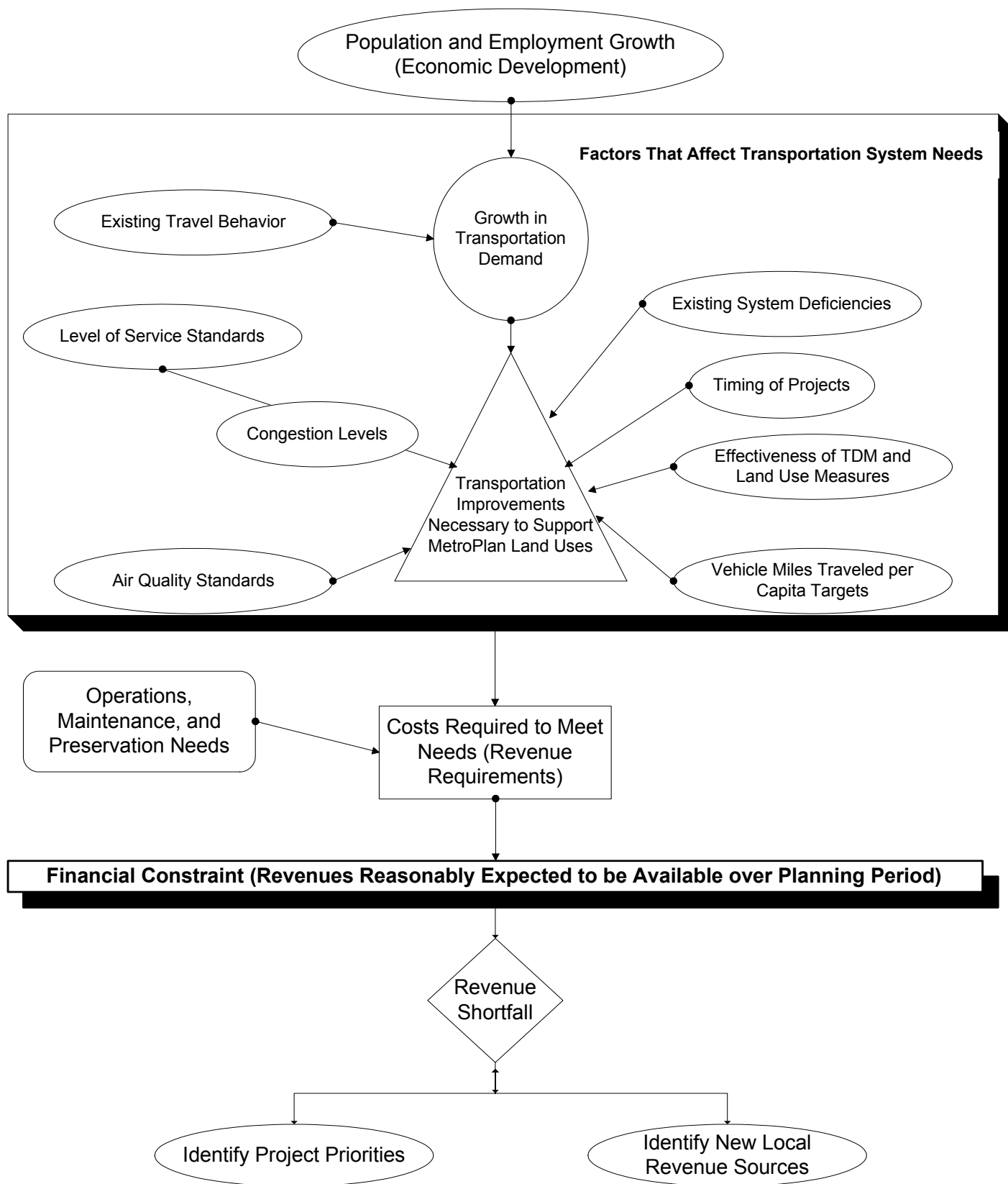
The level of transportation needs and the amount of revenues available to pay for the needs depend on several key factors such as the amount of congestion the region is willing to accept, and the timing and allocation of resources among the various components of the system. Figure 7 illustrates some of the interrelationships among key factors contributing to *TransPlan's* financial constraint. In the process of making decisions on the package of transportation investments contained in *TransPlan*, it is important to consider the tradeoffs that can arise from changes in individual factors. A discussion of these factors and tradeoffs and a description of the revenue shortfall under *TransPlan* assumptions follows.

### ***Factors That Affect the Revenue Shortfall***

As presented, transportation improvements necessary to support the land use pattern established in the *Metro Plan* arise from several sources. Population and employment growth and existing travel behavior contribute to a growth in transportation demand. Increased demand necessitates adding to the existing system (road, bus, bike, and pedestrian) through specific system improvements. The need for system improvements is also affected by: deficiencies in the existing system, decisions about system standards (such as level of service/congestion and pavement condition) to be provided on the region's transportation facilities, and the level and effectiveness of strategies like TDM measures, investments in alternative modes, future land use patterns, and the timing of projects.

**Figure 7**

**Key Factors That Affect Financial Constraint**



System improvement needs can also be affected by the requirement to meet national air quality standards and the VMT per capita targets specified in the state's TPR. In some cases, where an improvement reduces congestion, air quality can be improved. An improvement that has the affect of significantly increasing the number of vehicle trips can cause a decrease in air quality. Overall, the Eugene-Springfield area is expected to experience improved air quality over the next 20 years. In isolation, major system improvements can appear to have the affect of increasing VMT per capita. These factors were considered in the technical analysis and identification of transportation system needs.

In addition to system improvements, the plan must also consider the resources required to adequately operate, maintain, and preserve the existing and future transportation system. The need for ongoing O&M applies to all parts of the overall system including roadways, transit vehicles, bikeways, and sidewalks. The level of O&M need is affected by the general size of the system, and the function of the roadway system (freeway, arterial, collector).

The level of roadway system preservation needs is affected by roadway preservation standards. The goal in the Eugene-Springfield area is to maintain, through OM&P activities, a level of 80 percent of the system miles rated at fair or better condition. Adequately funding OM&P needs avoids the much higher costs associated with reconstruction of the system.

The combination of system improvement costs and the costs of OM&P activities represents the total costs required to meet future transportation needs in the region. The region's ability to provide for these needs is constrained by the revenues reasonably expected to be available over the 20-year planning period.

The revenue shortfall can be addressed through the establishment of priorities or the development of additional revenue sources.

### ***Conclusions About the Revenue Shortfall***

The following conclusions are drawn from current analysis of the revenue shortfall:

- 1) Eugene and Springfield have the ability to fund most of their collector and arterial roadway projects involving upgrades to urban standards through the combined use of assessments and SDCs.
- 2) Eugene and Springfield may have more difficulty finding resources for new facilities (e.g., Pioneer Parkway Extension, Booth Kelly Road).
- 3) Eugene and Springfield have a significant shortfall in resources for OM&P of the current roadway system.
- 4) Lane County's current policy calls for the use of available resources for the OM&P of the current roadway system first and expects resources to be adequate for this purpose.

- 5) Lane County projects a shortfall in modernization funding in about 2004. Modernization funding levels will depend on congressional action on federal timber receipt issues, legislative action on the state-wide gas tax, and priority-setting by the County Board of Commissioners.
- 6) ODOT lacks resources for modernization and OM&P, and a significant amount of the identified needs are on the ODOT arterial system, including the freeways.
- 7) LTD has projected sufficient resources to maintain the current transit service level and expects to be successful in obtaining federal resources to begin the implementation of the BRT system.
- 8) There are no existing transportation resources for the OM&P of the off-street bike system outside of the public right-of-way.
- 9) Recent history indicates that federal enhancement resources should be reasonably available for the majority of the planned off-street bike path modernization projects.

## **Strategies to Address Revenue Shortfall**

As described at the beginning of the financial plan, *TransPlan* is required to be constrained by revenue “reasonably expected to be made available” (federal requirement) and demonstrate its ability to support the land use pattern present in *Metro Plan*. The revenue shortfalls identified above can be addressed through either one of two primary means: a prioritization of needs (and the resulting movement of low-priority unfunded needs to a future project list), or the development of new revenue sources. This section presents possible strategies to address the anticipated revenue shortfall, suggesting factors to consider in establishing priorities and outlining the range of new revenue sources.

### ***1. Increased Federal and State Taxes and Fees***

Develop a united front to support state and federal efforts to develop additional transportation resources and obtain an equitable share of those resources for the metro area.

### ***2. Accept Lower Level of Service***

Establishing a set of needs within the limits of available resources can be accomplished by assigning a priority to specific projects or categories of projects. The major issues surrounding the level and priority of transportation system needs can be identified by assessing the tradeoffs that come with varying the acceptable level of congestion on roadways. A key policy tool in this discussion is level of service (LOS) standards. These standards are set to reflect the region’s willingness to accept a certain level of congestion on its roadway system. Generally, lowering LOS standards will have the effect of reducing the need for system improvements. Accepting increased congestion allows some system improvements to be postponed. Conversely, maintaining higher LOS will require more system improvements to reduce the amount of

congestion. The table below highlights some of the tradeoffs associated with different levels of congestion.

<b>Policy Choice</b>	<b>Impact on Standard</b>	<b>Potential Tradeoffs</b>
<b>Accept More Congestion</b>	<b>Lower Level of Service</b>	Reduce system improvement costs
		Reduce air quality in specific areas
		Increase hours of delay
		Increase vehicle operating costs
		Increase accidents
		Increase traffic infiltration into neighborhoods
		Increase use of alternative modes
<b>Accept Less Congestion</b>	<b>Raise Level of Service</b>	Increase system improvement costs
		Increase air quality in specific areas
		Reduce hours of delay
		Reduce vehicle operating costs
		Reduce accidents
		Reduce traffic infiltration into neighborhoods
		Reduce use of alternative modes

Other policy tools exist that can affect congestion levels. This plan is based on the use of a range of land use, TDM, and TSI measures to address the issues associated with congestion. In the long run (beyond the 20-year planning horizon), land use measures implemented in the planning period can have an affect on congestion levels. TDM measures can be used in the short run to affect demand at specific locations, though voluntary measures can only contribute to a reduction in congestion, not provide the full solution.

Thus, the primary set of actions available to address congestion in the planning period are the system improvement actions described in other sections of this chapter. Development of system improvement priorities should be based on a consideration of some of the tradeoffs highlighted above. In particular, it will be important to identify which projects can be postponed without significant degradation to the roadway system’s LOS. These might include ODOT freeway projects, interchanges, or local projects without identified funding sources.

### ***3. Special Road Funding Opportunities***

Identify special road funding opportunities to take advantage of state and federal resources such as Immediate Opportunity Funds, federal demonstration grants, or state or federal economic development grants.

### ***4. Stormwater Management***

Establish a stormwater utility fee for the area between the city limits and the urban growth boundary (UGB) and apply user fee revenues to augment Lane County road fund expenditures on roadway drainage projects.

Use Eugene and Springfield stormwater SDCs for the eligible drainage component of Lane County road modernization projects within the UGB.

### ***5. Transportation Utility Fee***

A Transportation Utility Fee (TUF) is analogous to a stormwater user fee. Each developed property within an area is charged a monthly fee for their anticipated use of the transportation system. These fees are determined by a methodology that is usually based on the trip-making characteristics of the land use type and becomes a fixed fee for that user. The fees can be collected on water utility bills just as sanitary and stormwater fees are currently. The fees can be set to generate any amount of revenue but are typically designed to cover a portion of ongoing O&M or to pay for preservation activities. The revenue is flexible and may be used for any purpose reasonably related to use of the public-sector transportation system, including maintenance of off-street bike and pedestrian facilities. These fees are typically not used for capacity-increasing projects because they are paid by existing users of the system.

### ***6. Increased Systems Development Charges***

There are several potential revenue-enhancing revisions to the existing Eugene and Springfield SDC methodologies and rate structures that could be explored.

The Eugene and Springfield transportation SDC could be revised to include the impact on county arterials and collectors and to ensure that wherever possible, the combination of assessments and SDCs cover 100 percent of the costs of the local arterial and collector street projects. Such a revision would increase revenues by approximately \$7.6 million over 20 years, increasing the transportation SDCs by about 21 percent.

The transportation SDC could also be expanded in the future to include capacity increasing transit facilities should transit revenues be insufficient to maintain the current level of service as growth occurs.

Another component that could be added to the local SDC rate structure would be one that addresses the local contributions Eugene and Springfield make to state roadway projects. These local expenditures on state projects are not currently included in the calculation of the SDCs.

Finally, it is possible that a reimbursement component could be added to each cities' SDC structure and result in increased revenues. Further analysis of this option would be required to determine if the necessary conditions for implementation of a reimbursement component are present, and if the addition of this component would actually result in additional revenues, or be revenue-neutral.

## ***7. Transfer of Jurisdiction***

A transfer of certain ODOT facilities to local jurisdictions in exchange for state assumption of locally owned segments of the National Highway System might allow for the use of local revenues (assessments and SDCs) on facilities that are unlikely to be improved by the state during the planning period.

Modernization projects could then be funded from a combination of assessments, transportation, and storm water SDCs and possible Lane County Road Fund contributions—revenue sources that are currently unavailable at the state level. However, in addition to handing over responsibility for costs, a transfer of ODOT facilities would also result in a reduction in revenues to the local ODOT district office because those revenues are partly dependant on total lane miles within the district. This reduction in revenue would result in the ODOT system improvements line item still showing a shortfall.

## ***8. Accept Lower Standards in Operations, Maintenance, and Preservation***

The standards applied to the OM&P of the transportation system determine the need for transportation revenues. This strategy consists of revisiting those standards to determine whether or not they are in line with priorities. In addition to the LOS (congestion) standard discussed above, other OM&P standards could be changed. Two possible strategies of this type are to eliminate maintenance on local gravel roads or on unimproved streets (streets with a thin surface treatment). Eliminating maintenance on metro area gravel local roads would save an estimated \$1.6 million over 20 years. Eliminating maintenance on unimproved local streets would save about \$5.8 million over the same period.

## ***9. Bond Measures***

Property-tax based measures, including capital bonds and levies, may be used to fund transportation activities. Springfield recently included \$2.8 million in street preservation projects in a bond levy. The City of Salem has used property-tax based serial levies a number of times in the past decade for preservation and modernization. Under Ballot Measure 50, capital bonds can be issued for a maximum of ten years and must be approved by the voters at a general election or with 50 percent turnout.

## ***10. Regional Transportation Taxes***

A local or regional gas tax and/or vehicle registration fee could be developed to fund the remainder of the gap in financing for the non-state road network. Each 1¢ of gas tax would generate about \$1.2 million county-wide. A gas tax should be charged on a regional basis and could include multiple counties. The revenues would be shared among the county and the cities. The current state tax is 24¢ and is shared among the state, counties, and cities. A simple gas tax does not include a comparable weight-mile tax for trucks, such as what the state currently has. Some method of taxing trucks or diesel fuel may be required to maintain equity.

Motor vehicle registration fees may be imposed by counties with a county-wide vote. The registration fee may not exceed that of the state, currently \$15 per year for a passenger car. The



funds must be shared with the cities within the county. Two or more counties may act jointly. A \$15 vehicle registration fee in Lane County would generate about \$3.8 million annually.

### ***11. Bridge Tolls***

Bridge tolls may be used to provide revenues for the construction of specific bridges. For example, tolls could be used to fund the construction of new river crossings. These tolls could be removed when construction has been paid in full, or could remain in place to fund OM&P of the bridge.

### ***12. Broadened Assessment Practices***

Under Oregon law, local improvement districts may be used to assess property owners for improvements that benefit the properties. Local agencies use local improvement districts to assess property owners for the initial street improvement resulting in a fully improved street, usually including, curbs, gutters, and sidewalks. Some jurisdictions have begun using improvement districts to assess property owners for preservation and reconstruction projects. Other jurisdictions are using them to fund ongoing O&M activities through an annual assessment. These may occur when streets need pavement overlays or when the street has reached the end of its useful life and needs to be reconstructed. The potential yield from this policy has not been estimated but potentially could fund a significant portion of the preservation needs. Remonstrance provisions in local codes may preclude the use of this tool unless property owners approve.

### ***13. Postpone Project to Future Projects List***

Prioritize projects and postpone projects based on availability of revenue. Postponed projects would be moved to a future projects list within *TransPlan*, pending availability of additional revenues.

## **Development of Constrained Plan**

Table 4 shows that under current *TransPlan* assumptions about standards, priorities, and timing, the region faces a \$441 million revenue shortfall over the planning horizon through Fiscal year 2021. The entire shortfall occurs in two areas—OM&P in general, and ODOT System Improvements.

To arrive at a financially constrained plan, a process was developed to consider the applicability of the various strategies to the individual line item revenue shortfalls shown in Table 4. The process included a determination of the regional priorities through the public review process and careful consideration by both inter-jurisdictional staff and policy groups of the applicability of individual strategies to each shortfall, among other steps. Not all of the strategies were considered appropriate for use (e.g., there was consensus that strategy #10 - *Regional Transportation Taxes* was not a viable local option and that the use of strategy #7 - *Transfer of Jurisdiction* would result in no net improvement in the cost/revenue picture). In most cases, packages of strategies were employed to address the shortfalls.

The Potential Strategies column in Table 4 shows the results of this process. Each line item revenue shortfall is addressed by one or more strategies. Where the *Postpone Projects* strategy is shown under System Improvements, the result is a movement of projects to the future projects list, thus removing the associated costs from the current plan.

Similar to the Postpone Projects strategy is the *Accept Lower Pavement Condition Ratings* strategy under OM&P. This strategy means that the overall pavement condition rating (PCR) standards will be lowered, resulting in a reduction in specific OM&P activities since the road surfaces will be maintained at a lower level. This results in a smaller percent of the road surface having a *fair* or *better* rating at any one time and reduces OM&P costs.

Other strategies are also intended to either directly reduce costs or increase revenues, resulting in a financially constrained plan. Table 5 and the following text describe the specific application of the strategy packages and show the resulting financially constrained costs and revenues.

**TABLE 4**  
**TRANSPLAN COSTS & REVENUES and STRATEGIES**  
(\$ Millions)

Local (Eugene, Lane County, Springfield) Components	Cost	Revenue	Shortfall	Potential Strategies
<b>Operations, Maintenance &amp; Preservation</b>				
Eugene Operations, Maintenance & Preservation	\$ 300	\$ 180	\$ 120	Implement New Local Revenue Source(s), Accept Lower Pavement Condition Rating(s) (PCR), Reduce Operations & Maintenance Service Levels, Add Reimbursement Component to Transportation System Development Charge(SDC)
Springfield Operations, Maintenance & Preservation	\$ 100	\$ 73	\$ 28	Implement New Local Revenue Source(s), Accept Lower PCR, Reduce Operations & Maintenance Service Levels, Use Bonding for Preservation
Lane County Operations, Maintenance & Preservation	\$ 112	\$ 112	\$ -	No Shortfall
<b>Subtotal</b>	<b>\$ 513</b>	<b>\$ 365</b>	<b>\$ 148</b>	
<b>System Improvements</b>				
City Arterial/Collector System Improvements	\$ 130	\$ 130	\$ -	No Shortfall
Lane County System Improvements	\$ 48	\$ 48	\$ -	No Shortfall
<b>Subtotal</b>	<b>\$ 178</b>	<b>\$ 178</b>	<b>\$ -</b>	
<b>Bike System</b>				
Local Bike/Ped Operations, Maintenance & Preservation	\$ 4	\$ -	\$ 4	Include in New Local Revenue Source(s)
Local Off-Street Bike System Improvements	\$ 15	\$ 15	\$ -	No Shortfall
Local On-street Bike (w/o Road) System Improvements	\$ 4	\$ 4	\$ -	No Shortfall
<b>Subtotal</b>	<b>\$ 23</b>	<b>\$ 19</b>	<b>\$ 4</b>	
<b>Total</b>	<b>\$ 714</b>	<b>\$ 562</b>	<b>\$ 153</b>	
<b>Lane Transit District (LTD)</b>				
LTD Operations, Maintenance & Preservation	\$ 498	\$ 498	\$ -	No Shortfall
LTD System Improvements	\$ 171	\$ 171	\$ -	No Shortfall
<b>Total</b>	<b>\$ 669</b>	<b>\$ 669</b>	<b>\$ -</b>	
<b>Oregon Department of Transportation (ODOT)</b>				
ODOT Operations, Maintenance & Preservation	\$ 251	\$ 168	\$ 83	Accept Lower Metropolitan Area PCRs
ODOT Facility Planning Studies*	\$ 6	\$ 6	\$ -	No Shortfall
ODOT System Improvements	\$ 370	\$ 164	\$ 205	Postpone Projects to Future List or Do Not Build
<b>Total</b>	<b>\$ 626</b>	<b>\$ 337</b>	<b>\$ 289</b>	
<b>GRAND TOTAL</b>	<b>\$ 2,009</b>	<b>\$ 1,568</b>	<b>\$ 441</b>	

All figures are rounded and are shown in 1997 dollars and are for the planning horizon through FY 2021.

\*ODOT Facility Planning Studies are shown for information purposes only.

**TABLE 5**  
**CONSTRAINED TRANSPLAN COSTS & REVENUES**  
(\$ Millions)

Local (Eugene, Lane County, Springfield) Components	Cost	Revenue	Shortfall	Comments on Constraint(s)
<b><u>Operations, Maintenance &amp; Preservation</u></b>				
Eugene Operations, Maintenance & Preservation	\$ 300	\$ 300	\$ -	Implement new locally controlled source of revenue
Springfield Operations, Maintenance & Preservation	\$ 98	\$ 98	\$ -	Apply Combination of Strategies
Lane County Operations, Maintenance & Preservation	\$ 112	\$ 112	\$ -	No Shortfall
<b>Subtotal</b>	<b>\$ 510</b>	<b>\$ 510</b>	<b>\$ -</b>	
<b><u>System Improvements</u></b>				
City Arterial/Collector System Improvements	\$ 130	\$ 130	\$ -	No Shortfall
Lane County System Improvements	\$ 48	\$ 48	\$ -	No Shortfall
<b>Subtotal</b>	<b>\$ 178</b>	<b>\$ 178</b>	<b>\$ -</b>	
<b><u>Bike System</u></b>				
Local Bike/Ped Operations, Maintenance & Preservation	\$ 4	\$ 4	\$ -	Include in New Local Revenue Source(s)
Local Off-Street Bike System Improvements	\$ 15	\$ 15	\$ -	No Shortfall
Local On-street Bike (w/o Road) System Improvements	\$ 4	\$ 4	\$ -	No Shortfall
<b>Subtotal</b>	<b>\$ 23</b>	<b>\$ 23</b>	<b>\$ -</b>	
<b>Total</b>	<b>\$ 712</b>	<b>\$ 712</b>	<b>\$ -</b>	
<b><u>Lane Transit District (LTD)</u></b>				
LTD Operations, Maintenance & Preservation	\$ 498	\$ 498	\$ -	No Shortfall
LTD System Improvements	\$ 171	\$ 171	\$ -	No Shortfall
<b>Total</b>	<b>\$ 669</b>	<b>\$ 669</b>	<b>\$ -</b>	
<b><u>Oregon Department of Transportation (ODOT)</u></b>				
ODOT Operations, Maintenance & Preservation	\$ 168	\$ 168	\$ -	Accept Lower Metropolitan Area PCRs
ODOT Facility Planning Studies*	\$ 6	\$ 6	\$ -	No Shortfall
ODOT System Improvements	\$ 164	\$ 164	\$ -	Postpone Projects to Future List
<b>Total</b>	<b>\$ 337</b>	<b>\$ 337</b>	<b>\$ -</b>	
<b>GRAND TOTAL</b>	<b>\$ 1,718</b>	<b>\$ 1,718</b>	<b>\$ -</b>	

All figures are rounded and are shown in 1997 dollars and are for the planning horizon through FY 2021.

\*ODOT Facility Planning Studies are shown for information purposes only.

The text below provides an expanded explanation of the specific strategies shown on each line item in Table 4.

### Operations, Maintenance & Preservation

#### Eugene

- Increase revenues through a locally controlled source of revenue equitably tied to all users of the transportation system that would provide revenues that could be used to address OM&P needs. Revenues shall be set at a level that ensures that the improved roadway and bike system at least falls no further behind in its condition of repair. As needed to maintain system condition, the Eugene City Council shall adopt at least one revenue source such as:
  1. Assessments
    - a. Broadened assessment practices/local improvement district
    - b. Broadened use of system development charges
  2. Property Taxes
    - a. General obligation bonds backed by a property tax levy
    - b. Local option property tax levy
  3. Excise Taxes
    - a. Business tax on fuel distribution
    - b. Local option motor vehicle fuel tax
    - c. Parking tax
    - d. Carbon-based fuel tax
    - e. Motor vehicle excise tax
    - f. Vehicle registration fees
  4. User/Utility Fees
    - a. Transportation utility fee
    - b. Street improvement fee
    - c. Municipal sticker fee (local vehicle public parking permit)
    - d. Tolls
    - e. Fees to compensate for dedicated use of traffic lanes for transit purposes
    - f. Employer payroll tax

## Springfield

- Implement a locally controlled source of revenue equitably tied to all users of the transportation system that would provide revenues that could be used to address OM&P needs.
- Decrease costs via acceptance of reductions in the PCR indicators by functional class.
- Lower overall operations and maintenance service levels.

## Lane County

- *No revenue shortfall*

## Transit

- *No revenue shortfall*

## ODOT

- Decrease costs via acceptance of reductions in the metropolitan area PCR indicators by functional class.

## System Improvements

### Cities

- *No revenue shortfall*

### Lane County

- *No revenue shortfall*

### Transit

- *No revenue shortfall*

### ODOT

- Decrease costs by postponing or not building projects, moving those projects to a future project list

## Bike System

### Bike/Pedestrian OM&P

- Increase revenues through the inclusion of bike/pedestrian OM&P in a new locally controlled source of revenue

### Local Off-Street Bike

- *No revenue shortfall*

### Local On-Street Bike w/o Road

- *No revenue shortfall*

## ***Application of Strategy Packages and Attainment of a Financially Constrained Plan***

For those line items that show revenue shortfalls in Table 4, application of the strategy packages described above results in elimination of the shortfalls. This action achieves a *financially*

*constrained* plan as required, one that plans for projects within the constraint of available revenues. Specifically:

### Operations, Maintenance & Preservation

#### Eugene

- A new locally controlled source of revenue will be implemented to generate revenue to cover the shortfall over the planning time horizon.

#### Springfield

- Overall maintenance service levels are assumed to decrease by an amount equal to 10 percent of the shortfall, or approximately \$2.8 million.
- A new locally controlled source of revenue will be implemented to generate revenue to cover the remainder of the shortfall over the planning time horizon.

#### ODOT

- The district ODOT office will decrease costs via acceptance of reductions in the metropolitan area PCR indicators by functional class. The current PCR on state facilities in the metropolitan area is 98 percent fair or better. The State plan indicates the state-wide system goal over the planning horizon is a measure of 77 percent fair or better. Reducing the ODOT OM&P costs by the amount of the shortfall will still allow the district to meet the state standard over the planning horizon, although the road condition ratings will be lower than they currently are.

### System Improvements

#### ODOT

- The district ODOT office will decrease costs by postponing or not building projects, moving those projects to a future project list. Pending additional revenues, these projects may be moved to a current project list in the future.

### Bike System

#### Bike/Pedestrian OM&P

- The revenue shortfall in this area will be addressed by the inclusion of bike/pedestrian OM&P in a new locally controlled source of revenue.

The above strategy packages will result in a financially constrained *TransPlan* over the planning horizon through Fiscal year 2021. Transit activities, local system improvements, and most bike and pedestrian projects are not financially constrained and can be funded at the full level projected. OM&P in the city and state systems will be reduced somewhat, but still meet applicable policy standards. The cities will also implement a new locally controlled source of revenue to raise additional OM&P revenues. State system improvement projects will be built on a priority basis as revenues allow, with the remaining unfunded improvement projects placed on a future projects list pending additional revenues.

## Part Three: Air Quality Conformity

This section summarizes the air quality conformity analysis required by federal legislation.

### Requirements

In nonattainment and maintenance areas, transportation plans and programs that are financed wholly or partly with federal funds are required to be in conformance with the transportation provisions of the State Implementation Plan (SIP) —the state-wide planning document that demonstrates how the state will attain the National Ambient Air Quality Standards (NAAQS). Conformity with a SIP means conformity to a SIP's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of the standards. The Lane Council of Governments (LCOG), as the MPO for the Eugene-Springfield area, must make conformity determinations on *TransPlan* and the TIP to ensure they conform to the SIP. The Federal Highway Administration and the Federal Transit Administration must also review *TransPlan* and the TIP and make a conformity determination in order for the projects contained in these documents to be eligible for federal funding or approvals.

The Clean Air Act Amendments of 1990 set the NAAQS for key pollutants, including ozone, (O<sub>3</sub>), carbon monoxide (CO), and particulate matter (PM<sub>10</sub>). Areas that do not meet the NAAQS are designated in varying degrees of nonattainment, from *marginal* to *extreme*. Nonattainment areas must submit air quality implementation plans and must integrate transportation and air quality planning in order to meet the standards. The Eugene-Springfield region is designated as a *maintenance area* for CO and designated as a nonattainment area for PM<sub>10</sub>.

The region has successfully petitioned the Environmental Protection Agency (EPA) that highway and off-highway vehicles are not significant emissions sources of PM<sub>10</sub>, and that transportation is therefore exempt from demonstrating area-wide conformity.

Regional emissions analysis for CO is required for all transportation plans, programs, and projects located within the Central Area Transportation Study (CATS) boundary. The CATS boundary encompasses the greater downtown Eugene area and is bounded by 5<sup>th</sup> Avenue on the north, 19<sup>th</sup> Avenue on the south, Lincoln Street on the west, and Walnut Street on the east. *TransPlan* is considered to conform when the annual tons of CO are below the Eugene-Springfield area motor vehicle emissions budget for CO. The motor vehicle emissions budget was filed with EPA and published in the Federal Register, Vol. 58, No. 232, page 64163, December 6, 1993.

The federal EPA has adopted new standards for ozone and fine particulate and based upon the existing LRAPA monitoring of these pollutants, this area is currently in attainment with these standards. Therefore, *TransPlan* will not need to address these new standards. However, transportation plans, programs, and projects will continue to be subject to the existing carbon monoxide conformity rules in OAR 340-252.



## **Analysis**

*TransPlan* conformity requires a technical analysis of the annual tons of CO generated by the transportation system. Based on the Capital Investment Actions project lists developed for the transportation system, an estimation of vehicle emissions of CO is calculated using the EPA's recommended guidelines. The emissions for the planning year are compared with the emissions budget established in the area's SIP.

The conformity analysis will be prepared based on a 20-year forecast (to 2021) of population, employment, and traffic. The analysis will use the *TransPlan* Financially Constrained Project Lists in development of the future year networks.

The formal conformity determination will be made as part of the MPO (i.e., LCOG Board) adoption process.

## Part Four: Planning and Program Actions

**Planning and Program Actions** represent a range of regionally significant planning, administrative, and support actions that might be used to implement *TransPlan* policies. Local jurisdictions will use their discretion to evaluate and prioritize Planning and Program Action implementation. The Planning and Program Actions are not adopted, meaning they are not binding or limiting to any implementing jurisdiction. Some Planning and Program Actions will lead to additional capital expenditures, others are examples of capital expenditures that might be implemented after further study. For example, a corridor study could lead to system improvements along the corridor. Planning and Program Actions are not subject to the same fiscal constraint requirements as the Capital Investment Actions. However, ongoing funding will be necessary to continue to implement actions such as the region's TDM program. Planning and program actions are presented for the following categories:

1. Land use,
2. Transportation demand management,
3. Transportation system improvements
  - a) System-Wide
  - b) Roadways
  - c) Transit
  - d) Bicycles
  - e) Pedestrian
  - f) Goods Movement
  - g) Other Modes

The Planning and Program Actions listed in this chapter represent a small portion of all transportation planning actions undertaken in the region. Jurisdictions within the region undertake a variety of activities, beyond the Planning and Program Actions, that implement the *TransPlan* policies. Many federal and state requirements that the region must comply with are not included as Planning and Program Actions, as is the case with many ongoing transportation planning programs.

The region's Unified Planning Work Program (UPWP), an annual report that sets priorities for local transportation planning activities, is a key listing of additional actions. The UPWP describes ongoing programs conducted by the region's public agencies, including LCOG (Lane Regional Air Pollution Authority, LTD, ODOT, Lane County, and the cities of Eugene and Springfield. The UPWP includes actions that the region is required to carry out due to federal and state requirements including those related to:

1. Surveillance, data maintenance, and modeling;
2. Long-range planning;
3. Short-range planning;

4. Refinement studies;
5. Programming;
6. Public involvement; and
7. Air quality.

## Land Use Planning and Program Actions

This section provides recommended actions to implement transportation-related land use policies, including recommended approaches for implementing nodal development. The listed implementation actions respond to requirements contained in the state's TPR, as well as the *TransPlan* land use policies. Roadway, transit, and bicycle projects listed in the Capital Investment Actions project lists will help to implement land use policies. Additional Capital Investment Actions may be identified and implemented on a case-by-case basis to support nodal development as deemed appropriate by local jurisdictions.

1. **Nodal Development** (*Reference TPR 660-12-045(4)(g) and (5)(a)*)
  - 1.1. Prior to approving nodal development projects in designated areas, conduct a site analysis to evaluate infrastructure capacity, establish project boundaries, and ensure project compatibility with adjacent land uses.
  - 1.2. Amend zoning and development codes to remove barriers to nodal development in designated areas.
  - 1.3. Develop and apply a plan designation that allows development consistent with nodal development guidelines.
  - 1.4. Prepare specific area plans (or specific development plans) to determine how to achieve the density, mixed-use, and design objectives of nodal development.
  - 1.5. Develop an overlay zoning/development district for designated nodal development areas that includes guidelines and development or performance standards.
  - 1.6. Selectively change plan and zoning designations to allow a mix of uses and housing types at higher average densities in areas designated for nodal development.
  - 1.7. Amend zoning and development codes to add site, landscape, and architectural design objectives, standards, and guidelines for higher density, mixed-use development to ensure compatibility with surrounding uses.
  - 1.8. Require developers to dedicate land, or money in lieu thereof, for public spaces in nodal development areas.
  - 1.9. Apply site plan and design review procedures in designated nodal development areas.
  - 1.10. Provide economic incentives, such as density bonuses and transfers, reduced SDCs, and property tax exemptions, to encourage nodal development.
  - 1.11. Give priority to constructing and improving public facilities in areas designated for nodal development.

- 1.12. Establish a streamlined, coordinated development review process for nodal development.
- 1.13. Support public/private joint ventures and demonstration projects to provide successful local examples of nodal development.
- 1.14. Establish a marketing program that advertises and promotes developments that are consistent with nodal development guidelines.

## **2. Transit-Supportive Land Use**

- 2.1. Designate areas along major transit corridors and near transit transfer stations for a mix of higher intensity commercial uses along with higher residential densities that achieve at least an average density within the medium-density range for residential uses. *(Reference TPR 660-12-045(4)(g))*
- 2.2. Amend zoning and development codes to add a transit-oriented development (TOD) district. *(Reference TPR 660-12-045(5)(a))*
- 2.3. Designate appropriate areas along major transit corridors and near transit transfer stations for TODs. *(Reference TPR 660-12-045(5)(a))*
- 2.4. Amend zoning and development codes to require all major new institutional and commercial development to provide facilities and access for transit, bicycles, and pedestrians. *(Reference TPR 660-12-045(4)(e) and (5)(d))*
- 2.5. Allow existing development to redevelop a portion of existing parking areas for transit-oriented uses, including bus stops and pullouts, bus shelters, Park-and-Ride stations, TODs, bicycle parking, and similar facilities, where appropriate. *(Reference TPR 660-12-045(4)(e) and (5)(d))*

## **3. Transportation Impacts**

- 3.1. Establish a process for coordinated review of proposed land use decisions through intergovernmental agreements among local, regional, and state jurisdictions. *(Reference TPR 660-12-045(2)(d))*
- 3.2. Coordinate and collaborate with local jurisdictions and ODOT on review of proposed regional land use decisions that could significantly impact major regional transportation facilities. *(Reference TPR 660-12-045(2)(d))*
- 3.3. Coordinate and collaborate with ODOT on review of proposed local land use actions that could significantly impact state transportation facilities and systems. *(Reference TPR 660-12-045(2)(d))*
- 3.4. Refer land development proposals to appropriate local, regional, and state transportation agencies for review and comment on compatibility with and impact on transportation facilities, projects, and plans. *(Reference TPR 660-12-045(2)(d))*
- 3.5. Develop and apply conditions to approved developments when necessary to protect the functional capability of regional transportation facilities. *(Reference TPR 660-12-045(2)(e))*
- 3.6. Require traffic impact studies and mitigation measures where appropriate. *(Reference TPR 660-12-045(2)(e))*

- 3.7. Make certain that amendments to *Metro Plan* and land use regulations take into account the impact on regional transportation facilities and do not conflict with capacities and levels of service. (Reference TPR 660-12-045(2)(g))

### ***Nodal Development Implementation Process***

The Nodal Development Areas map included in Appendix A identifies areas in Eugene-Springfield that are considered to have potential for establishment of a nodal development land use pattern. Other potential areas may be identified in the future, and some of the identified areas may be considered unsuitable for nodal development upon further analysis or as a result of future land use changes in the area.

Property owners and developers are encouraged to consider following nodal development guidelines when developing or redeveloping parcels in these identified areas. When property owners and developers express interest in following nodal development guidelines in a designated area, local governments will provide assistance by identifying design/development objectives, guidelines, and standards; specifying any additional site analysis needed to establish project boundaries and related improvements; and generally facilitating project review and evaluation. In addition, local jurisdictions may initiate actions to establish nodal development land use patterns in these identified areas.

Approaches taken to establish nodal development land use patterns may need to be different for redevelopment, infill, and new growth areas. Implementation approaches adopted by each jurisdiction will likely include a combination of several methods and techniques. Actual development of an area consistent with nodal development patterns and the specific type of nodal development center will be based on further site analysis, owner/developer interest, and the support of individual jurisdictions. The process for establishing a nodal development area will include the following elements:

1. Confirm potential for nodal development based on established criteria;
2. Determine most appropriate type of nodal development pattern;
3. Identify needed public improvements;
4. Establish boundaries; and
5. Identify any potential conflicts with adjacent uses.

Establishment of new nodal developments will require an amendment to *Metro Plan*.

### ***Nodal Development Implementation Schedule***

Based on its review and approval of TransPlan's Alternative Performance Measures for compliance with the TPR, LCDC adopted the following recommendations to provide guidance to local agencies in the development and implementation of TransPlan:

1. LCOG should amend TransPlan to include a schedule for implementation of the nodal development strategy. This schedule should incorporate the items listed

below and the requirements for an “integrated land use and transportation plan” over the next three years.

2. Eugene and Springfield need to specify specific areas for nodal development within one year. TransPlan identifies approximately 50 areas as having potential for nodal development. Eugene and Springfield need to move quickly to pick which of the 50 areas to designate as nodes and set general boundaries to guide subsequent detailed planning.
3. Eugene and Springfield need to adopt Metro Plan designations and zoning amendments for the specified nodes within two years after TransPlan adoption. Currently, most of the identified nodes are planned and zoned to allow continued auto-oriented development. This means inappropriate and poorly designed uses that could easily frustrate nodal development can be located in nodes. To be successful, nodes generally require a mix of mutually supportive pedestrian and transit-friendly uses and a good network of streets. If interim development includes inappropriate uses or is poorly laid out, the result could be to make a much larger area and perhaps a whole node unsuitable for nodal development.
4. Eugene, Springfield and Lane County need to review plan amendments and zone changes *outside* nodes to assure that they are consistent with the nodal development strategy. The success of nodal development strategy depends on attracting most of the higher density employment and residential development in nodes. Certain uses, such as neighborhood shopping centers are critical to the success of nodal development. Plan amendments to allow such uses outside of nodes undermine the nodal development strategy and hurt prospects for development in nodes.

The Integrated Land Use Transportation Plan referenced in the first recommendation is a requirement in the TPR (Section 0035(5)(c)) and includes the following elements:

- (A) Changes to land use plan designations, densities, and design standards listed in 0035(2)(a)-(d) as follows:
  - (a) Increasing residential densities and establishing minimum residential densities within one quarter mile of transit lines, major regional employment areas, and major regional retail shopping areas;
  - (b) Increasing allowed densities in new commercial office and retail developments in designated community centers;
  - (c) Designating lands for neighborhood shopping centers within convenient walking and cycling distance of residential areas;
  - (d) Designating land uses to provide a better balance between jobs and housing considering:
- (B) A transportation demand management plan that includes significant new transportation demand management measures;
- (C) A public transit plan that includes a significant expansion in transit service;

- (D) Policies to review and manage major roadway improvements to ensure that their effects are consistent with achieving the adopted strategy for reduced reliance on the automobile, including policies that provide for the following:
  - (i) An assessment of whether improvements would result in development or travel that is inconsistent with what is expected in the plan;
  - (ii) Consideration of alternative measures to meet transportation needs;
  - (iii) Adoption of measures to limit possible unintended effects on travel and land use patterns including access management, limitations on subsequent plan amendments, phasing of improvements. etc.  
(For purposes of this section a “major roadway expansion” includes new arterial roads or streets and highways, the addition of travel lanes, and construction of interchanges to a limited access highway); and
- (E) Plan and ordinance provisions that meet all other applicable requirements of this division.

Much of elements (B), (C), and (D) are addressed by components of TransPlan. Other elements either are or will be addressed in subsequent implementation of the nodal development strategy.

The schedule for implementation of nodal development incorporating LCDC’s recommendations is outlined below. This schedule assumes funding available to carry out the tasks listed.

### **Nodal Development Implementation and Integrated Land Use Transportation Plan Development Schedule**

<b>Task</b>	<b>Agency Responsible</b>	<b>Schedule</b>
1. Specify specific areas for nodal development within one year	Eugene, Springfield	May 2002
2. Adopt Metro Plan designations and zoning amendments for the selected sites within two years after TransPlan adoption	Eugene, Springfield	September 2003
3. Review plan amendments and zone changes <i>outside</i> nodes to assure that they are consistent with the nodal development strategy	Eugene, Springfield, Lane County	As plan amendments and concurrent zone changes are submitted
4. Changes to land use plan designations, densities, and design standards listed in TPR Section 0035(2)(a)-(d). (If needed, in addition to work done through 2. Above)	Eugene, Springfield	September 2004
5. Policies to review and manage major roadway improvements to ensure that their effects are consistent with achieving the adopted strategy for reduced reliance on the automobile	Eugene, Springfield, Lane County	September 2004
6. Plan and ordinance provisions that meet all other applicable requirements of this division	Eugene, Springfield, Lane County	September 2004

## **Transportation Demand Management Planning and Program Actions**

TDM actions encourage the use of transportation modes other than single-occupant vehicles to achieve reductions in VMT and reduce reliance on the automobile.

### ***Overview of Existing TDM Programs***

TDM programs are implemented at various levels by local agencies. Ongoing TDM planning efforts include coordination by local jurisdiction staff subcommittee of the TPC. The committee's purpose includes TDM project development; monitoring the performance of the TDM program; and educating local agency staff on current TDM programs region, state, and nationwide. In addition, LCOG provides technical analysis of the impacts of various TDM actions as part of the planning process.

LTD implements the TDM projects and reports the progress and results of the TDM program to the committee. LTD formalized its TDM program in fall 1994, when it started a new program called Commuter Solutions. Commuter Solutions offers area businesses, organizations, and educational institutions a comprehensive set of transportation programs for their employees and students. TDM strategies incorporated in the Commuter Solutions Program include discounted group bus pass programs, parking management, guaranteed ride home programs, transit vouchers, carpools and vanpools, Park-and-Ride facilities, bicycling, walking, telecommuting, and creative work scheduling. LTD's TDM programs are described below.

### **Transit Incentives**

#### ***Commuter Club Program***

LTD's Commuter Solutions offers a transit voucher program called the Commuter Club. Businesses request transit vouchers from LTD to distribute to their employees who purchase monthly LTD bus passes. The employee pays up to 50 percent of the cost of the bus pass and the employer is invoiced for the remaining amount. With the new federal transportation fringe benefit tax law, costs for the purchase of transit passes or vouchers (up to a maximum of \$60 per employee per month) are a business expense, and the employee benefit is tax-free. LTD's monthly bus passes are only \$26 (prices effective September 1996); therefore, an employer can purchase bus passes for employees and not reach the maximum allowable expenditure under federal law.

#### ***Group Pass Programs***

LTD's Commuter Solutions Program offers employers with at least 15 employees a discounted bus pass program called the Group Pass Program. Group Pass Program participants sign an annual contract with LTD, and photo identification for each employee is required. Transportation education fairs and employee surveys are conducted annually at each work site to



maintain visibility and encourage increased participation in alternative modes programs. The total number of local area employees with group pass benefits is approximately 30,000.

### *Guaranteed Ride Home Program*

LTD's Guaranteed Ride Home Program provides transportation in case of a family emergency or sudden illness for employees who use alternative modes of transportation for their work commute. Research has shown that the desire to have a vehicle at work in case of a family emergency is the main reason workers continue to drive alone. Usually a taxi voucher is supplied to designated staff, and the voucher is signed for the employee needing the taxi ride. The taxi company then completes and signs the voucher, keeping a copy, and bills the employer for the taxi ride. Most employers participating in a Guaranteed Ride Home Program in our area provide four (4) emergency taxi rides per person per year; however, actual usage has been minimal. Instead of using a taxi, some employers either provide a vehicle for the employee or allow a coworker to take the employee to his or her destination. For the employee who is considering riding the bus, carpooling, vanpooling, biking, or walking, the Guaranteed Ride Home Program provides an answer to the question of what if?

### *School Trip Management*

LTD currently sells 900-1,000 passes each month to Eugene 4J middle and high school students.

## **Bicycle Programs**

### *Bicycle Commuting Programs*

Programs and assistance are available to employers on how to facilitate the needs of bicycle commuters as well as how to promote and encourage bicycling as an alternative to the solo auto commute. LTD works closely with the City of Eugene's Bicycle Coordinator and with the City of Springfield's transportation planning staff to encourage safe bicycle access and secure bicycle parking facilities.

### *Bicycles on Buses Program*

LTD added bicycle racks to all LTD buses in June 1996. Bicycle racks on transit buses encourage bicycle use in our community by meeting the needs of bicycle riders. Increased bicycle use reduces the number of VMT in the area, is one of the cleanest and healthiest ways to get around, and is rapidly becoming a way to get to work. LTD currently transports 15,000 bicycles monthly.

### *Bicycle Cages Available*

New bicycle cages are now available at three locations: River Road Station, Thurston Station, and Amazon Station. Each location has a cluster of nine separate bicycle cages. Bicycle riders need to supply their own locks.

## **Parking**

### *Parking Management*

Parking Management and Transportation Management staff from the cities of Eugene and Springfield and LTD work closely on transportation management strategies to encourage the use of alternative modes of transportation in our metropolitan area. LTD works with local agencies to ensure that adequate carpool spaces are available in new and upgraded parking lots and reviews development plans for transit access, bicycle and pedestrian access, and parking needs. The City of Eugene also provides preferential carpool spaces in its parking garages.

### *Park-and-Ride Program*

LTD operates more than 24 Park-and-Ride locations throughout the area. Park-and-Ride lots are conveniently located along major bus routes, and many locations are served by express or direct bus service, limiting the travel time to your destination. Park-and-Ride lots also are popular meeting places for carpools and vanpools.

## **Commuter Solutions Outreach and Marketing**

### *Employer/Employee Outreach*

The primary mission of LTD's Commuter Solutions Program is business outreach, education, and providing alternative transportation services to solo drivers. The benefits, both to the individual and the business/organization, are magnified in the results the community receives from successful alternative transportation programs. Outreach methods include direct mail, business referrals, newsletter and media coverage, leads from local planning staff, public service campaigns, advertising, presentations, and individual telephone contact. As a result of outreach efforts, Commuter Solutions information packets have been mailed to over 400 businesses in the Eugene-Springfield area.

### *Marketing*

Marketing the services provided by LTD's Commuter Solutions Program is critical to the success of the program. Employer/employee participants and potential participants need to be informed of the services provided by Commuter Solutions and of the benefits received by participating; personally, locally, and globally. Marketing efforts include direct mail, telephone contact, news releases, newsletter articles, site visits, paid print advertising, group presentations, referrals, and public service announcements (television, radio, and print). Additionally, internal research, marketing, and incentive programs are conducted at participating work sites.

### *Creative Work Weeks*

Commuter Solutions staff assists and helps educate employers and employees on creative work schedules that can result in reduced peak-hour travel demand. Creative work schedules are an effective congestion management strategy. Elements in the program include staggered work hours, compressed work weeks, and flex-time. Encouraging an employer to consider on-site day

care, food services, and shopping services is also an element in the Commuter Solutions Program.

### *Telecommuting*

Telecommuting is using telephones, computers, and other equipment to work at home, usually one to three days a week. Commuter Solutions offers information and referral services to businesses and individuals inquiring about telecommuting. Business and individual tax credit information also is available.

### **Ride Matching Services**

#### *Carpool Matching Services*

When the Commuter Solutions Program was created at LTD in 1994, funding was made available to install and operate a new carpool matching software program.

In December 1995 and January 1996, LTD conducted carpool registration drives at several employer work sites. LTD currently has over 300 applicants in the carpool database and is working to match carpoolers and to track the number of carpools formed.

#### *Vanpool Matching Services and Support*

Commuter Solutions provides assistance for any group of individuals or any employer wishing to form a vanpool. Vanpool participants are matched by LTD and assistance and guidelines are provided to help get the vanpool operational. Vanpools are cost effective to operate if the daily work commute is more than 20 miles and six or more individuals join the vanpool.

### ***TDM Implementation Process***

Funding for the programs described above is primarily provided through the STIP process and by LTD. Priorities for STIP funding are coordinated by LCOG through the metropolitan planning process required by ISTEA and TEA 21. The TDM committee develops and prioritizes the project. TPC makes a formal recommendation to the Metropolitan Policy Committee (MPC). priorities are forwarded to ODOT's Region 2 Manager for programming consideration. The OTC makes the final determination on which TDM projects are funded by ODOT. Historically, the region has allocated approximately \$100,000 per year to TDM programs. The funding is primarily for operating expenses, though a part is eligible for capital grant expenditures. Successful implementation of TDM requires additional funds above what local jurisdictions have and spend currently.

Consistent with the proposed *TransPlan* TDM policy to expand the existing programs, the Draft fiscal year 1999-2003 STIP that is out for public review doubles the average amount of TDM funding per year to \$200,000. If approved by OTC, projects will include funding for two TDM staff positions, education and awareness campaign, school education program, hardware/staff

purchase, carpool sign program, TDM research, gateway area TDM program, Springfield Station relocation, and transportation information centers.

### ***TDM Planning and Program Actions***

The success of TDM efforts is dependent upon the availability and quality of alternative mode infrastructure. Thus, TDM Planning and Program Actions should be closely coordinated with the transit and bicycle/pedestrian Capital Investment Actions.

#### **1. TDM Programs**

- 1.1. Require employers to designate an Employee Transportation Coordinator and implement programs that encourage employee use of alternative modes in locations where traffic congestion is due in part to traffic generated by businesses with large numbers of employees.
- 1.2. Require state and local government agencies to implement TDM programs for their employees.
- 1.3. Require employers of a certain size to develop TDM programs for employees.
- 1.4. Require that large special events in the community, such as the Lane County Fair, sporting events, and concerts, provide transit shuttle service.
- 1.5. Expand employer bus pass programs in which employers provide free or discounted bus passes as employee benefits.
- 1.6. Evaluate potential impact of telecommunication technology applications to minimize future travel demand on the region's infrastructure. Refine regional transportation modeling and forecasting appropriately.
- 1.7. Evaluate various transportation system pricing strategies, appropriate applications, potential revenue-enhancing capabilities, institutional and legislative changes necessary for implementation, and public support programs. Transportation pricing measures can be applied to highly congested bridges and corridors where warranted by economic feasibility and to partially support financing of future infrastructure and transportation services.
- 1.8. Establish Transportation Management Associations (TMA) in areas with highest congestion. TMAs are voluntary or mandatory organizations of developers and/or employers in a particular subarea or impact zone, working together to solve transportation problems. TMA's would interact with public agencies and LTD to fashion cooperative courses of action. LTD would provide carpool, transit, and other TDM programs available in that area.
- 1.9. Develop program to price high school parking lot use. Parking pricing at high schools can also increase alternative mode use by students.
- 1.10. Implement traffic calming measures on roads to encourage the use of alternative modes.

#### **2. Educational Programs and Materials**

- 2.1. Develop a multimodal *Share the Road* public awareness campaign to foster increased courtesy and respect among all modes. Program elements could include

public service announcements and installation of *Share the Road* signs at key locations.

- 2.2. Reinforce public understanding of the law concerning pedestrian rights-of-way.
- 2.3. Provide bicycle rental information at bus and train stations.
- 2.4. Provide bicycle route and bus schedule information at the Amtrak station, airport, Greyhound Station, and other intermodal facilities.
- 2.5. Implement a public awareness campaign to alert people that they must yield to buses re-entering traffic.
- 2.6. Promote enforcement of traffic laws that prohibit unlicensed and uninsured motorists from driving to increase safety and use of alternative modes.
- 2.7. Promote school trip management through education and monthly pass programs. Typically, ten to 15 of peak period vehicle trips involve children to school. LTD developed a bus pass program for 4J high school students.
- 2.8. Promote car sharing. Car sharing is joint access to a fleet of vehicles located close to neighborhoods and businesses. Members pay for the hours and miles they drive. This provides a strong financial incentive to use alternative modes for most trips while having access to a vehicle when needed. Portland and Seattle have car sharing programs established.

### **3. Incentives**

- 3.1. Collaborate with bicycle shops to sponsor bicycle maintenance clinics, training rides, and other events and to offer discounts on bicycling gear to employees who commute by bicycle.
- 3.2. Provide incentives to employers who implement TDM programs for their employees. (Based on *TransPlan* 1986, Policy AM3, Policy PK5.)
- 3.3. Provide incentives, such as SDC credits or reductions in minimum auto parking requirements, to developers who construct bicycle support facilities such as lockers, changing rooms, shower facilities, and sheltered parking, beyond ordinance requirements.

4. **Parking Management:** For actions related to parking management, see page 94.

# Transportation System Improvements Planning and Program Actions

The TSI Planning and Program Actions are presented in the following categories:

1. System-Wide
2. Roadways
3. Transit
4. Bicycles
5. Pedestrian
6. Goods Movement
7. Other Modes

## ***TSI System-Wide***

This section provides Planning and Program Actions related to the transportation system as a whole.

### **1. Intermodal Linkages**

- 1.1. Evaluate the need for improved intermodal linkages.

### **2. System Efficiency**

- 2.1. Improve system efficiency without major additions in infrastructure through intersection modification, roadway modification, increased preservation efforts, restructuring area-wide transit service, and priority treatment for transit vehicles. (Based on *TransPlan* 1986 Policy TSM1.)

### **3. Right of Way**

- 3.1. Inventory, purchase, and improve private roads, rail rights-of-way, and easements of regional significance for public use and benefit. (Based on Oregon Transportation Plan (OTP) *Action 1B.4.*)
- 3.2. Obtain right-of-way or building setbacks to provide for future capacity in transportation corridors. (*TransPlan* 1986 Policy LU3.)

### **4. Standards**

- 4.1. Establish standards for minimum levels of service and system design for passengers and freight for all modes. (Based on OTP *Action 1C.1.*)

## **5. Environmental**

- 5.1. Regulate truck freight in sensitive environmental areas, such as Springfield's drinking water protection zones. (Springfield staff)
- 5.2. Retrofit existing transportation facilities to reduce environmental or social impacts (e.g., polluting runoff, noise).

## **6. Intelligent Transportation Systems**

- 6.1. Research, test, and implement as appropriate Intelligent Transportation Systems technology, including: arterial traffic signal and freeway-arterial interconnection programs, high-occupancy vehicles and transit enhancements, en-route trip guidance programs, automated support for TDM programs, and traffic incident response systems.

## ***TSI Roadways***

This section provides Planning and Program Actions related to the regional roadway system.

### **1. Access Management**

Access Management techniques can offer significant operational and safety benefits for arterial roadways. Access management has the potential to decrease accidents and to preserve mobility without large system expansions.

- 1.1. Develop access management plans for key transportation facilities.
- 1.2. Implement access management (access control) techniques, for example, driveway and public road spacing, median control, and signal spacing standards, that are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities. (Supported by *TransPlan* 1986 Policy LU1; TPR 660-12-045(2))

### **2. Neighborhood Traffic Calming**

- 2.1. Develop neighborhood traffic-calming plans.
- 2.2. Implement traffic-calming techniques, such as restricted turn movements, traffic diverters, bulb-outs (landscaped or narrowed entrances), traffic circles or roundabouts, woonerfs, narrowed streets, truck restricted areas, and vehicle weight limitations. (Based on *TransPlan* 1986 Policy LU5.)

### **3. Design Considerations for all Modes**

- 3.1. Provide sidewalks on urban streets, including arterials, collectors, and local streets, and bridges. Sidewalk separation from the curb should be provided on arterial streets and major collectors. (*TransPlan* 1986 Policy I8; TPR 660-12-045 (3)(b)(B))
- 3.2. Assign a higher priority to road projects that have a bicycle component.
- 3.3. Limit or eliminate on-street auto parking when necessary for the safe and convenient movement of bicycles.

- 3.4. Provide bicycle safety devices such as bicycle-proof drain grates, rubberized pads at railroad crossings, and appropriate signage in conjunction with reconstruction or new construction of the street system and in other areas as needed. (Based on *TransPlan* 1986 Policy AM4.)
- 3.5. Evaluate the need to improve roadway access for fire/emergency medical services and transit vehicles in low-density areas, such as the Eugene South Hills. (*South Hills Refinement Planning Committee Report*, July 1997.)
- 3.6. Evaluate the potential for construction of roundabouts at intersections.

## ***TSI Transit***

This section provides Planning and Program Actions related to transit service and facilities.

### **1. Transit Service Improvements**

- 1.1. Provide service every ten minutes along major corridors. (*TransPlan* 1986, Policy AM1.)
- 1.2. Implement a shuttle that connects the downtown Eugene area with other major activity centers.
- 1.3. Conduct feasibility studies on expanding transit service operations to nearby communities.
- 1.4. Implement operating procedures and monitor design guidelines to minimize security and safety concerns at transit stops/stations and on vehicles.
- 1.5. Acquire low-floor buses to improve and speed access by riders.
- 1.6. Acquire smaller buses to serve neighborhoods on local streets and connect the neighborhood service with the corridor service at nearby land use nodes.
- 1.7. Establish a prepaid fare system along the BRT corridors to speed rider boarding.

### **2. Transit Facility Improvements**

- 2.1. Construct transit stations in newly developed areas in the Eugene-Springfield area and in nearby communities. (Based on *Metro Plan* 1987 Transportation Policy
- 2.2. Implement a transit signal priority system along major transit corridors. (Based on *TransPlan* 1986 Policy TSM3, AM2.)
- 2.3. Support transit use through provision of bus stops, pullouts and shelters, optimum road geometrics, on-road parking restrictions, and similar facilities, as appropriate. (TPR 660-12-045(4)(a))
- 2.4. Implement transit-priority techniques, such as exclusive bus lanes, restricted turn movements at appropriate intersections for all vehicles except buses, queue-jumpers, and separate access ramps, along major transit corridors. (Based on *TransPlan* 1986 Policy TSM3, AM2.) Give priority to transit/carpools during the peak hour at appropriate ramps to limited access facilities. (*TransPlan* 1986 Policy TSM3, AM2.)
- 2.5. Provide transit facility improvements, such as shelters, benches, lighting, and transit schedule information, at major bus stops.



2.6. Provide transit schedule information at all transit shelters.

### **3. Park-and-Ride Facilities**

- 3.1. Provide multiple Park-and-Ride facilities along major corridors and BRT corridors.
- 3.2. Establish Park-and-Ride facilities in nearby communities for commuters into the metro area. (*TransPlan* 1986, Policy IC2.)
- 3.3. Develop Park-and-Ride facilities that make use of existing public and private parking lots, where use by Park-and-Ride commuters complements existing parking use (e.g., churches or retail establishments with evening or weekend peak demand) (*TransPlan* 1986 Policy AM5.)
- 3.4. Consider establishment of a Park-and-Ride facility at Autzen Stadium with a direct link to the University/Sacred Heart/Riverfront Research Park area.

### **Bus Rapid Transit Implementation Process**

BRT is, in essence, using a bus system to emulate the positive characteristics of a light rail system. BRT can be implemented at a fraction of the cost of light rail, and can be implemented incrementally. In addition, BRT can lay the foundation for a future light rail system. The BRT system travel times are expected to be competitive with single-occupant vehicle travel times.

The BRT concept consists of high-frequency, fast transit service along major transportation corridors, with small bus service in neighborhoods that connects with the BRT corridor service and with nearby activity centers. The following are potential elements of a BRT system:

1. Exclusive bus lanes,
2. A bus guideway system,
3. Traffic signal priority for transit,
4. Low-floor buses for faster boarding,
5. Pre-paid fares for faster boarding,
6. Greater spacing between bus stops,
7. Improved stops and stations (shelters, lighting, information, etc.), and
8. Park-and-Ride lots along BRT corridors.

It should be noted that some of these elements, such as low-floor buses, signal priority, and Park-and-Ride system expansion, while part of a BRT system, would also be part of improvements that could be made to the existing LTD system, even if BRT were not pursued.

Specific determination of which of the BRT elements are used and where they are used will require a significant amount of research and analysis. The research will include consideration of impacts on transit ridership, traffic flow, cost, the environment, and land uses. Also to be investigated are funding sources to pay for the improvements.

The BRT system would be implemented on a corridor-by-corridor basis. The first corridor is expected to be an east/west line between Springfield and Eugene along Main Street, Franklin

Boulevard, and West 11<sup>th</sup>/13<sup>th</sup>/18<sup>th</sup>. This corridor was selected based on an analysis of several factors, including transit ridership, car and bus travel times, population, employment, and coordination with planned nodal development.

The research and analysis process will include community involvement, with an emphasis on encouraging participation by those who work, live, or travel along the pilot corridor. There will also be extensive participation by technical staff from appropriate jurisdictions. The BRT improvements will not be implemented without the approval of both the LTD Board of Directors and the policy board with jurisdiction over the road under consideration.

## ***TSI Bicycles***

This section provides Planning and Program Actions related to the regional bicycle system and support facilities.

### **1. Bicycle System Improvements**

- 1.1. Acquire land at market value, or secure dedications of land or access easements for bikeways in connection with utility rights-of-way, drainage ditches, rivers, rail lines, and other corridors. (Based on *TransPlan* 1986 Policy LU9.)
- 1.2. Retrofit local streets that are designated bicycle routes with bicycle-friendly traffic-calming devices such as traffic circles, curb extensions, and diverters that allow through movements for bicyclists.
- 1.3. Improve safety and convenience of bicycle-pedestrian crossings at major streets.

### **2. Bicycle System Support Facilities**

- 2.1. Improve lighting and signage on off-street, multi-use paths and install adequate lighting and signage at street or bike path intersections or other segments of the bicycle system where significant numbers of bike-bike, bike-pedestrian, or bike-motor vehicle conflicts occur.
- 2.2. Provide bicycle parking facilities at all new multi-family residential developments of four or more units; new retail, office, and institutional developments; public facilities; regional activity centers; public events; and all transit transfer stations and Park-and-Ride lots. (*TransPlan* 1986 Policy PK4; TPR 660-12-045(3)(a))
- 2.3. Modify development regulations for new construction and major renovation projects to mandate the provision of showers and bicycle storage facilities in public buildings with at least 50 employees.
- 2.4. Design and place a series of *you are here* bicycle system maps at major destinations and other strategic locations along the bicycle system.
- 2.5. Place bicycle route signage along designated routes in the metro area.

### **3. Bicycle Safety**

- 3.1. Work with the state Legislature to add a non-motorized portion to the State Motor Vehicle test that includes questions on appropriate behavior of motorized vehicles towards bicyclists and pedestrians.

- 3.2. Work with public school districts to educate students about improving bicycle skills, increasing the observance of traffic laws and enhancing safety. Specific techniques include bicycle safety rodeos and transportation safety assemblies designed to teach safe riding habits and rules of the road to young cyclists.
- 3.3. Establish and publicize a *Close Call* hot line to better identify high hazard locations and to pinpoint violations that lead to accidents.
- 3.4. Work with local higher education institutions (e.g., University of Oregon, Lane Community College) to provide materials and instruction on bicycle safety to incoming students.
- 3.5. Collaborate with LTD to develop a training session, including a video, for LTD drivers. The focus of the training would be on sharing the road with cyclists.
- 3.6. Produce a video to educate bicyclists that commit traffic violations. The focus of the video would be on cyclists' rights and responsibilities.
- 3.7. Advise local school districts on ways to include bicycle education and awareness in driver education classes and testing and advise private driver training businesses on ways to include bicycle education and awareness in courses.
- 3.8. Adopt maintenance procedures for the bikeway system to ensure good pavement condition; visible striping and signage marking the route; and safe lanes unobstructed by leaves, gravel, and debris.

#### **4. Bicycle Planning**

- 4.1. Develop a process for assessing all planned and proposed bicycle projects to better determine their scope, feasibility, and cost.
- 4.2. Develop a bicycle transportation forecasting model.
- 4.3. Establish a comprehensive data collection system to: develop and regularly update a database of bicycle safety and use data; monitor bicycle and pedestrian accidents and injuries with local jurisdictions and health care facilities; conduct annual or seasonal bicycle counts along selected bikeways; and monitor pavement condition of bike lanes and paths.
- 4.4. Conduct a bicycle parking study that inventories existing structures and identifies the types and desired locations of additional structures.

## ***TSI Pedestrian***

This section provides Planning and Program Actions related to the pedestrian system and support facilities. The pedestrian actions will be implemented in large part through *TransPlan* land use actions and local jurisdiction design standards that support pedestrian-oriented design. Pedestrian actions will also be implemented through construction and reconstruction of roadways and small improvement projects.

### **1. Pedestrian System Improvements**

- 1.1. Establish priorities for expenditure on routine, ongoing repair, and reconstruction of existing sidewalks and construction of new sidewalks. (Based on *TransPlan* 1986 Policy I5.)
- 1.2. Develop a plan for prioritized construction of sidewalk segments to fill gaps in the existing system of urban area roadways. (Based on *TransPlan* 1986 Policy I5.) Develop a plan for prioritized retrofitting of all corner sidewalks with curb ramps. (Based on *TransPlan* 1986 Policy AM4.)
- 1.3. Install audio/tactile pedestrian signal systems in areas with large elderly and disabled populations. Provide pedestrian push buttons (with visual wait signal) at intersections. (Based on *TransPlan* 1986 Policy AM4.)
- 1.4. Evaluate the need for new or improved treatments of pedestrian street crossings, such as small curb radii, taking into account the type of pedestrian facility, pedestrian volume, vehicle traffic, crossing distance, sight distance, accident data, and related factors.
- 1.5. Identify pedestrian *use paths*, determine which ones provide needed connectivity, and ensure their continued viability (e.g., north end of Friendly Street through the Lane County Fairgrounds to 13th Avenue and Monroe).
- 1.6. Require that on-site pedestrian systems connect with adjoining properties and the external pedestrian system. (TPR 660-12-045(4)(b)(B))
- 1.7. Require developers to provide adequate internal pedestrian circulation facilities within new subdivisions, multi-family developments, planned developments, shopping centers, and commercial districts. This can be accomplished through clustering buildings, constructing paved accessways and walkways and other techniques. (Reference TPR 660-12-045 (3)(b,e))
- 1.8. Provide paved pedestrian walkways between new commercial and residential developments and neighborhood activity centers (e.g., schools, parks, shopping areas, transit stops, and employment centers) and adjacent residential areas and transit stops and neighborhood activity centers within one-half mile of the development. Specific measures include constructing walkways between cul-de-sacs and adjacent roads, providing walkways between buildings, and providing direct access between adjacent uses. (Based on *TransPlan* 1986 Policy LU6; TPR 660-12-045 (3)(b,c,d,e))
- 1.9. Provide convenient pedestrian access to transit at new retail, office, and institutional buildings at or near major transit stops. This shall be accomplished by providing walkways between building entrances and streets adjoining the site

and providing pedestrian connections from the on-site circulation system to adjoining properties. (TPR 660-12-045(4)(b))

- 1.10. Retrofit existing streets to be safer and friendlier for pedestrians (e.g., curb extensions, center refuge medians).

## **2. Pedestrian System Support Facilities**

- 2.1. Require landscaped areas (planting strips) along sidewalks.
- 2.2. Require street furniture, such as benches.
- 2.3. Require lighting.

### ***TSI Goods Movement***

This section provides Planning and Program Actions related to goods movement. The Goods Movement and Intermodal Facilities Map in Appendix A shows the locations of bus and passenger rail service terminals, public use airports, mainline and branchline railroads and railroad facilities, and major regional pipelines and terminals. There are no port facilities in the Eugene-Springfield metropolitan area.

ODOT has the responsibility for developing the intermodal management system in the Eugene-Springfield area as part of the ISTEA planning guidelines. ODOT is focusing its efforts on the links between various modes of freight transportation. Examples of intermodal links are roadways between freight intermodal facilities and the National Highway System facilities. The metropolitan planning process should continue to support ODOT's planning and implementation actions.

## **1. Goods Movement Planning**

- 1.1. Establish a freight task force (or freight planning committee) with members drawn from the freight-transport industry, local businesses, and other interested parties. Members should include senior public and private sector officials with decision-making authority.
- 1.2. Conduct a regional freight study to develop a thorough understanding of regional goods movement issues, needed data, travel patterns, and existing and future needs. The logistics requirements of major regional companies should be analyzed to identify the types of transportation on which they are most dependent, and to assess both deficiencies and opportunities. Freight mobility performance measures that are attentive to daily system reliability and the logistics needs of manufacturers and businesses should be developed.
- 1.3. Develop a database on freight movement and enhance the region's freight-travel modeling capability.
- 1.4. Study the feasibility of establishing a port authority to coordinate rail/truck intermodal goods movement.
- 1.5. Support actions that encourage goods movement by rail.
- 1.6. Encourage public and private partnerships to improve freight mobility.

## **2. Goods Movement System Improvements**

- 2.1. Correct existing safety deficiencies on the freight network related to: roadway geometry and traffic controls; at-grade railroad crossings; truck traffic in neighborhoods; congestion on interchanges and hill climbs; and hazardous materials movement.
- 2.2. Identify priority freight projects. Review CIPs, including TIP, to ensure that the priority projects are included. Coordinate the scheduling of projects in the TIP and various capital budgets with related private projects.

### ***TSI Other Modes***

This section provides Planning and Program Actions related to other modes, including air, rail, and inter-city bus service.

#### **1. Airport**

- 1.1. Develop plans to ensure that future air transportation capacity needs are met.

#### **2. Rail System Improvements**

- 2.1. Purchase the Amtrak station site in downtown Eugene to preserve as the future high speed rail terminal.
- 2.2. Plan for future high-speed rail train servicing facilities.

#### **3. Inter-City Bus Service**

- 3.1. Support private sector efforts to improve inter-city bus terminals and service.

## Part Five: Parking Management Plan

This plan discusses Capital Investment Actions and presents Planning and Program Actions related to parking management that meet the parking requirements of the TPR, while maintaining a parking supply that supports the economic health of the community. Parking management needs to be looked at regionally, while providing jurisdictional flexibility.

Parking management strategies are an important part of an integrated set of implementation actions that support nodal development, system improvements, and demand management. A vast supply of free and subsidized parking can encourage automobile use over transit use. A limited, rather than abundant supply of parking can encourage use of non-auto modes, especially transit. There is also a direct relationship between the price of parking and the use of public transit.

Parking management strategies address both the supply and demand for vehicle parking. They contribute to balancing travel demand with the region among the various modes of transportation available. Parking management strategies are effective in increasing the use of alternative modes, especially when combined with other TDM strategies. Supportive TDM programs include carpool/vanpool programs, preferential parking and reserved spaces for carpooling, and parking pricing.

### TPR Requirements for Parking Space Reduction

The TPR requires a parking plan that achieves a 10 percent reduction in the number of parking spaces per capita in the metropolitan area over the 20-year planning period. For the Eugene-Springfield region, the TPR reduction goal is .514. If the level of parking density (spaces per developed acre) remains constant and land development and population forecasts are accurate, then the level of parking spaces per capita will be reduced by more than the 10 percent reduction required by the TPR.

**Estimated Parking Supply 1995 to 2015**

	1995		2015		2015 TPR Goal	
--	------	--	------	--	---------------	--

<b>Zone/Plan Designation</b>	<b>Spaces</b>	<b>Capita</b>	<b>Spaces</b>	<b>Capita</b>	<b>Spaces</b>	<b>Capita</b>
<b>Commercial</b>	51,259	.229	57,865	.194	61,618	.207
<b>Industrial</b>	27,622	.124	30,200	.101	33,205	.111
<b>Institutional</b>	48,692	.218	49,067	.165	58,534	.196
<b>Total</b>	<b>127,573</b>	<b>.571</b>	<b>137,132</b>	<b>.460</b>	<b>153,357</b>	<b>.514</b>

### Capital Investment Actions

Capital Investment Actions that support non-auto modes have an indirect impact on parking needs by lowering the demand for spaces in higher density areas. For example, Park-and-Ride facilities can contribute to lowering the demand for parking in downtown areas. Transit Capital Investment Actions call for the establishment of Park-and-Ride facilities throughout the Eugene-Springfield area.

## Planning and Program Actions

*TransPlan* policy supports increased use of motor vehicle parking management strategies in selected areas throughout the Eugene-Springfield metropolitan area.

### ***TDM Policy #2: Parking Management***

Increase the use of motor vehicle parking management strategies in selected areas throughout the Eugene-Springfield metropolitan area.

The City of Eugene established policy that made specific recommendations regarding parking reduction with the Eugene city limits through the adoption of the CATS and the Transportation rule Implementation Project (TRIP). CATS recommended a range of parking policies and TRIP refined and implemented several of these strategies.

#### **1. Supply Strategies**

- 1.1. Establish maximum allotments for parking. (TPR 660-12-045(5)(c))
- 1.2. Increase the use of Park-and-Ride lots to reduce parking demand in the city centers and other intensely developed areas.
- 1.3. Allow parking exemptions.
- 1.4. Lower or eliminate minimum parking requirements. (*TransPlan* 1986 Policy PK3; TPR 660-12-045(5)(c))
- 1.5. Encourage construction of parking structures rather than surface parking.
- 1.6. Expand the number of carpool/vanpool parking spaces in City-owned lots and provide financial incentives to use those spaces.

#### **2. Demand Strategies**

- 2.1. Provide incentives, such as employer payroll tax reductions and automobile parking requirement reductions, to employers who implement preferential parking for carpools and vanpools in new developments with designated employee parking areas.
- 2.2. Shift free parking areas to paid parking where appropriate.
- 2.3. Encourage employers to charge fair market prices for employee parking. (*TransPlan* 1986 Policy PK6.)
- 2.4. Provide preferential parking for carpools and vanpools in new developments with designated employee parking areas. (TPR 660-12-045(4)(d))
- 2.5. Manage overflow parking impacts in residential areas through residential parking permit programs. (Based on *TransPlan* 1986 Policy PK7.)
- 2.6. Encourage adherence to parking regulations by expanding enforcement programs and increasing parking fines. (*TransPlan* 1986 Policy PK9.)
- 2.7. Establish shorter time limits on parking in high demand areas, such as on-street parking near employment centers. (*TransPlan* 1986 Policy PK8.)



# ***TransPlan* Chapter 4: Plan Performance and Implementation Monitoring**

## **Table of Contents**

Introduction.....	1
Part One: Context for Assessment of Plan Performance .....	2
Part Two: Projected Plan Performance.....	4
Traffic Congestion Measures.....	6
Vehicle Miles Traveled and Trip Length Measures .....	7
Mode Choice Measures .....	8
Environmental Measures .....	10
Land Use Measures.....	11
Transportation System Measures.....	11
Summary Assessment .....	14
Part Three: TPR Alternative Performance Measures .....	16
Background on LCDC Approval .....	16
Development of <i>TransPlan</i> 's Alternative Performance Measures.....	17
Summary Assessment of <i>TransPlan</i> 's TPR Compliance .....	18
Part Four: Plan Implementation Monitoring.....	25
Plan Monitoring Process.....	25
Part Five: <i>TransPlan</i> Update Cycle.....	26

## **Introduction**

This chapter describes how *TransPlan* is projected to perform and sets forth a monitoring program to assess how the plan performs over time. The monitoring program ties plan goals, objectives, and policies presented in Chapter Two to the implementation of actions presented in Chapter Three. The program also aids in tracking the plan's performance in meeting federal and state requirements.

Findings that result from analysis of these performance measures will allow for informed decisions to be made as to how best implement the plan. For example, priorities or emphasis for implementation actions may be adjusted, policies may be amended, and additional policies or implementation actions may be recommended due to performance measure outcomes. Findings may also influence budgeting and the type and phasing of capital projects included in the region's Transportation Improvement Program (TIP).

The remainder of this chapter provides a context for the performance assessment, a presentation of the performance of the plan, and an overview of the proposed program for monitoring the impacts of plan implementation. This includes a presentation of the TPR alternative performance measures approved by LCDC. .

# Part One: Context for Assessment of Plan Performance

Regional transportation planning has been carried out in the Eugene-Springfield area since the mid 1960s beginning with the Eugene-Springfield Area Transportation Study (ESATS) in 1967. T-2000 in 1978 and *TransPlan* in 1986 followed ESATS. Between the time ESATS was completed and the current update of *TransPlan*, there has been an evolution in what is expected from a region's transportation system and commensurately with the decision making for and content of the region's transportation plan. This evolution has included the following shifts:

**From:** Emphasis on methods and data in support of programming transportation system improvements.

**To:** Improved information on a wide-ranging set of impacts for a wide variety of capital, operational, pricing, lifestyle, and land-use strategies.

**From:** A focus on the efficiency of highway networks and corresponding levels of service (speed and travel time).

**To:** Multimodal systems operation and broad performance measurement.

**From:** A focus on how to get from point A to point B.

**To:** A broader context of transportation's role in a community and in the global, national, state, and local economic market.

**From:** Acceptance of land use patterns as a given and not part of the solutions set.

**To:** Use of land use strategies in connection with corresponding transportation policies as a major strategy.

**From:** A focus on transportation system user benefits and costs.

**To:** Broader concern for the equitable distribution of benefits and costs within the community.

These changes have led to consideration of a more complex set of relationships, which makes it important to consider a wide range of performance measures. The monitoring program provides for assessment of multiple performance measures to address the comprehensive, sometimes conflicting goals, objectives, and policies and to facilitate a broad discussion of issues among diverse users.

Performance measures are the primary tools for quantitatively assessing the impacts and achievements of plan implementation and are key criteria by which progress towards the plan goals can be assessed. The performance measures provide a framework within which data that are generated and collected can be presented in a meaningful way.

The performance measures are results-oriented, meaning they are focused on assessing the outcomes or effectiveness of transportation investments and other implementation actions. Results from the ongoing plan performance and implementation monitoring program will be compiled and presented to decision makers as the plan is implemented.

When making comparisons between plan costs and the plan performance presented in this chapter, care should be taken to consider only the costs beyond those associated with the operation and maintenance of the existing transportation system. The increase in costs for added roadway capacity, improved transit service, and improvements to the bicycle and pedestrian systems is a relatively small proportion of the total plan cost. The overall cost for the Financially Constrained 20-Year Plan presented in Chapter 3 is \$1.714 billion. Of this total, 69 percent is associated with the operation and maintenance of the existing transportation system. This leaves 31 percent or approximately \$528 million associated with system improvements.

## Part Two: Projected Plan Performance

The combination of land use, transportation demand management (TDM), and transportation system improvement (TSI) programs and capital investments included in *TransPlan* is the result of a comprehensive evaluation of alternative scenarios. This technical analysis provided a process to determine the relative significance of alternative scenarios and the desirability of one scenario over another.

The main focus of reviewing the performance of the plan is to assess how the proposed investments and actions are either:

- 1) Improving existing conditions, or
- 2) Avoiding undesirable conditions that would be present without the planned investments and actions.

Table 6 shows data for existing conditions and projections for two future scenarios:

- **Existing Conditions 1995**, shows system performance as of 1995.
- The first future scenario, **2015 Trends**, shows system performance for 1995 conditions extended into the year 2015. This scenario shows projections of what is expected to happen by 2015 under *business as usual* trends.
- The second future scenario, **2015 Financially Constrained *TransPlan***, shows projected draft *TransPlan* performance for the year 2015 under conditions of financial constraint. Like the second scenario, it assumes implementation of land use and TDM strategies. Transit, bicycle, and roadway capital actions are limited to financial resources expected to be available to the region as discussed in Chapter 3. Capital actions identified as Future in Chapter 3 are not included in this scenario.

For each future scenario presented in Table 6, the amount for each performance measure is listed along with the percentage change in that performance measure from 1995 conditions. In the descriptions of performance measures that follow, except where explicitly noted, comparisons are drawn between 1995 Existing Conditions and the 2015 Financially Constrained *TransPlan*. Changes to performance measures resulting from the West Eugene Parkway-related amendment to *TransPlan* are presented in this chapter in legislative format.

In general, implementation of the 2015 Financially Constrained *TransPlan* is projected to serve the region's future travel needs for people and goods, while turning the transportation system and the service it provides in a more desirable direction than existing trends. The proposed plan reflects a set of tradeoffs among the communities' goals and objectives. A comprehensive set of transportation system performance measures provides the framework for a meaningful comparison of the scenarios.

**Table 6 - Summary of Key Performance Measures <sup>(1)</sup>**

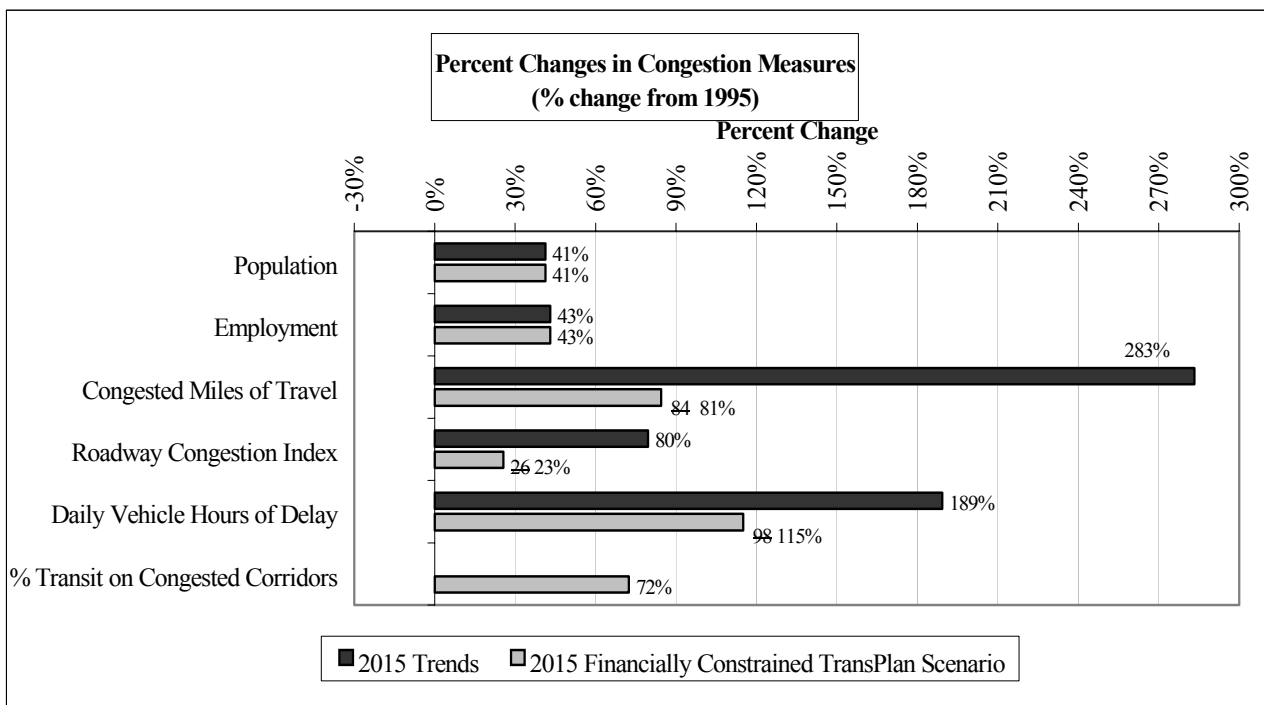
Category	Key	Description	1995 Existing Conditions	2015 Trends		2015 Financially Constrained TransPlan Scenario <sup>(2)</sup>	
				Amount	% Change from 1995	Amount	% Change from 1995
<b>Demographics</b>		Population (TransPlan Study Area)	209,800	296,500	41.3%	296,500	41.3%
		Employment (TransPlan Study Area)	106,900	153,000	43.1%	153,000	43.1%
<b>Congestion</b>	PM 1	Congested Miles of travel (percent of total VMT)	2.8%	10.6%	283.3%	5.0%	80.8%
	PM 2	Roadway Congestion Index	0.78	1.40	79.5%	96%	23.1%
	PM 3	Network Vehicle Hours of Delay (Daily)	9,818	28,407	189.3%	18,924	92.7%
	PM 4	<b>% Transit Mode Share on Congested Corridors <sup>(3)</sup></b>	5.8%			10.0%	72.4%
<b>Vehicle Miles Traveled and Trip Length</b>	PM 5a	Internal VMT (no commercial vehicles)	2,305,779	3,508,913	52%	3,232,977	40%
	PM 5b	Internal VMT/Capita	10.99	11.83	8%	10.90	-1%
	PM 6	Average Trip Length (miles)	3.7	3.9	6%	3.6	-1.7%
	PM 7	% Person Trips Under 1 Mile	14.5%	13.2%	-9%	15.9%	9.6%
<b>Mode Shares - All Trips</b>	PM 8a	Walk	8.93%	7.92%	-11%	9.52%	6.6%
	PM 8b	Bike	3.68%	3.32%	-10%	3.64%	-1.1%
	PM 8c	Transit	1.83%	1.95%	7%	2.73%	49.2%
	PM 8d	Shared Ride (2 or more)	42.04%	44.30%	5%	44.53%	5.9%
	PM 8e	Drive Alone	43.52%	42.52%	-2%	39.57%	-9.1%
	PM 8f	<b>% Non-Auto Trips</b>	14.43%	13.18%	-9%	17.00%	17.8%
	PM 8g	Person Trips per Auto Trip	1.59	1.61	2%	1.7	7.2%
<b>Environmental</b>	PM 9	Average Fuel Efficiency (VMT/Gal.)	19.7	19.1	-3%	19.2	-2.5%
	PM 10	CO Emissions (Weekday Tons)	124.4	125.3	1%	111.1	-10.7%
<b>Land Use</b>	PM 11	<b><i>Acres of zoned nodal development</i></b>				2,000	
	PM 12	<b><i>% of dwelling units built in nodes</i></b>				23.30%	
	PM 13	<b><i>% of New "Total" Employment in Nodes</i></b>				45%	
<b>System Characteristics</b>	PM 14	% of Roadway Miles with Sidewalks	58%	68%	18%	70%	20.9%
	PM 15	Ratio of Bikeway to Arterial and Collector Miles (PM24)	44%	46%	5%	81%	85.1%
	PM 16	% of Roadways in Fair or Better Condition	85%	80%	-6%	80%	-5.9%
	PM 17	% of Households Within 1/4 Mile of a Transit Stop	92%	92%	0%	92%	0.0%
	PM 18	Transit Service Hours per Capita	1.29	1.69	31%	1.99	54.3%
	PM 19	% Households with Access to 10-minute Transit Service	23%	23%	0%	88%	281.8%
	PM 20	% Employment with Access to 10-minute Transit Service	52%	52%	0%	91%	75.0%
	PM 21	Bikeway Miles	126.6	135.9	7%	257.8	103.6%
	PM 22	<b><i>Priority Bikeway Miles</i></b>				75.3	
	PM 23	Arterial and Collector Miles	325.6	331.8	2%	355.8	9.3%
PM 24	Arterial and Collector Miles (excluding fwys)	290.5	296.7	2%	319.6	10.0%	

(1) Note - these scenarios factor in the 10 percent vehicle trip rate reduction allowed in the Transportation Planning Rule amendments for mixed-use pedestrian friendly areas. This reduction has been applied to nodal development areas identified in the Draft *TransPlan*.

(2) Note - Measures in **bold italics** are the TPR alternative performance measures approved by LCDC.

The data presented in this chapter stem from extensive computer modeling analyses of different combinations of land use, TDM, and TSI programs and capital investments. The analysis draws on recent surveys of transportation patterns and behavior in the Eugene-Springfield region. Readers should interpret the data as indicating the magnitude and general direction of change, and should not attach great significance to the apparent precision of the figures.

## Traffic Congestion Measures



### ***PM 1: Congested Miles of Travel***

This measure represents congested miles of travel as a percentage of total vehicle miles traveled. High levels of congested miles of travel can indicate that the system is not operating efficiently. The evaluation of future plan alternatives shows that, regardless of the strategies employed, congestion will increase significantly over existing conditions. One objective of the planning effort is to minimize the increase in congested miles of travel. Under the Financially Constrained *TransPlan*, congested miles of travel is 5.0 percent of total miles traveled, an increase of 81 percent over 1995 conditions.

### ***PM 2: Roadway Congestion Index***

The Roadway Congestion Index (RCI) is a measure of congestion on the region’s freeways and arterials. This measure is based on a method developed to estimate relative regional congestion for urbanized areas in the U.S. It is a measure of the regional system of freeways and arterials that does not account for specific bottlenecks. An index value greater than 1 indicates generally congested conditions area-wide. A value less than one means that, while congestion may occur during certain periods on specific facilities, on average, the freeways and arterials are relatively

uncongested. The objective is to avoid area-wide congestion represented by values of 1 or greater. A lower index value relative to the trend indicates that the plan will have a positive impact on managing congestion. The Financially Constrained *TransPlan* RCI of .96 is less than 1 and thus indicates that while congestion might occur at peak traffic times, on average, congestion would remain relatively low on freeways and arterials. In comparison, the region's 2015 RCI is below Portland's 1994 value of 1.11.

### ***PM 3: Daily Vehicle Hours of Delay***

Daily vehicle hours of delay provides another measure of the level of congestion. Very similar to congested miles of travel, it is expected to increase significantly in the future. However, as expressed earlier, while congestion will increase over existing conditions, the investments proposed in the Financially Constrained *TransPlan* minimize the increase in vehicle hours of delay over what would be experienced under trend conditions. While Daily Vehicle Hours of Delay is expected to increase by 115 percent over 1995 conditions, this is approximately two thirds of what is expected under trend conditions.

### ***PM 4: % Transit Mode share on Congested Corridors***

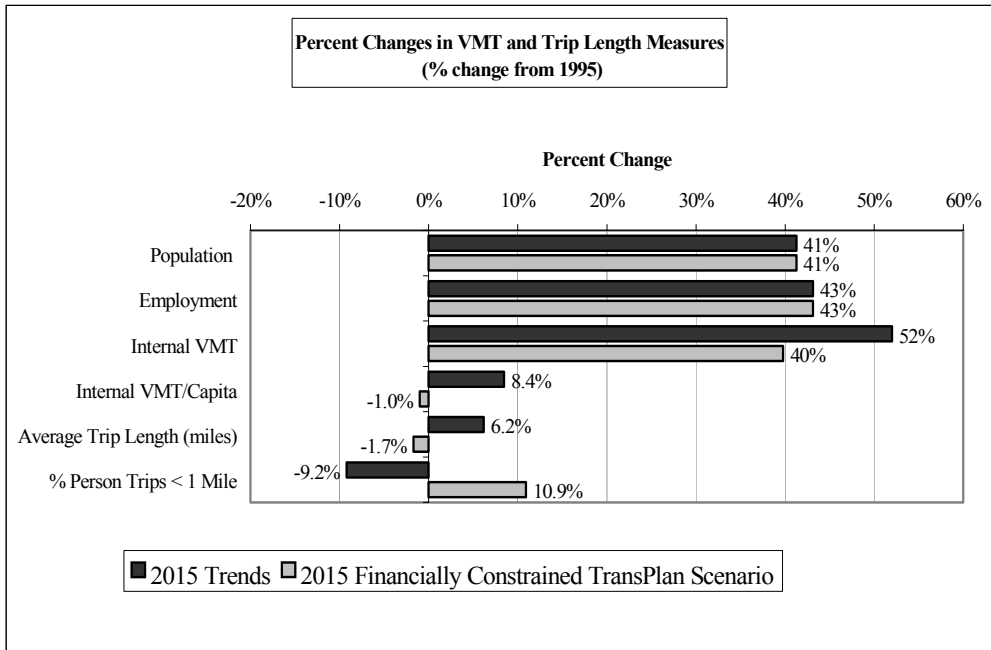
The % Transit Mode Share on Congested corridors is the ratio of transit person trips to total person trips on congested facilities during PM peak hour. An increase in this measure is a direct indication of reduced reliance on the automobile. Increasing transit mode share on the congested corridors by 72 percent over the 1995 base is a significant shift in reliance on the automobile.

## **Vehicle Miles Traveled and Trip Length Measures**

### ***PM 5: Daily Vehicle Miles of Travel Per Capita***

PM 5a is a measure of the total daily VMT by trips made within the metropolitan area by area residents (internal trips) and PM 5b presents VMT divided by the region's population. Under the Financially Constrained *TransPlan*, VMT per capita decreases slightly showing no increase over the 20-year period. The Transportation Planning Rule (TPR) seeks no increase in VMT per capita over ten years and a 5 percent reduction over 20 years.

Reasons for not meeting this VMT reduction target include a high proportion of growth in the outlying parts of the urban growth boundary (UGB), and few and small contiguous areas of higher density. Growth in outlying parts of the UGB has the effect of increasing average trip lengths in these areas. Limited areas of higher density limits the effectiveness of transit and alternative mode strategies. The region's model estimates that trips to and from these growth areas are 21 percent longer than the regional average trip length.



Amendments to the TPR require areas not meeting the VMT reduction target to seek approval from the Land Conservation and Development Commission (LCDC) for the use of alternative measures in demonstrating reduced reliance on the automobile. This process is discussed further in Part Three: TPR Alternate Performance Measures of this chapter..

### ***PM 6 and PM7: Average Trip Length and Percentage of Person Trips Under 1 Mile***

Shorter trip distance is one factor that contributes to making the use of alternative modes more attractive. As presented in Table 6, trip length reflects the average distance for trips taken within the region by all modes and does not include trips made through the region. The objective is to reduce average trip length. Percentage of person trips under 1 mile provides a measure of the plan’s specific impact on short trips. The objective here is to increase the percentage of trips under 1 mile.

Average trip length is projected to decrease slightly from 3.7 miles to 3.6 miles under the Financially Constrained *TransPlan*. As discussed under PM 5, an explanation for why this change is not greater lies in the fact that a large amount of growth over the planning period that is taking place on the edges of existing development in the region.

The percentage of trips under 1 mile is expected to increase to 16.1 percent. This reflects the impact of the plan’s proposed nodal development strategy.

## **Mode Choice Measures**

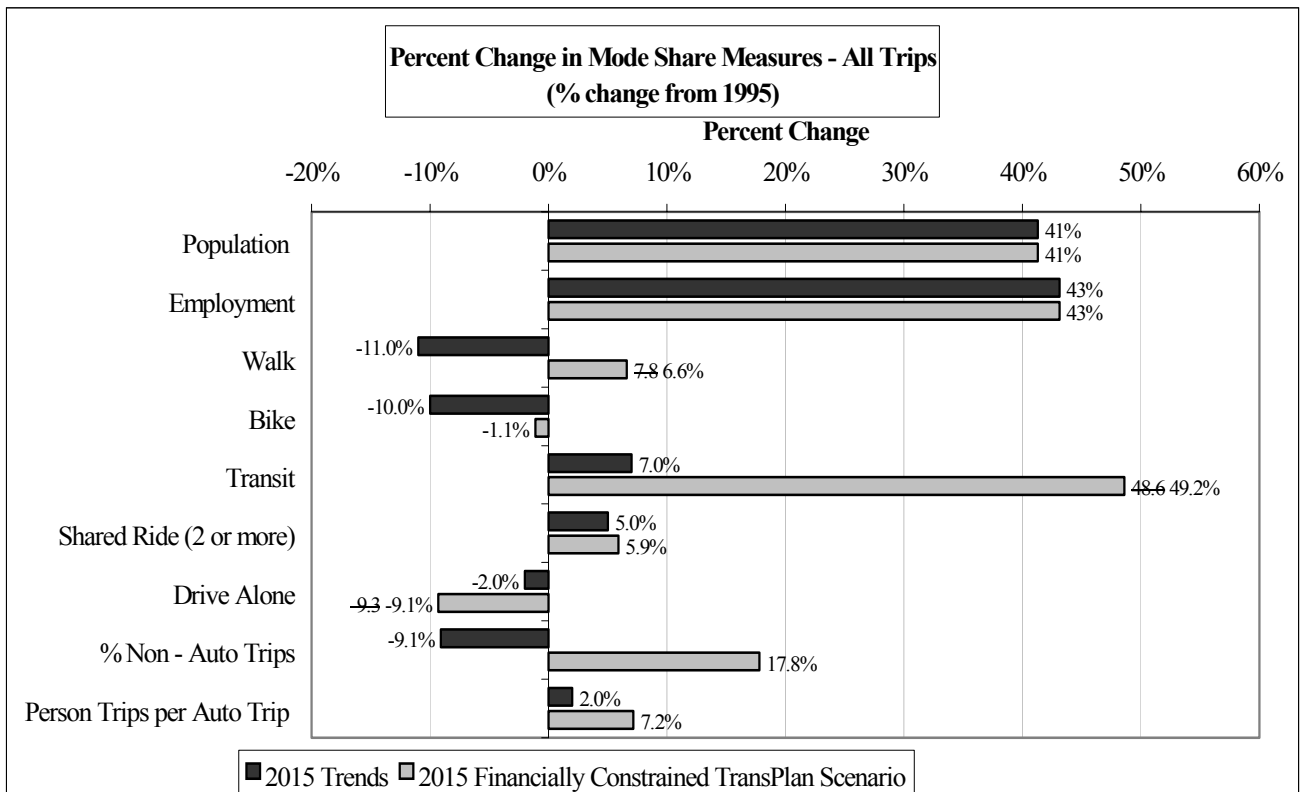
### ***PM8: Mode Shares (All Trips)***

This measure shows the relative share of the region’s trips taken by each mode of transportation. The objective is to reduce drive-alone auto trips while increasing the number of trips taken by



other modes. Measures PM 8a through PM 8e indicate the relative percentage share for walk, bike, bus, shared-ride auto, and drive-alone auto trips. The most significant changes are the 49.2 percent increase in transit mode share and the 9.1 percent decline in drive-alone trips. The decline in bike mode share is due in large part to the significant improvements in transit provided by Bus Rapid Transit. As shown in PM 8f, there is an overall increase in the use of alternative modes under the Financially Constrained *TransPlan*.

PM 8f is the sum of all non-auto (walk, bike, and bus) trips. Model analysis indicates that non-auto mode shares increase by about 18 percent under the Financially Constrained *TransPlan*. PM 8g provides an aggregate estimate of the region's reliance on the auto. Total person trips taken in the region are divided by the total number of auto trips. The objective is to increase the overall number of person trips taken relative to total auto trips. Model results suggest that person trips per auto trip will increase by approximately 7 percent under the Financially Constrained *TransPlan*.



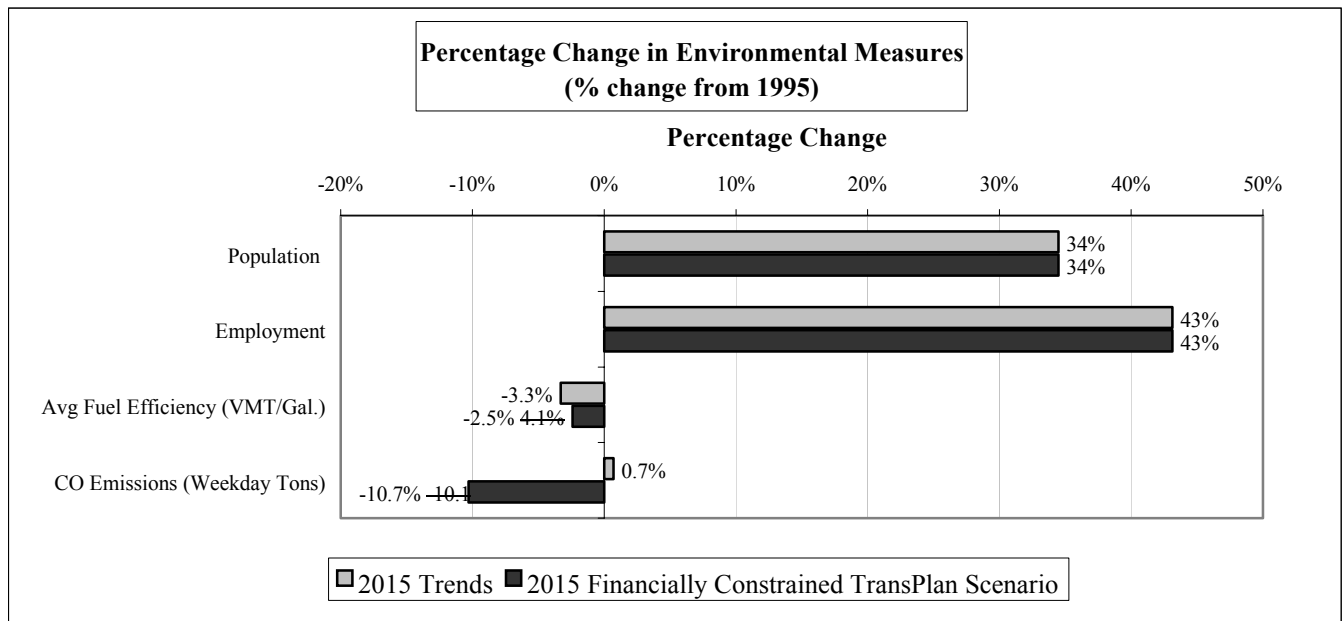
## Environmental Measures

### *PM 9: Average Fuel Economy (Miles per Gallon)*

This measure provides an estimate of fuel use under the three scenarios. The objective is to increase fuel economy. Fuel economy is directly related to levels of congestion. Higher levels of congestion result in more fuel use and lower fuel economy. The Financially Constrained *TransPlan*'s lower fuel economy is a result of increased congestion over existing conditions. However, the fuel economy achieved by the Financially Constrained *TransPlan* is higher than that achieved under the trend condition.

### *PM 10: Vehicle Emissions (Annual Tons of Carbon Monoxide)*

Vehicle emissions is a measure of plan air quality impact. The Eugene-Springfield area is required to meet National Ambient Air Quality Standards for various pollutants. Of primary concern to the transportation system are the standards for carbon monoxide. The region is currently in compliance with the standards for this pollutant. The region will continue to be in compliance with the carbon monoxide standard in the future. Vehicle fleet turnover and stricter emission controls on newer vehicles are factors that contribute to lower emissions in future scenarios.



## Land Use Measures

The three plan measures related to nodal development – *Acres of Zoned Nodal Development*, *Percent of Dwelling Units Built in Nodes* and *Percent of New “Total” Employment in Nodes* – are all indicators of plan implementation. They are measures directly intended “to result in a significant increase in the share of trips made by alternative modes. The *Percent of Dwelling Units Built in Nodes* and *Percent of New “Total” Employment in Nodes* measures are both market response measures in that they reflect the development sector response to the public policies proposed for nodal development. They reflect the benefits coming from changes in development anticipated for nodal development. These measures are defined below.

### ***PM 11: Acres of Zoned Nodal Development***

The number of acres zoned for nodal development in the Eugene-Springfield Metropolitan Area

### ***PM 12: % of Dwelling Units Built in Nodes***

The percentage of new dwelling units in Eugene-Springfield permitted for construction within an area designated for nodal development

### ***PM 13: % of New Total Employment in Nodes***

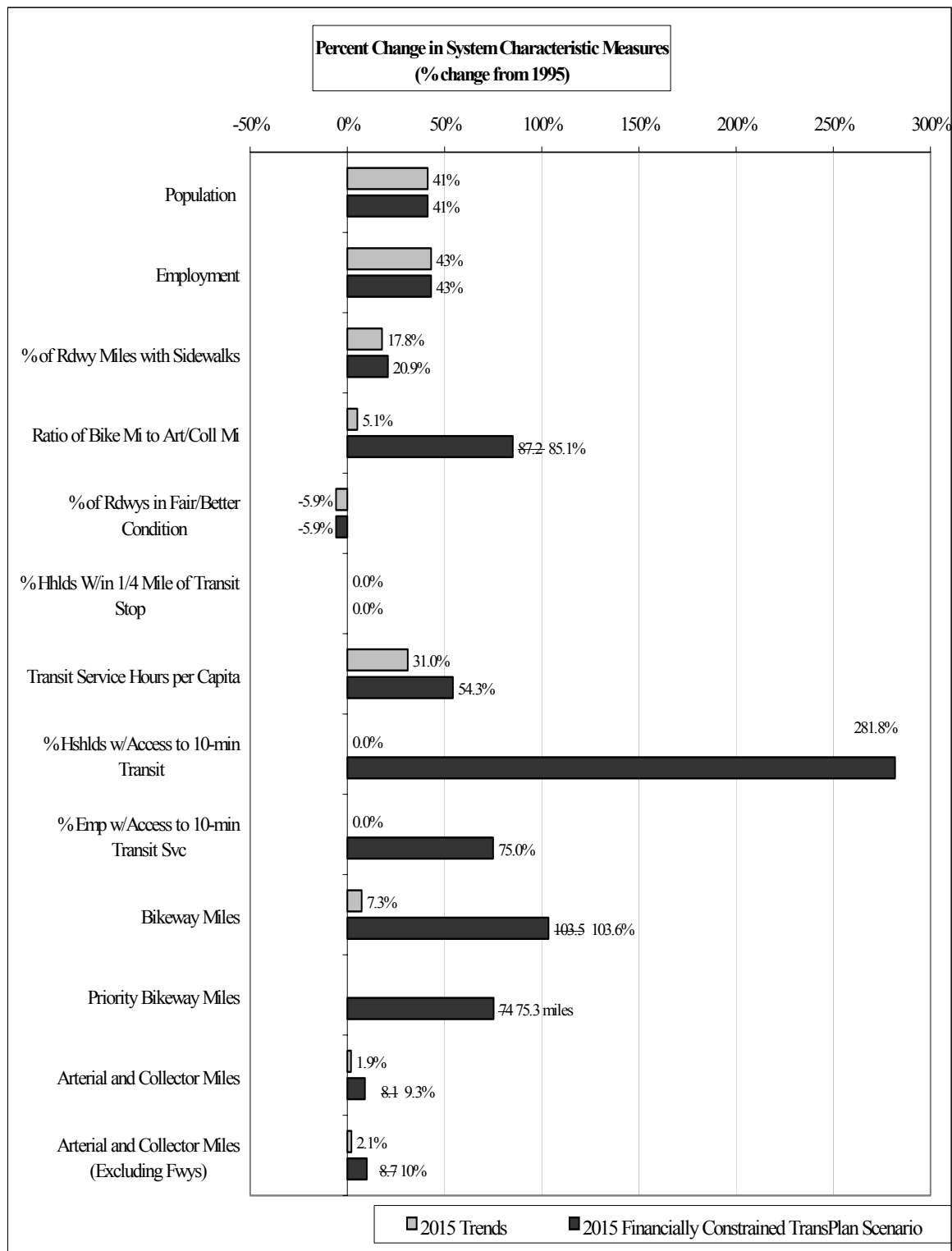
The percentage of new employment in Eugene-Springfield located within an area designated for nodal development. Calculation of the measure excludes employment that would not likely locate in a nodal area (e.g., heavy industrial).

## Transportation System Measures

The following set of measures provides information on changes to various parts of the region’s transportation system. Where the previous sets of performance measures reflected changes in and impacts of the region’s demand for transportation, the measure described below reflects changes in and impacts of the region’s supply of transportation. Investments in non-auto systems increase the convenience and practicality of their use, thereby improving travel choices. Investments in the roadway system to address safety and congestion issues allow all modes to function more effectively and efficiently.

### ***PM 14: Percentage of Roadway Miles with Sidewalks***

This measure indicates the percentage of the total roadway system (local collector and arterial, excluding freeways) on which there are sidewalks on at least one side. This percentage has been increasing over several years as new development occurs and roads are built to current city codes. Projects that raise existing collectors and arterials to urban standards (adding curb, gutter, sidewalks, and bikeways) are another factor explaining the increases.



***PM 15: Ratio of Bikeway miles to Arterial and Collector Miles***

This measure indicates the percentage of total bikeway miles (both on- and off-street) compared to total arterial and collector roadways (excluding freeways). Because of the proposed addition of several miles of off-street bikeways, additional new and reconstructed roadway miles with

bikeways, and the proposed striping of several miles of existing roadway, this ratio is expected to increase substantially from 44 percent today to 81 percent in 2015.

***PM 16: Percentage of Roadways in Fair or Better Condition***

This measure provides a summary of the overall pavement condition of the region's roadways. Currently, 85 percent of the region's roadways are in fair or better condition. The objective is to maintain at least 80 percent of the roadways in fair or better condition. The ability to maintain that standard is dependent upon financial priorities identified during the draft *TransPlan* review. Maintaining the roadway condition at this level helps minimize the cost of future system.

***PM 17: Percentage of Households Within ¼ Mile of a Transit Stop***

This measure provides an indication of the geographic coverage of Lane Transit District's service. Currently, 92 percent of the households in the region are within ¼ mile of a transit stop. The objective is to maintain that level of coverage. Given the transit system's maturity and extensive geographic coverage, focus is not on achieving 100 percent coverage but on improving the convenience of existing service.

***PM 18: Transit Service Hours per Capita***

This measure shows the amount of annual transit service (in hours) per person in the region. The objective in the plan is to increase transit service hours, ideally in terms of the frequency of service (e.g., change from service every 15 minutes to service every ten minutes). The increases in service hours projected for the Trend condition are necessary to offset delays caused by increased traffic congestion. They assume no increases in service frequency, but are necessary to maintain existing frequency of service. The 2015 Financially Constrained *TransPlan* increases (to 1.99 service hours per capita) reflect substantial increases in service frequency with the implementation of Bus Rapid Transit (BRT).

***PM 19: Percentage of Households with Access to Ten-Minute Transit Service***

Frequency of service is one of the key factors in making public transportation more attractive. The frequency of service proposed in the extensive neighborhood feeder system and interconnected trunk lines of the BRT system is one of the primary reasons explaining the 48.6 percent increase in transit mode shares. PM19 presents the percentage of households in the region with access to ten-minute transit service frequencies. The proposed BRT system would increase the percentage of households with access to ten-minute service frequencies from 23 percent under existing conditions to 88 percent in 2015 under the Financially Constrained *TransPlan*. This represents an increase of approximately 282 percent.

***PM 20: Percentage of Employment with Access to Ten-Minute Transit Service***

Similar to PM19, PM20 presents the percentage of employment in the region with access to ten-minute service frequency. The proposed BRT system would increase the percentage of

employment with access to ten-minute service frequencies from 52 percent under existing conditions to 91 percent in 2015 under the Financially Constrained *TransPlan*. This represents an increase of approximately 75 percent.

### ***PM 21: Bikeway Miles***

This measure indicates the additional bikeway miles and percentage change in bikeway miles anticipated over the planning period. As described under PM15, additions to the off-street system and striping of existing roadways result in a significant increase in bikeway miles (103 percent over existing conditions).

### ***PM 22: Arterial and Collector Miles***

This measure indicates the additional roadway centerline miles and percentage change in roadway centerline miles anticipated over the planning period. Total miles of collector and arterials are proposed to increase by 9.3 percent from 325.6 to 355.8.

### ***PM 23: Arterial and Collector Miles (excluding freeways)***

This measure is similar to PM19a except that it excludes freeway miles. Total miles of collector and arterials, excluding freeways, are proposed to increase by about 10 percent from 290.5 to 319.6.

## **Summary Assessment**

This section provides an overall assessment of the plan's performance. A more detailed assessment of the plan's compliance with Transportation Planning Rule (TPR) requirements is provided in Part Three: TPR Alternative Performance Measures.

Over the past 25 years, growth in the region has been fairly compact. This is in part due to the limitations put on partitioning of parcels outside of city limits and allowing development to occur only with the extension of public facilities. Thus, infill and redevelopment have been taking place over time and, as a result, a large portion of future development will occur within the UGB on the edges of existing development. As demonstrated above, growth on the edges leads to longer overall trip lengths, which in turn, makes non-auto modes less attractive. This makes it difficult to achieve VMT reductions within the planning period.

However, the Financially Constrained *TransPlan* has been shown to perform much better than trend conditions in minimizing increases in congested miles of travel, and minimizing area-wide congestion. An overall outcome stemming from implementation of nodal development is that the region is able to increase the percentage of person trips less than one mile in length to approximately 16 percent.

Investments in non-auto modes (particularly BRT) and implementation of nodal development strategies improve choices available for travel and contribute to the Financially Constrained *TransPlan*'s ability to increase levels of non-auto mode share of all trips over existing conditions (increase from 14.1% to 17%). Increases in the percentage of households and employment with access to ten-minute transit service are the basis for the 48.6 percent increase in transit mode

share. The Financially Constrained *TransPlan* also calls for increases in the percentage of roadway miles with sidewalks and a significant increase in the number of bikeway miles. As noted above, investments in alternative modes increase their convenience and practicality. This improves the transportation choices available to the region's residents.

Financial constraint limits the resources available to make improvements to the roadway system. This is the primary explanation for the increase in the region's congestion levels. Limited expansion of the roadway system is also a contributing factor to the reductions in the drive alone mode share. The increases in the region's congestion levels have the general effect of making the auto mode less attractive. However, congestion, in and of itself, is not a major determinant in shifts to alternative modes. Congestion increases in much higher proportion than the shifts to alternative modes. The primary factor contributing to the increase in use of alternative modes are the investments made directly in each alternative mode.

Continued development of the region's TDM program provides incentives that also make use of alternative modes more attractive. TDM also provides a low-cost means of helping to address transportation demand in specific areas surrounding congested facilities.

Overall, the performance measures presented in this chapter clearly point to a reduced reliance on the automobile. A longer timeframe than the planning period is required to accomplish the full benefits of several aspects of the proposed plan. Nodal development may take 30 to 40 years before its full benefits are realized in the region. BRT will be implemented incrementally over the planning period and will require additional time for its full benefits to be realized. It is important to pursue the balanced set of strategies in the proposed plan to set the stage for future benefits.

# Part Three: TPR Alternative Performance Measures

## Background on LCDC Approval

Oregon's Transportation Planning Rule (TPR) requires that TransPlan comply with certain performance measures (either a Vehicle Miles Traveled per capita target or alternative measures). As described in Table 6 (Chapter 4, Page 5), VMT per capita is expected to remain virtually unchanged through 2015 (1-percent decrease). As a result, the region will not meet the reduction in VMT per capita called for in the TPR. The TPR provides that, should a plan not meet the VMT reduction targets, alternative measures can be developed to demonstrate compliance with the TPR. The alternative measures must demonstrate that:

- (A) Achieving the alternative standard will result in a reduction in reliance on automobiles;
- (B) Achieving the alternative standard will accomplish a significant increase in the availability or convenience of alternative modes of transportation;
- (C) Achieving the alternative standard is likely to result in a significant increase in the share of trips made by alternative modes, including walking, bicycling, ridesharing and transit;
- (D) VMT per capita is unlikely to increase by more than 5 percent; and,
- (E) The alternative standard is measurable and reasonably related to achieving the goal of reduced reliance on the automobile as described in OAR 660-012-0000.

Alternative Performance Measures were developed to address this requirement. While these measures have been incorporated into Table 6, a more detailed description of the measures and related interim benchmarks are presented in Table 7. These measures were approved by LCDC on May 4th, 2001. The Commission Order approving the measures is attached as **Appendix G**.

Based on its review, the Commission approved the proposed alternative standard with the following conditions:

1. Assure that the methodology for calculating non-auto mode split is adjusted to account for improved counting of non-auto trips to assure that results in achieving this standard are not the result of improved counting of non-auto trips.
2. Develop a definition of qualifying dwelling units and employment in nodes that includes only those dwelling units and employment that are clearly consistent with implementing the nodal development strategy.
3. Revise the "interim benchmarks" for dwellings and employment in nodes to be clearly consistent with achieving the 20-year performance standard.



The first condition will be addressed by adjusting both base year and future year model output. This will assure that changes in future year forecasts are not the result of improvements in the model.

The second condition will be addressed by using TPR definition of “mixed-use, pedestrian-friendly” development contained in TPR Section 0060 (7)(a)-(b) dealing with Plan and Land Use Regulation Amendments. This Section of the TPR identifies the following characteristics of “mixed-use, pedestrian-friendly” development:

- (A) A concentration of a variety of land uses in a well-defined area, including the following:
  - (i) medium to high density residential development (12 or more units per acre);
  - (ii) offices or office buildings;
  - (iii) retail stores and services;
  - (iv) restaurants; and,
  - (v) public open space or private open space which is available for public use, such as a park or plaza.
- (B) Generally include civic or cultural uses;
- (C) A core commercial area where multi-story buildings are permitted;
- (D) Buildings and building entrances oriented to streets;
- (E) Street connections and crossings that make the center safe and conveniently accessible from adjacent areas;
- (F) A network of streets and, where appropriate, accessways and major driveways that make it attractive and highly convenient for people to walk between uses within the center or neighborhood, including streets and major driveways within the center with wide sidewalks and other features, including pedestrian-oriented street crossings, street trees, pedestrian-scale lighting and on-street parking;
- (G) One or more transit stops (in urban areas with fixed route transit service); and
- (H) Limit or do not allow low-intensity or land extensive uses, such as most industrial uses, automobile sales and services, and drive-through services.

The third condition involved restating the interim benchmarks for dwelling units and employment in nodes such that the percentages are of an interim total rather than the ultimate total. Table 7 provides these performance measures calculated in both ways.

## **Development of TransPlan’s Alternative Performance Measures**

Multiple objectives are set forth in the TPR for demonstrating compliance - reduced reliance on the auto, increase in the availability or convenience of alternative modes, and increase in the use of alternative modes. The strongest way to measure compliance with the TPR is through a framework of multiple performance measures. As well, the complex interrelationship among the plan’s set of goals, objectives, policies, and suggested implementation measures calls for consideration of multiple performance measures in assessing plan progress.

An underlying purpose of the TPR is to promote the development of plans that lead to a reduced reliance on the automobile. The alternative performance measures are meant to provide an objective indicator of the improvement in the transportation system achieved through

implementation of the plan. In particular, it is important to measure the implementation of and response to those elements of the plan that most directly contribute to reduced reliance on the automobile. For example, Bus Rapid Transit and Nodal Development are key elements of TransPlan that contribute to reduced reliance on the automobile.

The framework of alternative measures should therefore include performance measures that capture both the supply (plan implementation) and demand (travel or market response) for transportation in the Eugene-Springfield area. In addition, where possible, these measures should provide a direct indication of the region's progress in implementing key elements in the plan that contribute to reduced reliance on the auto. This approach ties the plan's implementation effort to expected results. Table 7 provides an indication for each measure as to its type (plan implementation or travel/market response).

## **Summary Assessment of TransPlan's TPR Compliance**

### **A. Demonstrating the "Significance" of Alternative Measures**

One of the main challenges present in development of alternative measures is demonstrating why and how a particular target represents a "significant" change in reliance on the auto. The term "significant" is inherently subjective. What is "significant" from one perspective can well be "insignificant" from another perspective.

A key measure of whether the expected reduction in reliance on the automobile is 'significant' is whether local governments have committed to every reasonable effort to accomplish reduced reliance. In the development of TransPlan over the past 9 years, the region has gone to considerable effort to identify a wide range of strategies to reduce reliance on the auto. The more ambitious strategies ranged from TDM pricing measures (increased parking fees (tripling) in central Eugene; reduced transit fare; bridge tolls; \$1.00 per gallon gas tax;) to restrictions on development to force concentration of development (some land in the UGB would be restricted from developing by 2015), and 100 percent exclusive bus lanes.

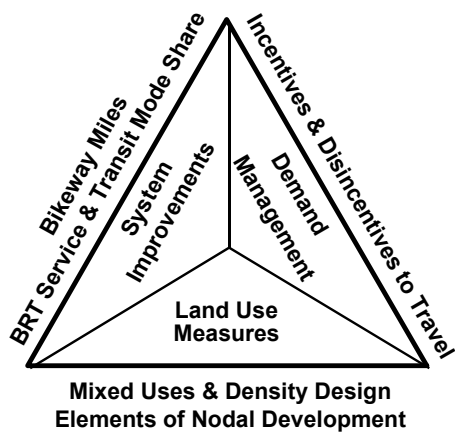
These alternative plan concepts were presented to the region's planning commissions and elected officials in the form of a Decision Package. The feedback from these groups indicated that there was considerable interest in an overall approach that integrated land use, system improvements, and demand management. They focused on support of nodal development, bus rapid transit and expanded voluntary TDM as key strategies to be pursued in TransPlan. However, there was no policy-level support for TDM pricing measures, constraining development, or mandatory TDM techniques.

The proposed alternative performance measures assessed below rely heavily on the implementation of the key strategies identified in the process described above.

### **B. Elements of TransPlan Directly Contributing to Reduced Reliance on the Auto:**

Achieving a reduction in automobile reliance is dependent on the success of implementing the following key elements of TransPlan and the degree to which each option is developed. As mentioned above, four key elements identified by TransPlan policy officials include Nodal

Development, Bus Rapid Transit, Transportation Demand Management and Priority Bikeway Miles.



The diagram to the left depicts the synergistic relationship that exists between each of the proposed elements and their combined ability to reduce automobile dependency. The effect of combining TSI, TDM and Land Use policies, programs and services is relative to the degree in which auto dependency is diminished.

As residential, retail and commercial densities increase in specific areas, urban design features can be implemented that give more emphasis to the mobility of pedestrian, bicycle and transit modes. The addition of parking constraints within a limited area further affects the use of the automobile. Connecting nodal developments with a fixed, frequent transit service provides competition for similar trips that would have originally been made using an automobile. Through TDM, providing comprehensive information about alternative transportation programs, services and facilities to residents and employees in nodal developments insures that options other than driving can begin to be considered.

The more robust the implementation of TSI, TDM and Land Use, the greater the effect the combination will have reducing automobile reliance.

The integrated nature of the plan elements means that changes in any of the individual elements will affect the outcome of the alternative performance measures. For example, while nodal development and BRT have a primary affect on reducing Percent Non-Auto Trips, changes in TDM, bikeway and other plan strategies also contribute to the reduction.

*Nodal Development* – By design, nodal development reduces the need for individual trips made by automobile within the node. The proximity of residential clusters to retail and commercial services, coupled with at-grade pedestrian and bicycle facilities, fosters movement by alternative modes within the node. A range of designs exist that can directly affect the amount of drive alone traffic that occurs within and through the node. As the integration of designs for pedestrian, bicycle and transit are enhanced, the accessibility and movement of the automobile through this environment starts to diminish.

*Bus Rapid Transit (BRT)* – BRT provides a frequent and highly reliable source of transportation that can compete with the automobile. The more frequent and reliable transit service becomes, the easier it is for patrons to board and use the service. People have a tendency to avoid using transit because it cannot compete with the ease and convenience their own automobile affords them. As proposed in TransPlan the service will provide a quick and easy transportation solution for a whole variety of trip purposes and will compete well with the travel time of the automobile along major corridors. As such, the service will start to attract more riders. As the time between buses using the BRT corridor diminishes, so to does the need for using a schedule. Connecting

viable nodes along the BRT corridor creates the ability for more riders to use the service to get to and from the destinations they want to go to.

*Transportation Demand Management (TDM)* – TDM is the essential management of information that can be provided to prospective users of alternative means of transportation to diminish their reliance on driving to and from destinations via their own automobiles. An essential component in establishing TDM programs is marketing. The more attractive TDM options become, the easier they are to use; however, in order to be used the public needs to be made aware that various programs, facilities and services exist. Nodal development coupled with TDM marketing and services effectively reduces the reliance of single occupancy automobile trips.

*Priority Bikeway Miles* – Priority bikeway projects consist of those projects that are along an essential core route on which the overall system depends, fill in a critical gap in the existing bicycle system, or overcome a barrier where no other nearby existing or programmed bikeway alternatives exist (e.g., river, major street, highway), or significantly improve bicycle users safety in a given corridor. As such, they are the key additions to the bikeway system that support nodal development and an increase in the use of this alternative mode.

### C. Analysis

The assessment of compliance below focuses on the five objectives listed in the TPR.

TPR Objective A: *Achieving the alternative standard will result in a reduction in reliance on automobiles.*

The plan's performance on this objective can be measured using the **Travel Response** performance measures. In general, the travel response described below relies on implementation of the nodal development, Bus Rapid Transit, and expanded TDM strategies set forth in TransPlan, and the Priority Bikeway Miles.

Reduced reliance on the auto is indicated in the forecasted 18 percent increase in the *Percent Non-Auto Trips*, a measure of the relative proportion of trips occurring by alternative modes. This increase is particularly significant when compared to the 2015 Trend Scenario which indicates a 9 percent decrease without implementation of the plan. An increase in the percent of the region's trips taken by alternative modes is a direct measure of reduced reliance on the auto. An increase indicates that improvements made to alternative modes have been successful in attracting more people to use those alternatives for some trips. Percent Non-Auto Trips is a good measure of the cumulative effect of the implementation of all of TransPlan's key strategies.

The *Percent Transit Mode Share on Congested Corridors* measure also directly indicates reduced reliance on the automobile. The target of increasing transit mode share on the congested corridors by 72 percent over the 1995 base is a significant shift in reliance on the automobile. The fact that this target specifically calls for reduced reliance on the automobile in the areas of greatest congestion is also of significance. By doing so, the measure targets reduced reliance on the automobile in those areas where the impact will be the greatest.

TPR Objective B:     *Achieving the alternative standard will accomplish a significant increase in the availability or convenience of alternative modes of transportation.*

The plan's performance on this objective can be measured using Plan Implementation and other measures. These measures reflect the implementation effort made by the adopting agencies in nodal development, TDM, and alternative modes improvements (e.g., additional Priority Bikeway miles, etc.).

The additional 74 miles of *Priority Bikeway Miles* proposed in TransPlan represent a 58 percent increase in total bikeway miles. This is part of TransPlan's overall planned increase in total bikeway miles of 104 percent. An increase in bikeway miles is a direct measure of the availability and convenience of alternative modes and is expected to result in an increase in the use of those modes. One of the key aspects of the bike system planning effort was to identify and address existing gaps and barriers in the existing system. These gaps and barriers are addressed in the bicycle project list, and are identified as the "Priority Bikeways," thus increasing the convenience and availability of the bike mode. This measure provides a direct indication of the public policy effort in TransPlan toward reducing reliance on the auto and increasing the availability of alternative modes.

Both the *Percent Transit Mode Share on Congested Corridors* and the *Percent Non-Auto Trips* also are indicators of increased availability and convenience of alternative modes. Achieving the 72 percent increase in transit mode share along the congested corridors is a direct result of more frequent service. The proposed BRT system would provide 10-minute service along its corridors. The 10-minute threshold is a critical one for transit service because it is considered to be the level of service at which riders do not need schedules. This increase in convenience is one of the main reasons for the 72 percent increase in mode share on congested corridors. This is part of an overall increase in transit mode share of 49 percent.

TPR Objective C:     *Achieving the alternative standard is likely to result in a significant increase in the share of trips made by alternative modes, including walking, bicycling, ridesharing and transit.*

Virtually all of the plan's six performance measures are relevant to this objective. As already described above, the 72 percent increase in *Transit Mode Share on Congested Corridors* and the 18 percent increase in *Non-Auto Trips* both show a significant increase in the share of trips made by alternative modes as a result of implementation actions in the plan.

Also already described above is the direct relationship between the *Priority Bikeway Miles* measure and the likely result of additional bike trips.

The three plan measures related to nodal development – *Acres of Zoned Nodal Development*, *Percent of Dwelling Units Built in Nodes* and *Percent of New "Total" Employment in Nodes* – are all indicators of plan implementation measures directly intended "to result in a significant increase in the share of trips made by alternative modes". The *Percent of Dwelling Units Built in Nodes* and *Percent of New "Total" Employment in Nodes* measures are both market response measures in that they reflect the development sector response to the public policies proposed for

nodal development. They reflect the benefits coming from changes in development anticipated for nodal development. The very definition of nodal development included in TransPlan states that:

Nodal development is a mixed-use *pedestrian-friendly* land use pattern that seeks to increase concentrations of population and employment in well-defined areas *with good transit service*, a mix of diverse and compatible land uses, and *public and private improvements designed to be pedestrian and transit oriented*. (emphasis added)

The TransPlan definition of nodes and nodal development continues, stating in part that:

Fundamental characteristics of Nodal Development require:

- Design elements that support pedestrian environments and encourage transit use, walking and bicycling;
- A transit stop which is within walking distance (generally 1/4 mile) of anywhere in the node;
- Mixed uses so that services are available within walking distance

These requirements are directly related to increasing the use of alternative modes. The nodal development measures and their integration into the overall TransPlan strategy are the basis for the increase in *Percent Non-Auto Trips* and the *Percent Transit Mode Share on Congested Corridors*. Nodal development in TransPlan also plays a significant role in allowing the region's VMT per capita to remain virtually unchanged over the planning horizon.

TPR Objective D: *VMT per capita is unlikely to increase by more than 5 percent.*

As indicated in Table 6, VMT per capita in the Eugene-Springfield area is expected to remain virtually unchanged through 2015 (1 percent decrease).

TPR Objective E: *The alternative standard is measurable and reasonably related to achieving the goal of reduced reliance on the automobile as described in OAR 660-012-0000.*

The measurability of each of the performance measures weighed heavily in the MPC subcommittee's selection process. The relationship of these measures to reduced reliance on the automobile is referenced in the assessment of other objectives. The table below summarizes the measurability of each of the proposed measures. While each measure relies on different data, the region currently maintains all of the underlying information required to track these measures.

Measure	<i>Update Process/Reliability</i>
<b>Percent Non-Auto Trips</b>	The mode choice model relies on current data on the existing transportation system (traffic counts, transit ridership, roadway speeds, etc.) and travel behavior data (typically through travel surveys). Estimates are as reliable as the model being used. The model is most reliable when based on an updated travel survey and current system data.
<b>Percent Transit Mode Share on Congested</b>	LTD updates its ridership data frequently. Traffic volumes are updated regularly. Very reliable.

<b>Corridors</b>	
<b>Priority Bikeway Miles</b>	This measure would be updated based on the sum of the distances of bikeway projects determined to be “priority.” Very reliable.
<b>Acres of zoned nodal development</b>	This measure would be updated as each city takes action to zone parcels for nodal development. Very reliable.
<b>Percent of dwelling units built in nodes</b>	This measure would be updated periodically through analysis of building permits. Very reliable.
<b>Percent of New “Total” Employment in Nodes</b>	Requires taking employment files and “cleaning” them to establish correct address (geographic location). GIS is then used to estimate new employment in nodes. This is typically done on a regular basis (every two years). Fairly reliable. Need to define “excluded” employment to equate to standard employment codes used in the state employment files.

D. Summary:

The process employed for the development of TransPlan considered a wide range of strategies to reduce reliance on the automobile. The strategies identified by the adopting officials for inclusion in TransPlan represent a significant commitment to the objectives of the TPR.

The process used in developing the measures represents an extensive effort on the part of local policy officials to identify the measures that would document the region’s implementation of key strategies in TransPlan which achieve state and local goals.

**Table 7**  
**Alternative TPR Performance Measures for the Eugene-Springfield MPO**  
**(approved by LCDC on May 4<sup>th</sup>, 2001)**

Measure	Key Plan Element	Plan Implementation or Travel/Market Response	1995	2005	2010	2015
% Non-Auto Trips	Alternative Modes	Travel Response	14.43% Walk=8.93% Bike=3.68% Bus=1.83%	15%	16%	17% Walk=10% Bike=4% Bus=3%
% Transit Mode Share on Congested Corridors	Transit	Travel Response	5.8% 5.9% in 1999	6.8%	8.0%	10.0%
Priority Bikeway Miles	Bicycle	Plan Implementation		15 miles	45 miles	74 miles
Acres of zoned nodal development	Nodal Development	Plan Implementation		1,000 acres	1,500 acres	2,000 acres zoned for nodal development
% of dwelling units built in nodes	Nodal Development	Market Response		2.5% 5.6%	14.5% 20.4%	23.3% of new Dus
% of New "Total" Employment in Nodes	Nodal Development	Market Response		10% 18.1%	25% 32.6	45%
Internal VMT			2,305,779			3,224,037
VMT/Capita			11			10.9

Note that % of dwelling units and employment in nodes are expressed **first** as a percentage of the planning horizon total and **second** as an interim year total (e.g., the % of dwelling units in nodes in 2005 is 2.5% of the 2015 total new dwelling units and 5.6% of the new dwelling units built by 2005).



## **Part Four: Plan Implementation Monitoring**

Plan implementation monitoring is an ongoing program of data collection and analyses for providing feedback to policy makers and the public on the progress of the policies and actions in *TransPlan*. Monitoring allows local jurisdictions to assess how well the plan is performing and complying with federal and state requirements and to determine when steps need to be taken to keep the plan on course. Monitoring examines the effectiveness of policy implementation efforts through the collection and analysis of data for various performance measures. Lane Council of Governments will coordinate the plan implementation monitoring program in cooperation with implementing agencies.

### **Plan Monitoring Process**

The ongoing plan monitoring process includes the following components:

1. Review of trends, assumptions, and new opportunities;
2. Inventory of actions taken to implement *TransPlan* policies;
3. Analysis of transportation system performance using the performance measures presented above; and
4. Recommended actions and corrective steps, including potential plan amendments during the next update cycle.

The second component of the plan monitoring process involves tracking how local jurisdictions and regional and state agencies are applying *TransPlan* policies. Implementation of Planning and Program Actions and Capital Investment Actions from Chapter 3 will be summarized.

The third component of the plan monitoring process involves collecting data to assess transportation system performance in relation to the performance measures. This analysis will provide a comprehensive view of how the transportation system as a whole is performing. The analysis will indicate when additional actions need to be taken. The need may become apparent to identify different performance measures.

The fourth component of the plan monitoring process involves identifying actions and making recommendations as to how the plan can be implemented most effectively. In many cases, these actions will involve increased or decreased emphasis on existing policies and implementation actions. In other cases, plan monitoring will indicate that new or modified policies and implementation actions are necessary. Modifications to the plan will most often be made during the regular plan update process, occurring every three years. Should modifications need to be made to the plan between updates, the plan amendment process will be used. The *TransPlan* amendment and update processes are described in Appendix C: *TransPlan* Update Process Documentation.

## Part Five: TransPlan Update Cycle

To keep the plan relevant to current conditions, federal legislation requires an update of the plan every three years. Specifically, the federal guidelines state that the plan:

*“...shall be reviewed and updated triennially...to confirm its validity and its consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period.”*

The planning process envisioned in the Transportation Equity Act for the 21st Century (TEA 21) is a dynamic activity that effectively integrates current operational and preservation considerations with longer term mobility, environmental, and development concerns. This more frequent update requirement reflects the perspective that the function of the TSP is moving from a documentation of system development to contemporary decision tool. The three-year update cycle maintains the technical utility of the plan and its ability to serve the needs of local decision makers.

The table below shows the proposed update process, with TransPlan adoption in mid-2001. Minor updates would extend and adjust forecasts of land uses and the transportation system and update priorities. A major update will add a review of policies, priorities, and major projects. Air quality conformity analysis and financial constraint analysis would be prepared for each update as required by federal legislation.

### Schedule for TransPlan Updates


Year	Update
2001	Major
2002	
2003	
2004	Minor
2005	
2006	
2007	Major
2008	
2009	
2010	Minor

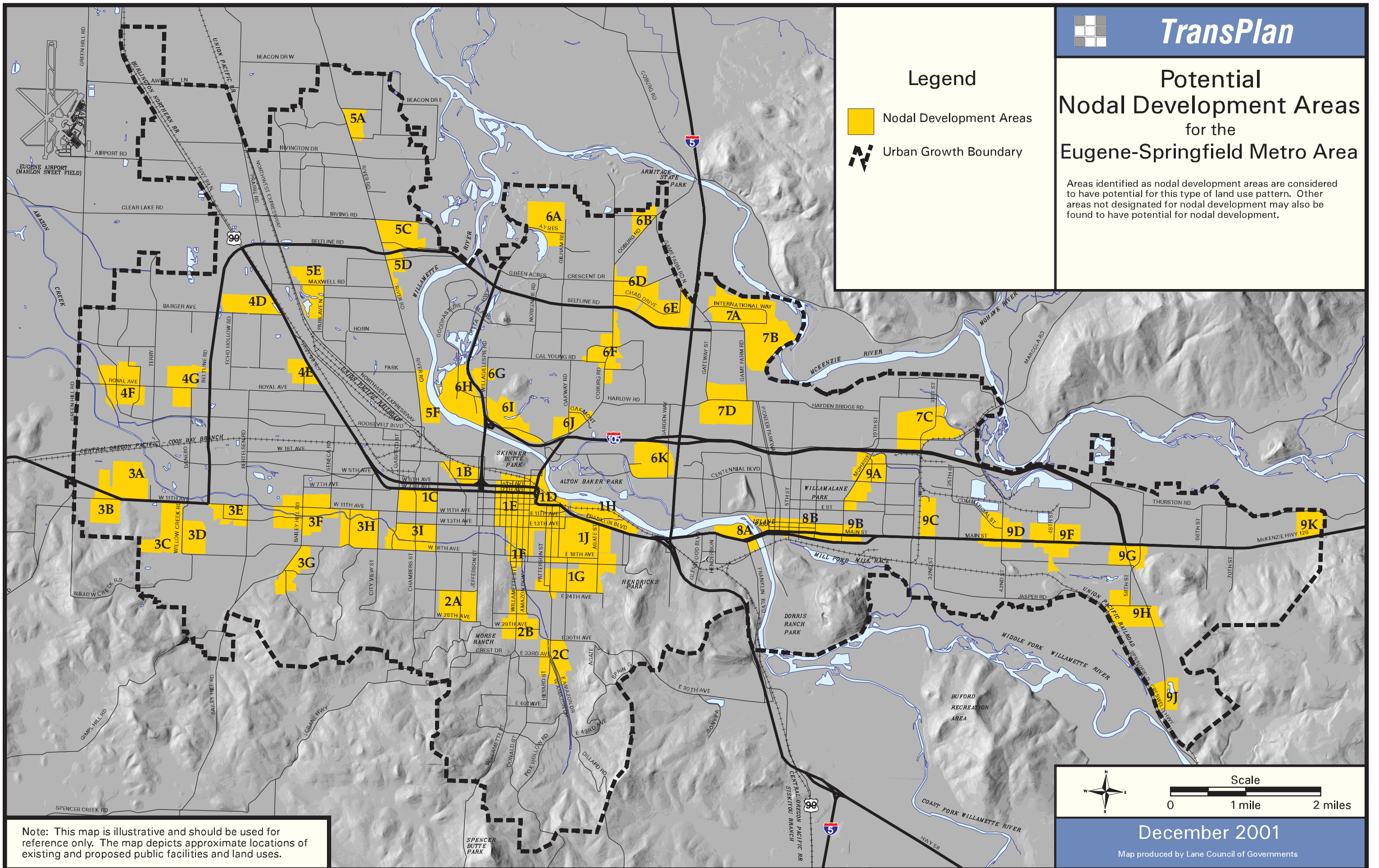


# Potential Nodal Development Areas for the Eugene-Springfield Metro Area

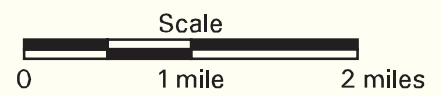
Areas identified as nodal development areas are considered to have potential for this type of land use pattern. Other areas not designated for nodal development may also be found to have potential for nodal development.

## Legend

-  Nodal Development Areas
-  Urban Growth Boundary



Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed public facilities and land uses.



December 2001

Map produced by Lane Council of Governments

# Financially-Constrained Roadway Projects

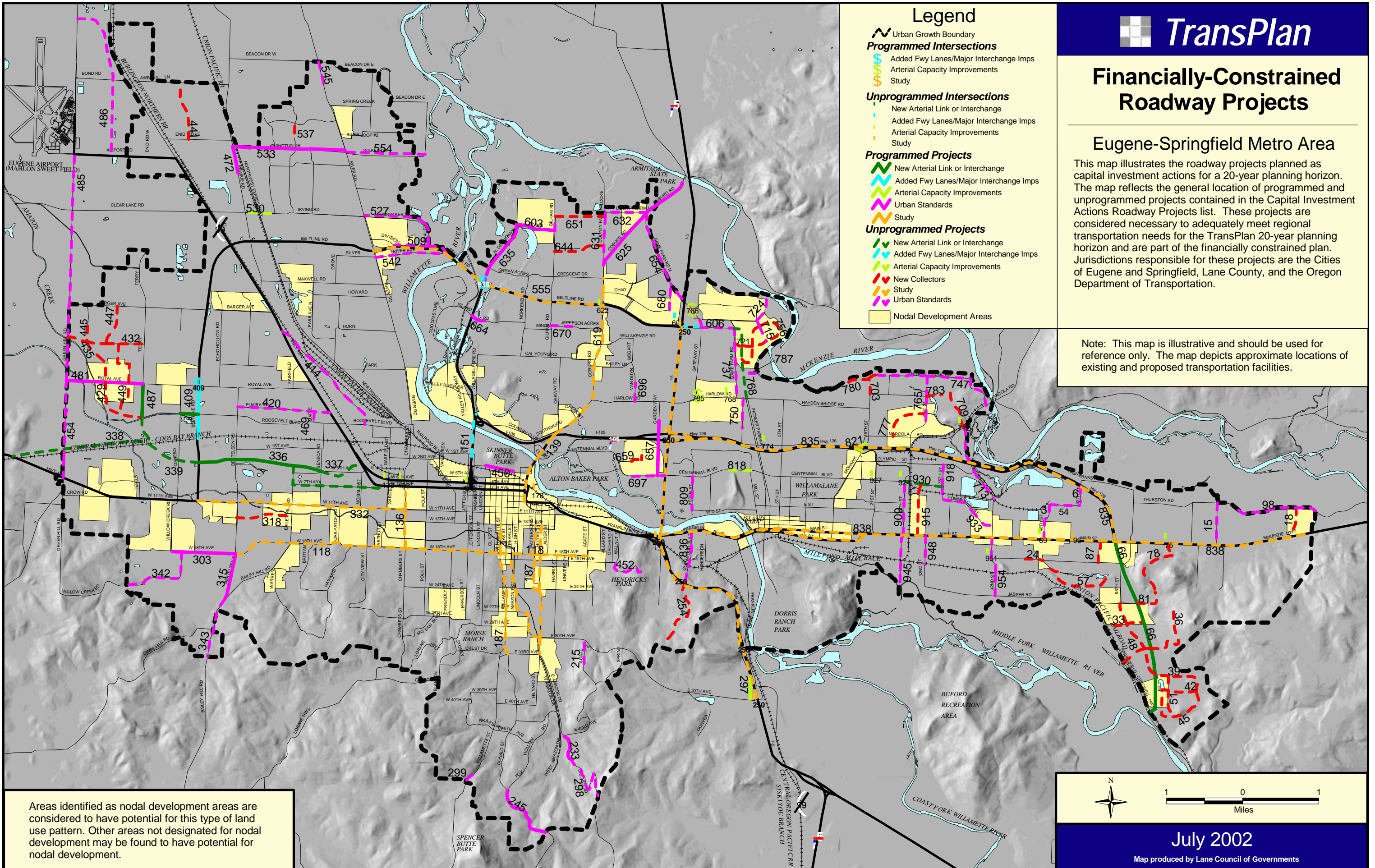
## Eugene-Springfield Metro Area

This map illustrates the roadway projects planned as capital investment actions for a 20-year planning horizon. The map reflects the general location of programmed and unprogrammed projects contained in the Capital Investment Actions Roadway Projects list. These projects are considered necessary to adequately meet regional transportation needs for the TransPlan 20-year planning horizon and are part of the financially constrained plan. Jurisdictions responsible for these projects are the Cities of Eugene and Springfield, Lane County, and the Oregon Department of Transportation.

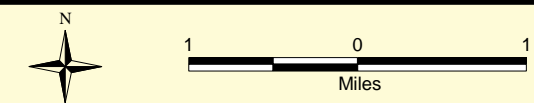
Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities.

### Legend

- Urban Growth Boundary
- Programmed Intersections**
  - Added Fwy Lanes/Major Interchange Imps
  - Arterial Capacity Improvements
  - Study
- Unprogrammed Intersections**
  - New Arterial Link or Interchange
  - Added Fwy Lanes/Major Interchange Imps
  - Arterial Capacity Improvements
  - Study
- Programmed Projects**
  - New Arterial Link or Interchange
  - Added Fwy Lanes/Major Interchange Imps
  - Arterial Capacity Improvements
  - Urban Standards
  - Study
- Unprogrammed Projects**
  - New Arterial Link or Interchange
  - Added Fwy Lanes/Major Interchange Imps
  - Arterial Capacity Improvements
  - New Collectors
  - Study
  - Urban Standards
- Nodal Development Areas



Areas identified as nodal development areas are considered to have potential for this type of land use pattern. Other areas not designated for nodal development may be found to have potential for nodal development.



July 2002

Map produced by Lane Council of Governments

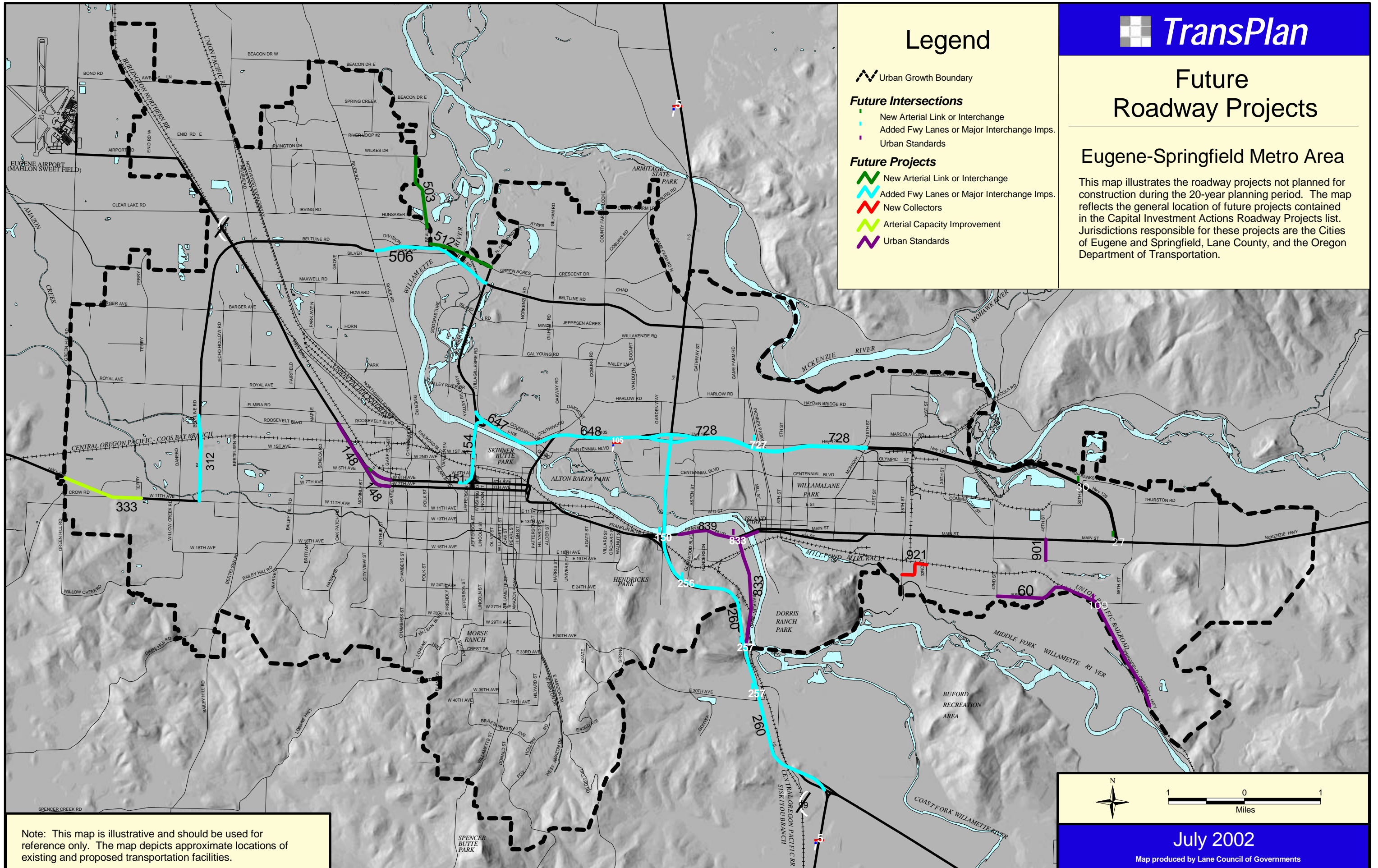
# Future Roadway Projects

## Eugene-Springfield Metro Area

This map illustrates the roadway projects not planned for construction during the 20-year planning period. The map reflects the general location of future projects contained in the Capital Investment Actions Roadway Projects list. Jurisdictions responsible for these projects are the Cities of Eugene and Springfield, Lane County, and the Oregon Department of Transportation.

### Legend

- Urban Growth Boundary
- Future Intersections**
  - New Arterial Link or Interchange
  - Added Fwy Lanes or Major Interchange Imps.
  - Urban Standards
- Future Projects**
  - New Arterial Link or Interchange
  - Added Fwy Lanes or Major Interchange Imps.
  - New Collectors
  - Arterial Capacity Improvement
  - Urban Standards



Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities.

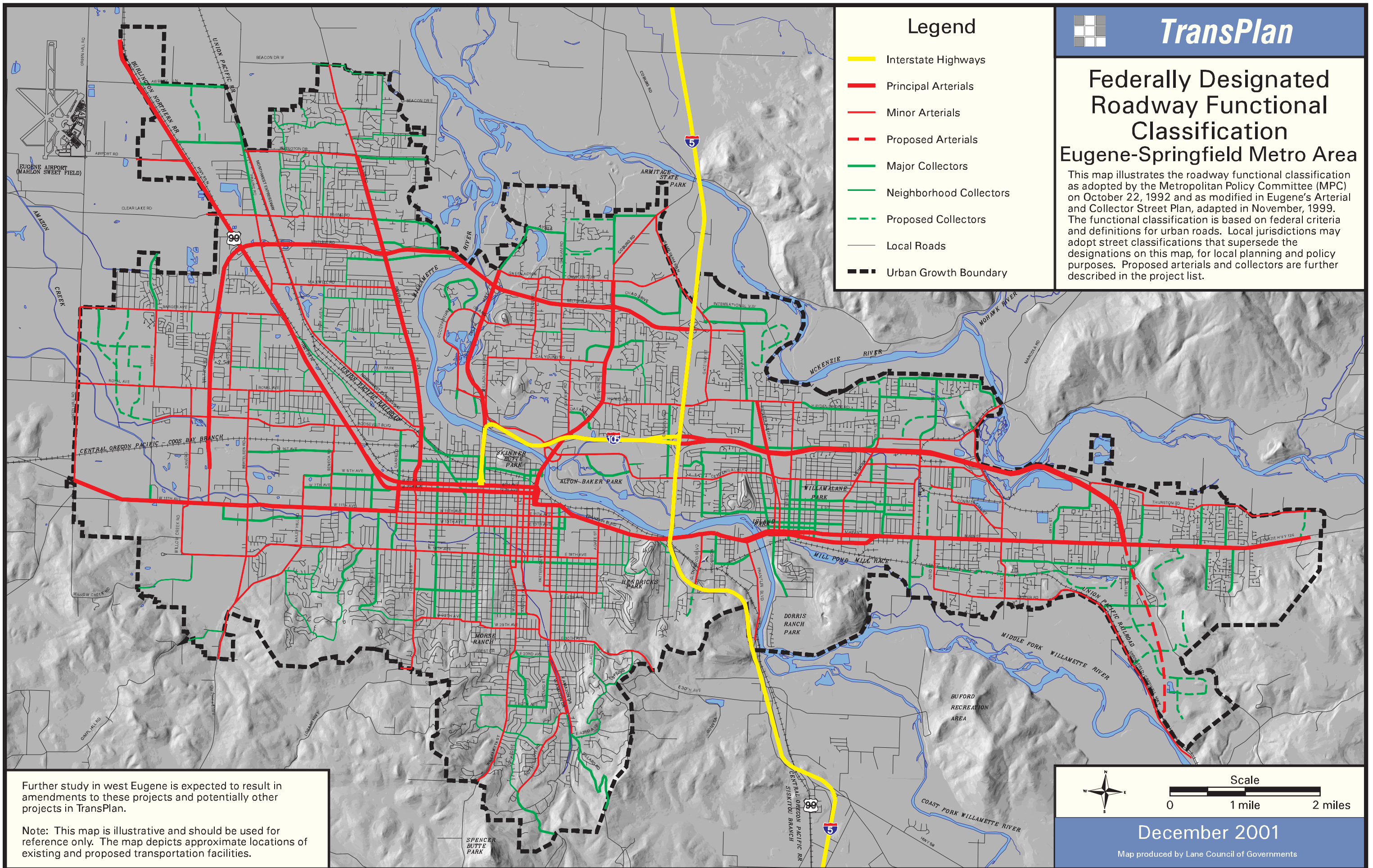


## Federally Designated Roadway Functional Classification Eugene-Springfield Metro Area

This map illustrates the roadway functional classification as adopted by the Metropolitan Policy Committee (MPC) on October 22, 1992 and as modified in Eugene's Arterial and Collector Street Plan, adapted in November, 1999. The functional classification is based on federal criteria and definitions for urban roads. Local jurisdictions may adopt street classifications that supersede the designations on this map, for local planning and policy purposes. Proposed arterials and collectors are further described in the project list.

### Legend

- Interstate Highways
- Principal Arterials
- Minor Arterials
- Proposed Arterials
- Major Collectors
- Neighborhood Collectors
- Proposed Collectors
- Local Roads
- Urban Growth Boundary



Further study in west Eugene is expected to result in amendments to these projects and potentially other projects in TransPlan.

Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities.



Scale

0 1 mile 2 miles

December 2001







Map produced by Lane Council of Governments



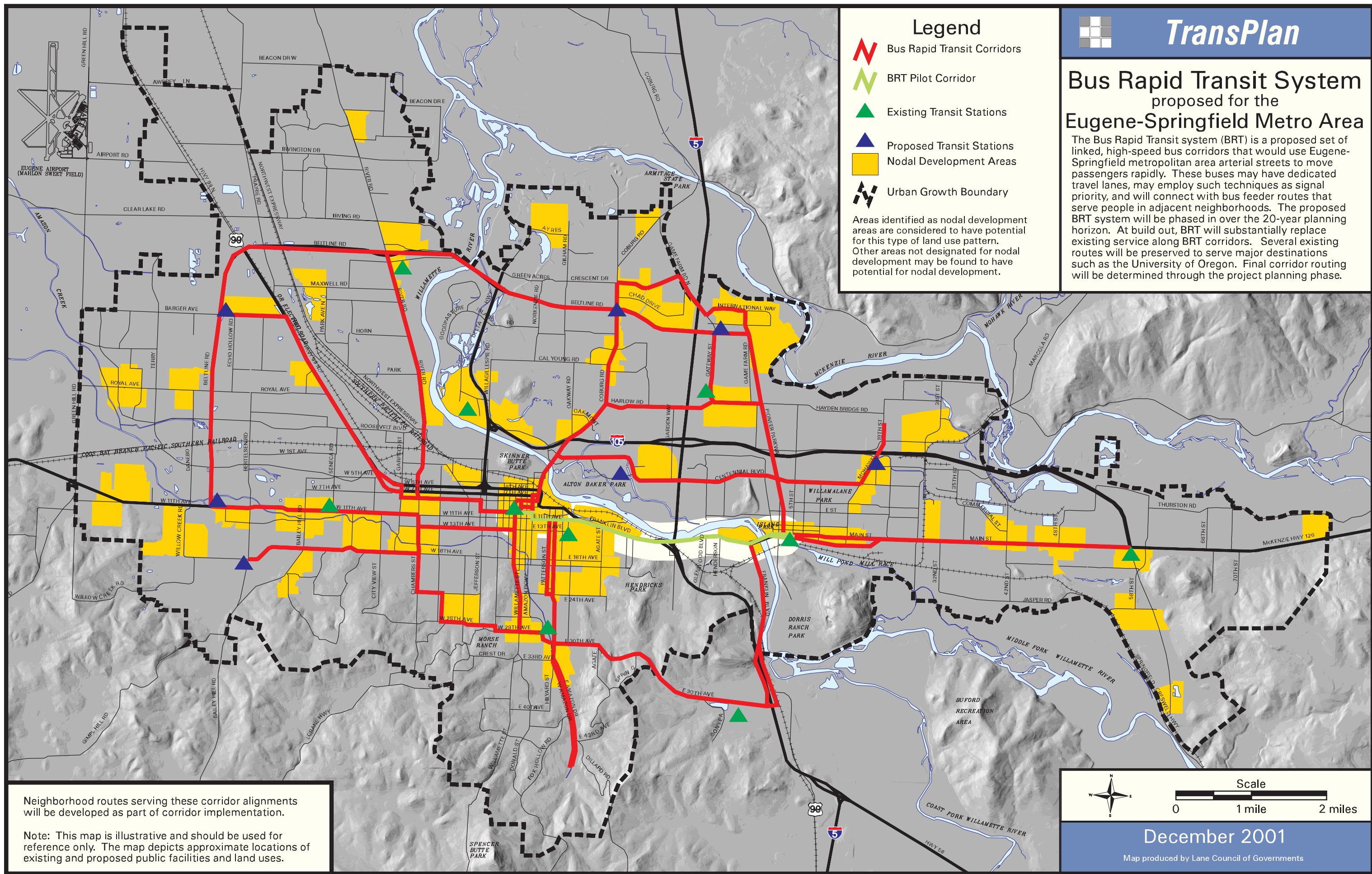
## Bus Rapid Transit System proposed for the Eugene-Springfield Metro Area

The Bus Rapid Transit system (BRT) is a proposed set of linked, high-speed bus corridors that would use Eugene-Springfield metropolitan area arterial streets to move passengers rapidly. These buses may have dedicated travel lanes, may employ such techniques as signal priority, and will connect with bus feeder routes that serve people in adjacent neighborhoods. The proposed BRT system will be phased in over the 20-year planning horizon. At build out, BRT will substantially replace existing service along BRT corridors. Several existing routes will be preserved to serve major destinations such as the University of Oregon. Final corridor routing will be determined through the project planning phase.

### Legend

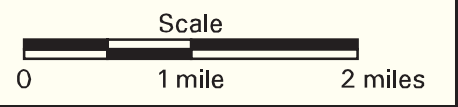
-  Bus Rapid Transit Corridors
-  BRT Pilot Corridor
-  Existing Transit Stations
-  Proposed Transit Stations
-  Nodal Development Areas
-  Urban Growth Boundary

Areas identified as nodal development areas are considered to have potential for this type of land use pattern. Other areas not designated for nodal development may be found to have potential for nodal development.



Neighborhood routes serving these corridor alignments will be developed as part of corridor implementation.

Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed public facilities and land uses.



December 2001

Map produced by Lane Council of Governments

# Financially-Constrained Bikeway System Projects

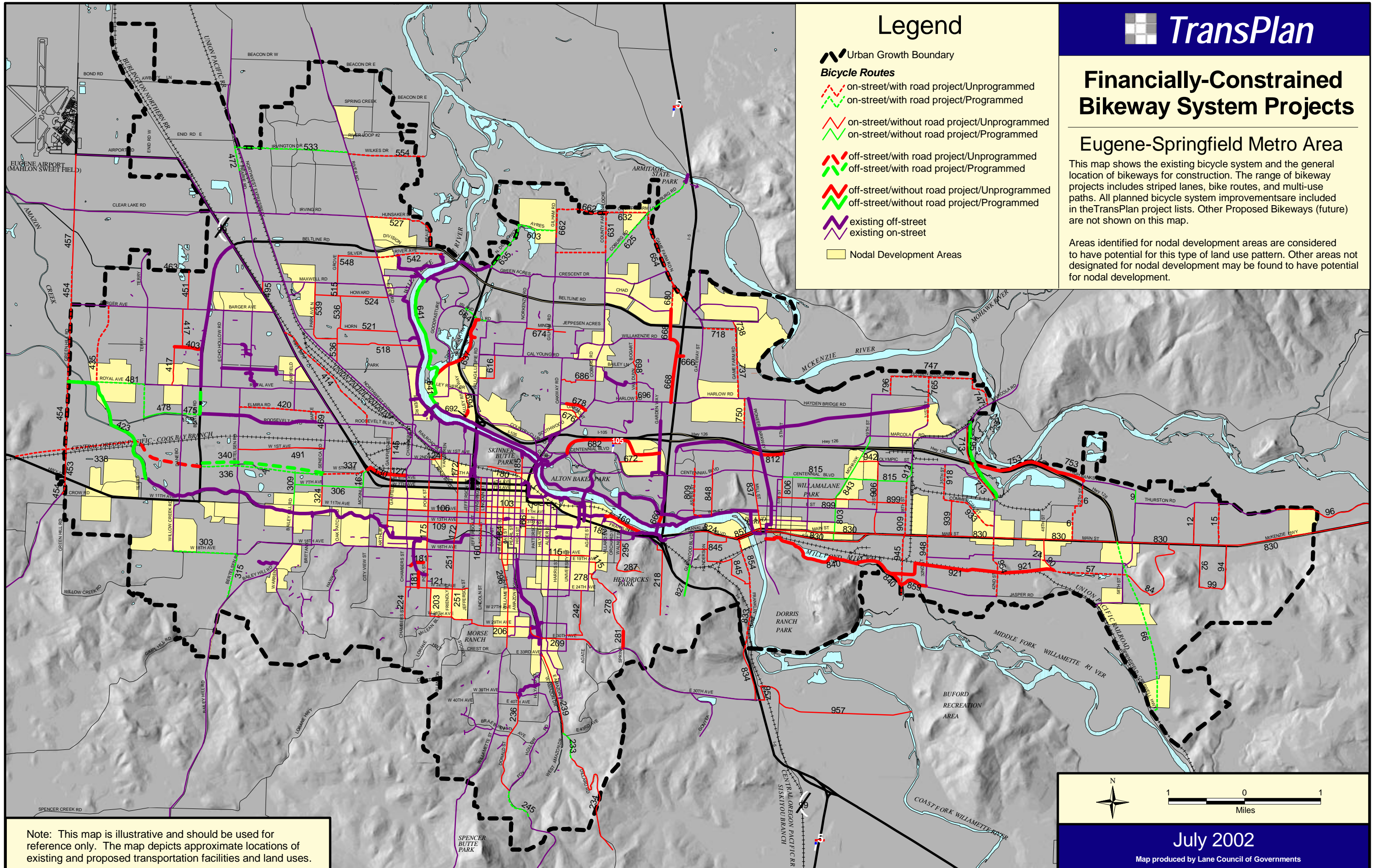
## Eugene-Springfield Metro Area

This map shows the existing bicycle system and the general location of bikeways for construction. The range of bikeway projects includes striped lanes, bike routes, and multi-use paths. All planned bicycle system improvements are included in the TransPlan project lists. Other Proposed Bikeways (future) are not shown on this map.

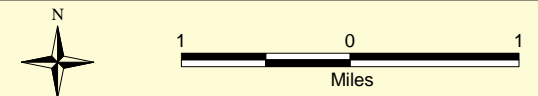
Areas identified for nodal development areas are considered to have potential for this type of land use pattern. Other areas not designated for nodal development may be found to have potential for nodal development.

### Legend

- Urban Growth Boundary
- Bicycle Routes**
- on-street/with road project/Unprogrammed
- on-street/with road project/Programmed
- on-street/without road project/Unprogrammed
- on-street/without road project/Programmed
- off-street/with road project/Unprogrammed
- off-street/with road project/Programmed
- off-street/without road project/Unprogrammed
- off-street/without road project/Programmed
- existing off-street
- existing on-street
- Nodal Development Areas



Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities and land uses.



July 2002

Map produced by Lane Council of Governments



# Priority Bikeway System Projects

Eugene-Springfield Metro Area  
TransPlan Bikeway Projects Selected  
by Connectivity and Safety Criteria

Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities and land uses.

## Legend

Planned or Programmed Priority Bikeways

On-street Bikeways (lanes, shoulders, and routes)



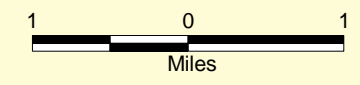
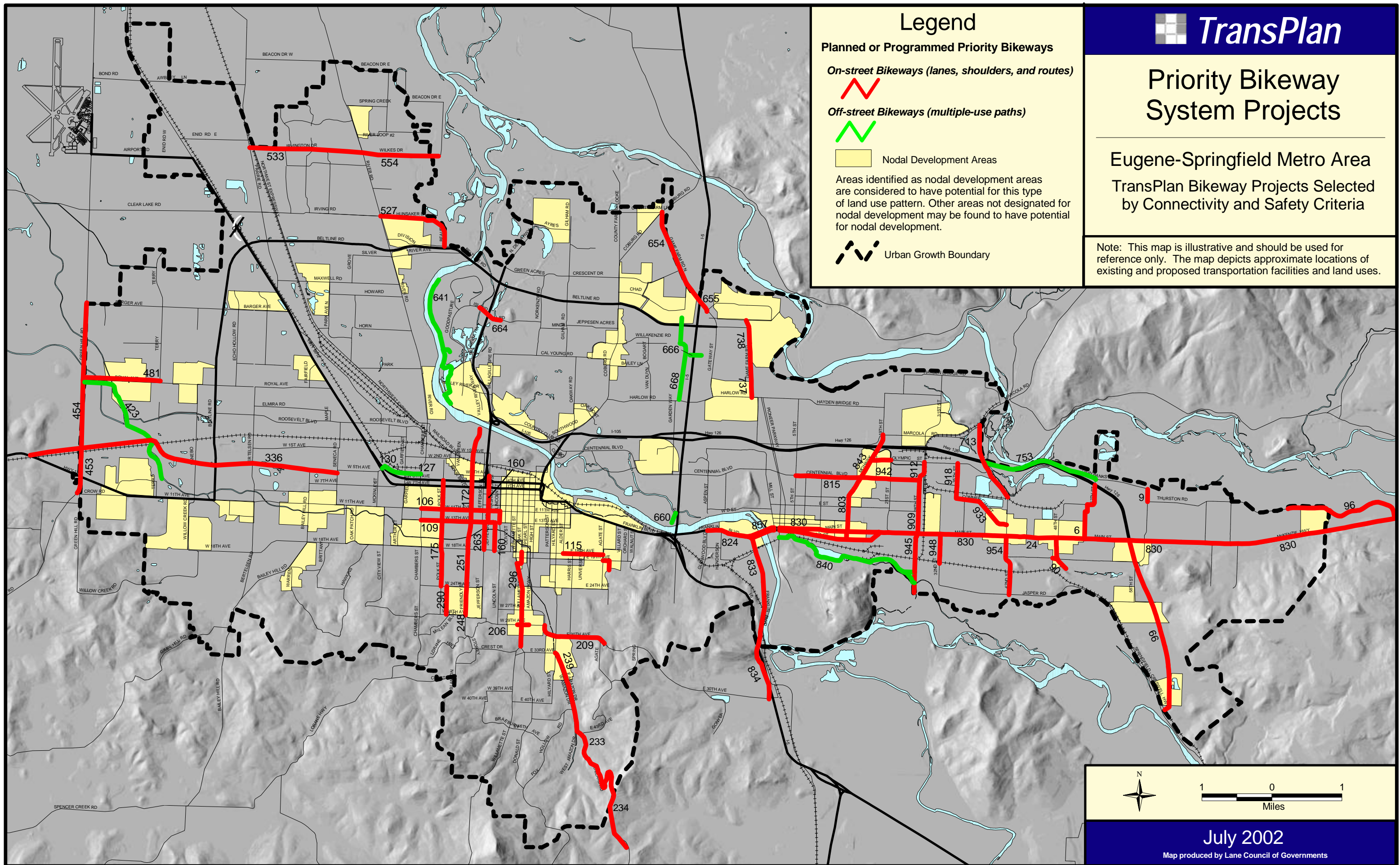
Off-street Bikeways (multiple-use paths)



Nodal Development Areas

Areas identified as nodal development areas are considered to have potential for this type of land use pattern. Other areas not designated for nodal development may be found to have potential for nodal development.

Urban Growth Boundary



July 2002

Map produced by Lane Council of Governments

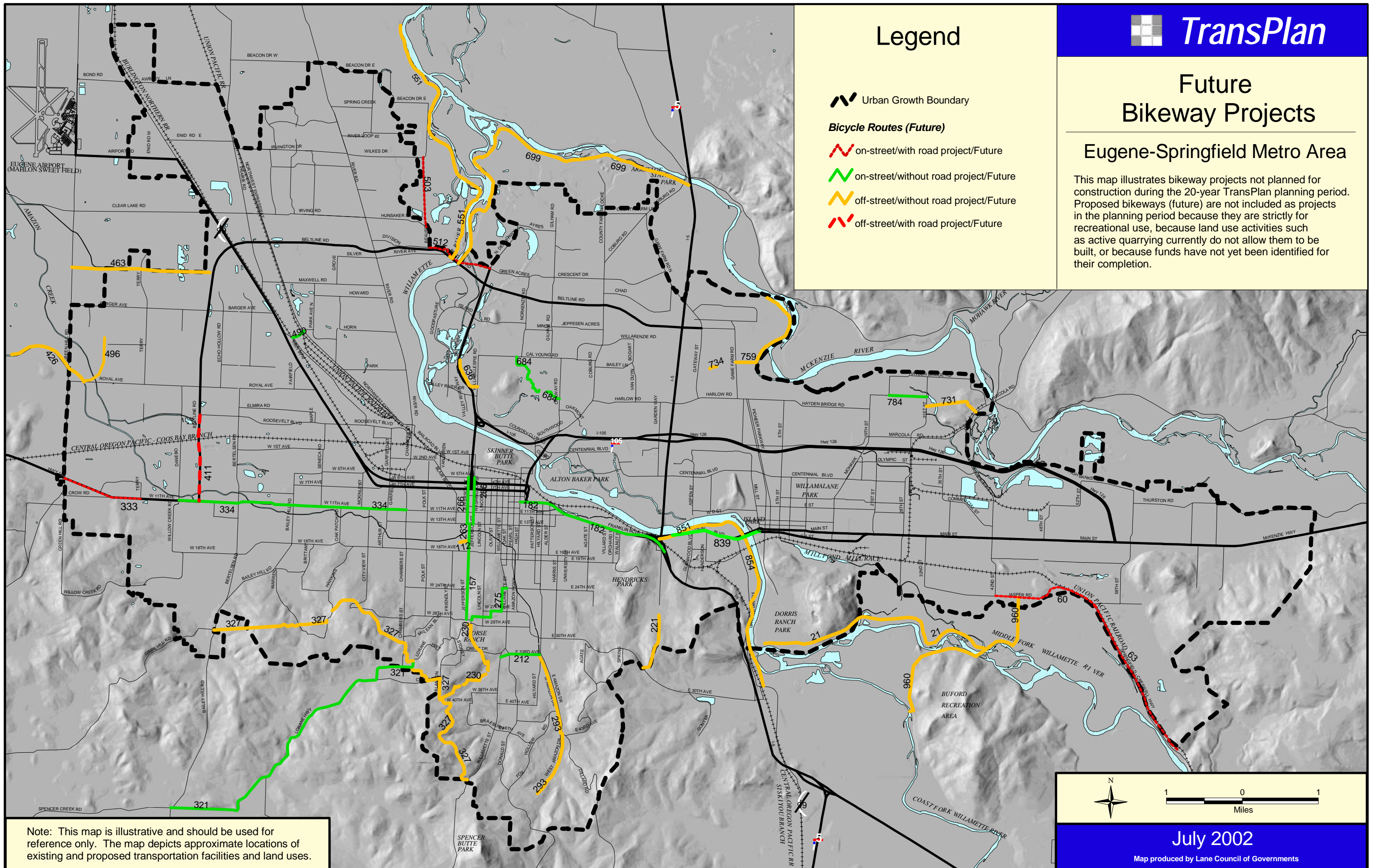
# Future Bikeway Projects

## Eugene-Springfield Metro Area

This map illustrates bikeway projects not planned for construction during the 20-year TransPlan planning period. Proposed bikeways (future) are not included as projects in the planning period because they are strictly for recreational use, because land use activities such as active quarrying currently do not allow them to be built, or because funds have not yet been identified for their completion.

### Legend

- Urban Growth Boundary
- Bicycle Routes (Future)**
- on-street/with road project/Future
- on-street/without road project/Future
- off-street/without road project/Future
- off-street/with road project/Future



Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities and land uses.

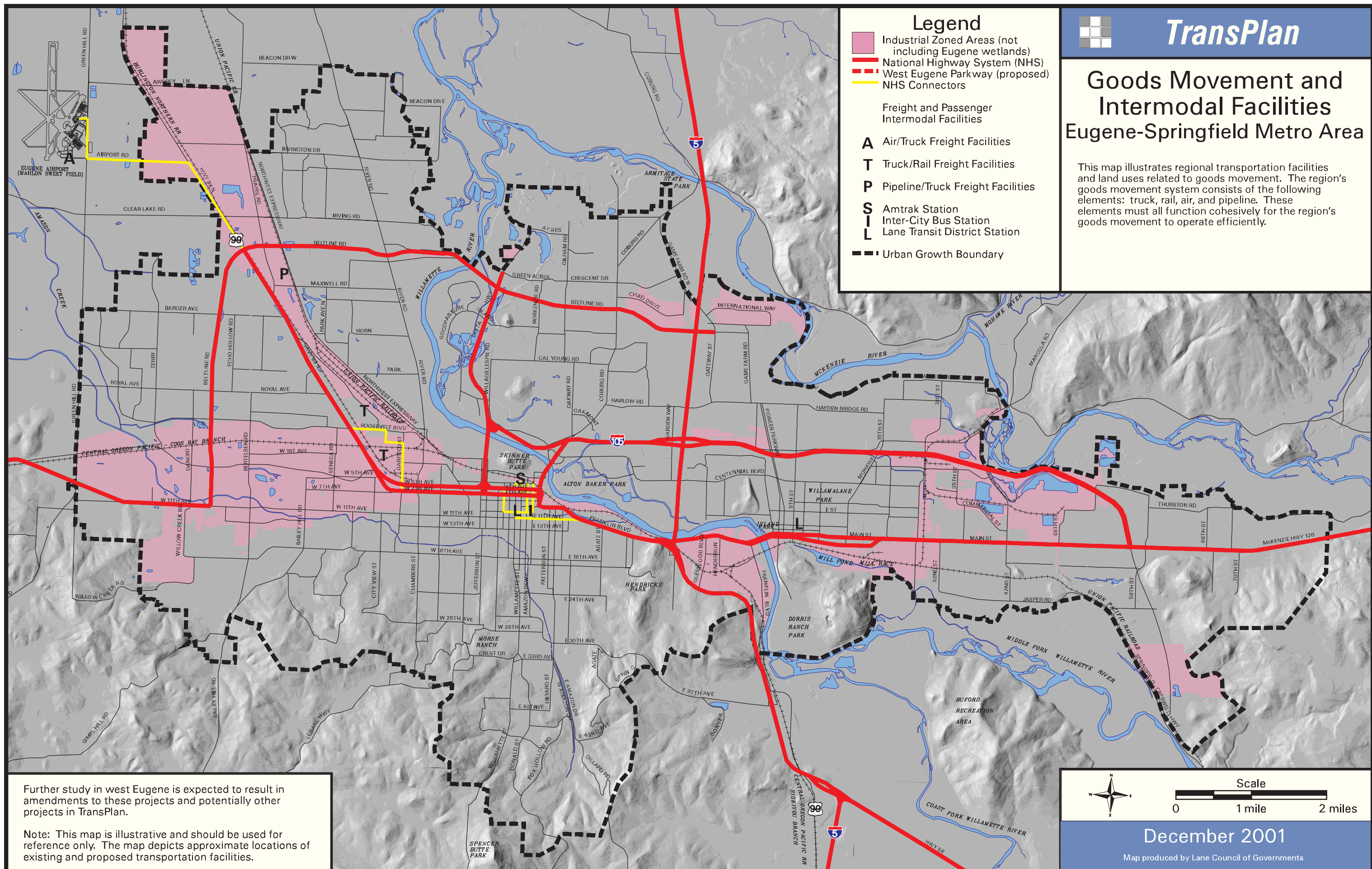


## Goods Movement and Intermodal Facilities Eugene-Springfield Metro Area

This map illustrates regional transportation facilities and land uses related to goods movement. The region's goods movement system consists of the following elements: truck, rail, air, and pipeline. These elements must all function cohesively for the region's goods movement to operate efficiently.

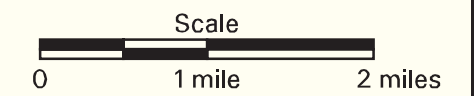
### Legend

- Industrial Zoned Areas (not including Eugene wetlands)
  - National Highway System (NHS)
  - West Eugene Parkway (proposed)
  - NHS Connectors
  - Urban Growth Boundary
- Freight and Passenger Intermodal Facilities
- A** Air/Truck Freight Facilities
  - T** Truck/Rail Freight Facilities
  - P** Pipeline/Truck Freight Facilities
  - S** Amtrak Station
  - I** Inter-City Bus Station
  - L** Lane Transit District Station



Further study in west Eugene is expected to result in amendments to these projects and potentially other projects in TransPlan.

Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities.



December 2001

Map produced by Lane Council of Governments

# Appendix B: Level of Service Standards

## Table of Contents

Level of Service Concept.....	1
Roadway Congestion Impacts.....	1
Responses to Roadway Congestion .....	2
LOS Standards – Application .....	2
Capacity Analysis Methodologies .....	2
Roadway System Needs Analysis.....	3

## Level of Service Concept

*Level of service* (LOS) is a concept that is used to assess roadway system performance. It measures traffic flow *quality* as experienced by motor vehicle drivers and passengers. Typically, six levels of service are defined and each is assigned a letter designation from A to F, with LOS A representing the least congested conditions and LOS F the most congested.

For the purpose of identifying capacity deficiencies in *TransPlan*, a roadway's LOS is based on the ratio of its peak-hour traffic volume to the maximum hourly volume the roadway can accommodate. This is referred to as the roadway's *volume-to-capacity ratio* (V/C).

## Roadway Congestion Impacts

When the volume of traffic using a roadway nears the roadway's capacity, the resulting congestion has several types of undesirable impacts:

- Travel speeds fall, which lengthens travel times and significantly increases the overall cost of transportation.
- Congestion on main routes causes traffic to spillover onto local routes through neighborhoods.
- Slowdowns and backups on high-speed freeway facilities can produce more frequent and severe vehicle collisions.
- Vehicle idling time caused by severe traffic congestion is a primary source of excessive auto emissions that degrade air quality.

## Responses to Roadway Congestion

A key *TransPlan* strategy for meeting the region's mobility needs using available resources is to extract maximum value from the existing roadway system. Transportation System Improvements (TSI) System-Wide policies and implementation actions set a high priority on managing and protecting existing and future transportation infrastructure. When combined with policies and implementation actions for land use, transportation demand management and transit, TSI System-Wide policies provide direction for a wide range of actions that reduce the need to construct new roadway capacity improvements. Examples of such actions include the following:

- Reconfigure roadway accesses to minimize traffic conflicts at intersections;
- Limit parking near signalized intersections to increase intersection capacity;
- Coordinate and operate traffic signals to improve traffic progression;
- Relocate driveways and improve local street connections to direct traffic away from overburdened intersections and intersections where side-street capacity is limited in order to optimize traffic progression on arterials and collectors;
- Improve turning-radii at intersections that are heavily used by trucks to avoid lane blockages;
- Install raised medians to reduce traffic conflicts; and
- Improve accesses so that traffic can enter or exit the highway with minimal disruptions of flow.

Even with the above actions, significant components of the roadway system are forecast to fall below acceptable LOS standards. Where management actions have failed to produce acceptable LOS, construction projects to add roadway capacity must be considered.

## LOS Standards – Application

*TSI Roadway Policy #2: Motor Vehicle Level of Service* guided *TransPlan's* transportation system needs analysis and is intended to guide the transportation aspects of future land use decisions. OAR 660-12-0060 (1) "Transportation Planning Rule" states that,

"Amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g., level of service, volume to capacity ratio, etc.) of the facility."

## Capacity Analysis Methodologies

The most current Highway Capacity Manual (HCM), *Special Report 209, Transportation Research Board* is the standard reference for roadway capacity analysis methodology. The basic concepts of *capacity* and *LOS* are described in Chapter 1 of the HCM.

In general terms, the HCM defines roadway capacity as the maximum hourly rate at which vehicles can reasonably be expected to traverse a uniform section of roadway during a given time period under prevailing roadway, traffic, and control conditions. Capacity is often stated in terms of Passenger Cars Per Lane Per Hour (pcplph).

The Highway Capacity Software (HCS) package is a tool that implements the HCM analysis methods. The HCM/HCS package has been developed over time as an integrated, comprehensive package of analysis methods that are widely understood and accepted.

The Oregon Department of Transportation (ODOT) has developed special analysis tools for use in analyzing capacity issues for certain types of facilities on the state highway system. In particular, the SIGCAP2 and UNSIG10 software packages are used for signalized and unsignalized intersection capacity/LOS analysis, respectively. Other more specialized analysis methods are also used, depending on the nature of issues being analyzed.

## Roadway System Needs Analysis

Transportation system needs analysis for the Eugene-Springfield area's collector and arterial roadway network was conducted using a computer model (EMME/2). Output from this model was used as a primary source of information about locations on the roadway network where roadway volumes are forecast to exceed capacity.

The traffic volume forecasted to occur on each network link was compared to the link's assumed capacity to produce a V/C ratio. The following thresholds were established to relate these V/C ratios to the roadway LOS performance standards:

<b>Facility Type</b>	<b>LOS D</b>	<b>LOS E</b>
Freeways, 55 MPH	V/C #0.78	V/C #1.0
Non-freeways, 55 MPH	V/C #0.87	V/C #1.0
Other Arterials and Collectors	V/C #0.87	V/C = 0.88 - .97

Through the *Oregon Highway Plan* (OHP), ODOT establishes performance standards for the state highway system, including all state facilities considered in *TransPlan*. The adopted OHP sets V/C standards based on various combinations of highway and land use categories. Due to the prominent role that state facilities play in the local transportation system, these standards are reproduced here for reference.

**Maximum Volume-to-Capacity Ratios for Peak Hour Operating Conditions Through a  
Planning Horizon for State Highway Sections Located  
Outside the Portland Metropolitan Area Urban Growth Boundary**

Highway Category	Land Use Type/Speed Limits					
	Inside Urban Growth Boundary				Outside Urban Growth Boundary	
	STA <sup>1</sup>	MPO <sup>2</sup> outside of STAs	Non-MPO outside of STAs where non-freeway speed limit < 45 mph	Non-MPO where non- freeway speed limit \$ 45 mph	Unincorporated Communities	Rural Lands
Interstate	N/A	0.80	0.70	0.70	0.70	0.70
State-wide <sup>3</sup> :						
• Freight route	0.85	0.80	0.75	0.70	0.70	0.70
• Non-Freight Route State- Wide	0.90	0.85	0.80	0.75	0.75	0.70
Regional	0.95	0.85	0.80	0.75	0.75	0.70
District/Local Interest Roads	0.95	0.90	0.85	0.80	0.80	0.75

<sup>1</sup> Special Transportation Area

<sup>2</sup> Metropolitan Planning Organization

<sup>3</sup> National Highway System

# Appendix C: *TransPlan* Update Process Documentation

## Table of Contents

Overview.....	1
Phase I: Issues Identification .....	2
Phase II: Alternatives Development .....	2
Phase III: Alternatives Evaluation and Draft Plan Direction.....	3
Phase IV: Draft Plan Development, Review, and Adoption.....	5

## Overview

*TransPlan* represents a comprehensive and integrated approach to transportation planning, encompassing extensive public involvement; a broad range of technical analyses and studies; and the expertise of staff, consultants, public officials, and stakeholders. Through consideration of these three types of input—public perception, technical analysis, and expert knowledge—local elected and appointed officials provided policy direction throughout the *TransPlan* update process.

- **Public perception** of a variety of topics, including transportation issues, alternative methods for addressing those issues, and staff conclusions and recommendations was obtained through a wide range of broad-based and focused public involvement techniques.
- **Technical analyses** results were generated by the travel forecasting model and a number of studies conducted during the update process. The results of these planning efforts allowed staff to draw informed conclusions about the alternative strategies for addressing transportation issues.
- **Expert knowledge** was obtained from staff, consultants, elected and appointed officials, stakeholders, and other contributors to the *TransPlan* update process. The primary roles of experts are to interpret the meaning and relevance of technical analyses, evaluate the implications of policy alternatives, and present alternatives or make recommendations based on judgment and experience.

*TransPlan* is the result of an update process with four phases. The timeline at the end of this appendix details the events that have occurred in each of the phases.



## **Phase I: Issues Identification**

The first phase began in June 1992 with broad-based public involvement efforts that focused on publicizing the beginning of the *TransPlan* update process and identifying issues, needs, and concerns of area residents. Techniques included two community workshops, presentations, a survey, and newsletters. Based on public input, staff compiled a preliminary list of issues to address. The main issues were:

- The challenges of accommodating a growing population with diverse needs and interests;
- The challenges of improving transportation options;
- The region's increasing reliance on the automobile;
- Existing land use patterns that favor auto use over other forms of transportation;
- The challenges of maintaining mobility given increasing levels of traffic congestion; and
- Federal and state policies that mandate integrated transportation and land use planning, reduced traffic congestion and vehicle miles traveled per person, and increased use of alternative modes.

After identifying the issues, preliminary goals and objectives were developed to guide the *TransPlan* update process.

## **Phase II: Alternatives Development**

The second *TransPlan* phase began in July 1993 and focused on identifying a range of strategies to address the issues identified in Phase I. Public involvement work in Phase II was centered around the stakeholder process. The stakeholder symposiums facilitated the participation of a wide range of interest groups in the *TransPlan* update and contributed to establishment of a broad-based consensus on issues, priorities, and solutions. Most stakeholders who participated in the symposiums also served on task forces and focus committees. Other public involvement efforts included a community workshop, a strategies survey, a visual preference survey, newsletters, and land use planning events.

Opportunities for addressing the transportation-related issues were categorized into three fundamental components of transportation planning: transportation demand management (TDM), land use measures (LUM), and transportation system improvements (TSI). TDM reduces the demand placed upon the transportation system by redistributing or eliminating vehicle trips and encouraging the use of alternative modes. Changing travel behavior improves performance of transportation facilities and reduces the need for additional road capacity. LUM focus on the relationship between land use and transportation by encouraging development patterns that reduce the need for autos, reduce trip lengths, and support the use of alternative modes. Balanced land use patterns allow growth to occur without the congestion and deteriorating road conditions experienced in many metropolitan regions. TSI focuses on the supply side of transportation. TSI strategies include the full range of system improvements from improving the capacity and efficiency of the existing system to the construction or expansion of a new facility. TSI strategies are not limited to improvements for the automobile but also incorporate system improvements, expansion, and construction for transit, bicycles, and pedestrians.

The concept of integrated transportation planning requiring a balance of the three components was presented to stakeholders at the first symposium in November 1993. After the symposium, stakeholder task forces studied strategies and identified those that seemed most effective and that might have the best opportunities for implementation in the Eugene-Springfield area. The strategies under consideration were presented to the public for review and comment at the third community workshop in May 1994.

Through consideration of the stakeholder task forces' recommendations and input from citizens and public officials, plan concepts were developed. In fall 1994, a survey was mailed to over 90,000 households to collect citizen input on the types of strategies that were considered by the stakeholder task forces. The preliminary plan concepts were reviewed with stakeholders at the second symposium in April 1995.

In 1995, a stakeholder focus committee reviewed and refined goals and objectives for the *TransPlan* update process. The committee's work resulted in the *TransPlan Update Interim Goals and Objectives*, which were approved by the Metropolitan Policy Committee in December 1995.

## **Phase III: Alternatives Evaluation and Draft Plan Direction**

The third *TransPlan* phase began in October 1995 and focused on developing and evaluating alternative plan concepts and obtaining direction on the policy framework for the draft plan. The preliminary plan concepts underwent an iterative evaluation, review, and refinement process, which was shaped by input from citizens, stakeholders, public officials, staff, and results of technical studies and the travel forecasting model. A series of focus groups were conducted with community members and business representatives in December 1995 and May 1996 to obtain feedback on the alternative plan concepts. Additionally, a community survey on the alternative plan concepts was conducted in spring 1996 with a random sampling of 500 Eugene and Springfield residents. In May 1996, two community workshops provided citizens with additional opportunities to review and comment on the alternative plan concepts.

The alternative plan concepts that resulted from the refinement process represented staff's efforts to develop a range of plan concepts that responded to the stated preferences of citizens, stakeholders, and public officials; addressed legislative requirements; and progressed towards achieving the *TransPlan Update Interim Goals and Objectives*. These alternative plan concepts are summarized as:

Plan Concept #1: The **Base Case** contained strategies that were essentially an extension of current transportation and land use conditions and trends. The concept served as a point of reference from which to gauge the effectiveness of the other plan concepts.

- Plan Concept #2: The ***Demand Management Emphasis*** plan concept contained higher levels of demand management strategies and lower levels of land use and system improvement strategies.
- Plan Concept #3: The ***Land Use Emphasis*** plan concept contained higher levels of land use strategies and lower levels of demand management and system improvement strategies.
- Plan Concept #4: The ***System Changes Emphasis*** plan concept contained higher levels of system improvement strategies and lower levels of land use and demand management strategies.
- Plan Concept #5: The ***Equal Emphasis*** plan concept attempted to strike a balance between the three strategy categories.
- Plan Concept #6: The ***Transportation Planning Rule Vehicle Miles Traveled Goal Compliance*** plan concept emphasized demand management and system improvement strategies to meet the Transportation Planning Rule goal of reducing vehicle miles traveled by 10 percent over current conditions by the year 2015.

Stakeholders reviewed the alternative plan concept strategies and provided their recommendations on preferred strategies to include in a plan concept at the third symposium in August 1996. After the third symposium, staff reviewed prior policy direction and public input, stakeholder recommendations that arose from the symposium, and technical analyses findings in an effort to develop a plan concept that contained strategies that could provide the framework for the draft *TransPlan*.

The plan concept developed by staff provided the outline for the *Policy Makers' Decision Package for Draft Plan Direction* (Decision Package) (November 1996). This document contained a recommended set of strategies that comprised the guiding framework for the draft *TransPlan*. Staff presented the Decision Package to the Eugene, Springfield, and Lane County planning commissions. The planning commission recommendations were forwarded to Eugene City Council, Springfield City Council, Lane County Board of Commissioners, and Lane Transit District Board for consideration. In April 1997, each of these bodies approved a set of strategies as the guiding framework for development of the draft *TransPlan*.

## Phase IV: Draft Plan Development, Review, and Adoption

The purpose of public review of the draft plan was to obtain input on the plan contents from citizens and appointed and elected officials. The fourth and final phase began in May 1997 and has included developing, reviewing, and revising the draft plan, and ultimately adoption of the final plan. The draft *TransPlan* was reviewed in winter and spring 1998. Copies of the draft plan were distributed to interested parties including the Eugene and Springfield city councils; Lane County Board of Commissioners; Lane Transit District Board; Eugene, Springfield, and Lane County planning commissioners; Lane County Roads Advisory Committee; *TransPlan* Stakeholders; key local agency staff; and media. Notice of the availability of the draft *TransPlan* at locations throughout the metro area and an announcement of the Open Houses were mailed to the *TransPlan* mailing list (about 1,300 recipients). Display advertisements in local newspapers informed the public that the draft *TransPlan* was available for public review. Press releases and direct contact with media encouraged newspaper, radio, and television coverage of the release of the draft plan. *TransPlan* staff was available to make presentations to *TransPlan* stakeholder groups, civic organizations, and neighborhood associations.

After *TransPlan* was released to the public, the review and adoption process was combined with the Metropolitan Residential Lands and Housing Study. This coordinated process allowed the public to review and comment on these studies' recommendations, including their inter-relationship and for the planning commissions and elected officials to consider these comments and take action. Both *TransPlan* and the Residential Lands Study are proposing amendments to the *Metro Plan*.

Two coordinated open houses for *TransPlan* and the Residential Lands and Housing Study were held in February 1998. The Springfield, Eugene, and Lane County Planning Commissions and the Lane County Roads Advisory Committee held two joint public hearings beginning in April 1998. In addition, the cities of Eugene and Springfield each held an individual public hearing. After the four public hearings were held and the written comment period closed, the Springfield, Eugene, and Lane County planning commissions and the Lane County Roads Advisory Committee held two joint worksessions. Also, 21 individual worksessions were held among the four advisory bodies.

After considering the oral and written testimony submitted by the public, these advisory bodies made recommendations to their respective elected officials. Individual and joint public hearings will be held in June 1999 before the Eugene and Springfield city councils, the Lane County Board of Commissioners, and the Lane Transit District Board. Following the public hearings, local officials will meet separately to deliberate and make decisions. After the local jurisdictions approve the updated *TransPlan*, the Lane Council of Governments' Board will ratify the plan.

## ***TransPlan* Public and Adopting Official Review**

### **General Public**

The May 1999 Revised Draft *TransPlan* went through an extensive public and adopting official review. A variety of techniques were used to inform and involve the public including direct mail, broad distribution of *TransPlan*, web site information, direct contact in-person and via e-mail, Metro TV, distribution of *TransPlan* summary to all Register-Guard, Springfield News and Business Week subscribers, display ads, news releases, active contact with print, radio and television media, public comment periods, and public hearings. Throughout the deliberations of the Revised Draft *TransPlan* by the adopting officials, the public was informed of all meetings and any opportunities for public comment.

*TransPlan* adopting officials opened the public record on May 1, 1999 and closed it on October 29, 1999. Public hearings were conducted on September 29, 1999 and October 20, 1999 in which approximately 685 people submitted testimony in the form of an oral presentation at one of the two public hearings, e-mail testimony, by letter, or by petition. *TransPlan* staff prepared a response to the public testimony, which was provided to the adopting officials and the general public.

*TransPlan* adoption officials re-opened the *TransPlan* public record from January 25, 2000 to March 31, 2000 to allow the public to submit additional testimony. The *TransPlan* public record was re-opened again from August 10, 2000, to October, 6, 2000, to all the public the opportunity to provide written testimony on the Alternative Plan Performance Measures. In addition, the Department of Land, Conservation and Development, opened up their public comment period to allow the residents of the Eugene-Springfield area to comment directly to the Land, Conservation and Development Commission on the Alternative Plan Performance Measures.

### **Adopting Official Review**

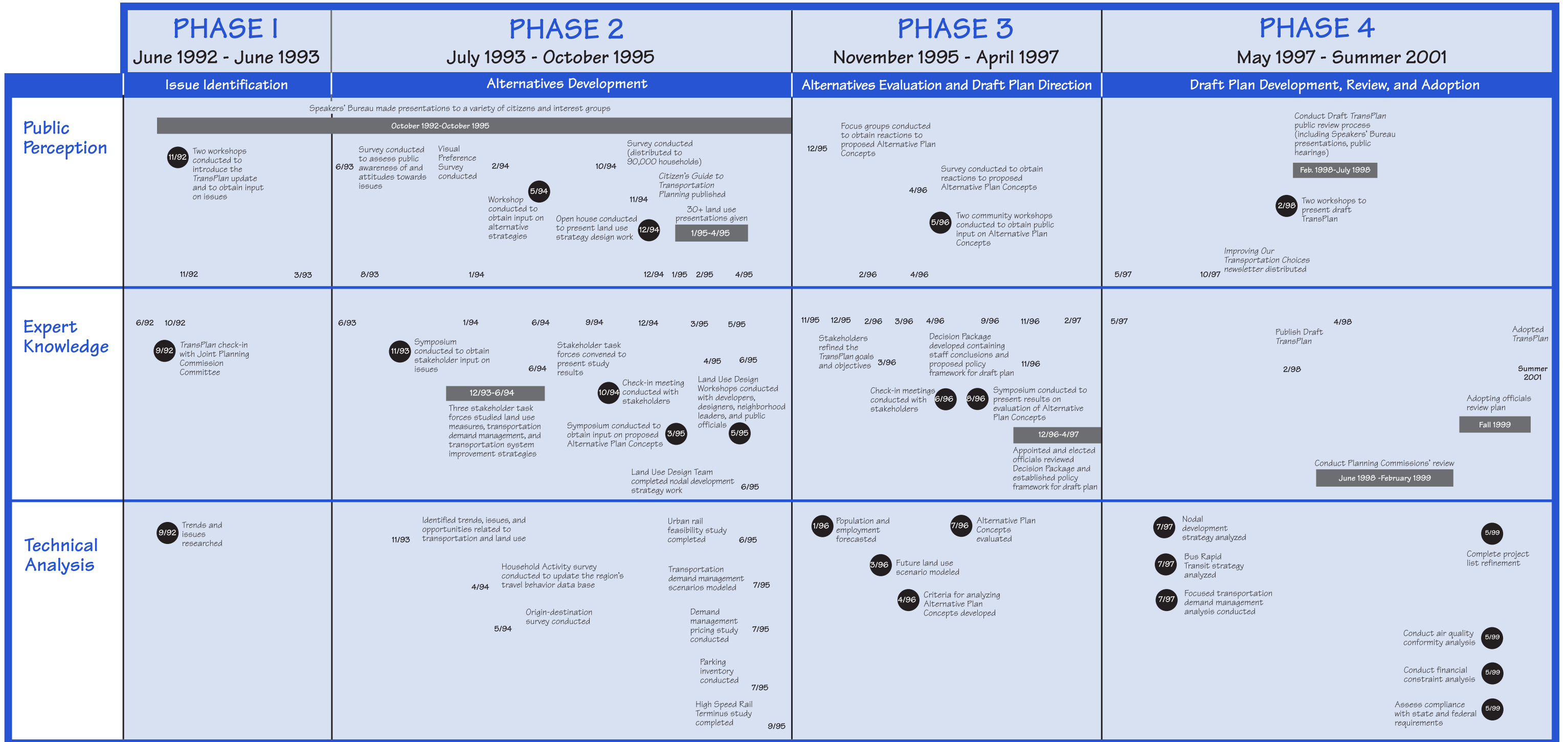
*TransPlan* adopting officials held an extensive amount of worksessions to review and deliberate on the public comment and the Revised *TransPlan*. Fifty-four individual worksessions were held prior the LCOG Board adoption scheduled for June 28, 2001. In addition, the adopting officials conducted three joint worksessions to resolve any outstanding issues that resulted from the individual meetings. Adopting officials then forwarded the outstanding issues to the Metropolitan Policy Committee for dispute resolution. All adopting officials received agendas and materials for all MPC meetings. The public was kept informed of the MPC meetings and opportunities for public comment.

MPC formed two sub-committees to resolve the outstanding differences. One committee was assigned to resolve the seven outstanding issues and the other was directed to identify and recommend Alternative Plan Performance Measures to be forwarded to the Land, Conservation and Development Commission. Both committees met several times prior to sending their recommendations to the full MPC. All issues approved by MPC were sent out to the adopting officials for concurrence by the four adopting agencies.

# TransPlan Timeline

September 2001

This timeline highlights key events in the TransPlan Trek that relate to public perception, expert knowledge, and technical analysis.



Key:      Newsletter Distributed      Report prepared      TransPlan check-in with elected officials      Milestone      Process

# Appendix D: List of Supporting Documents

This list of documents includes background information, studies, and analyses undertaken as part of or in conjunction with the *TransPlan* update. These reports were published by Lane Council of Governments, local jurisdictions, and consultants.

Doc No.	Title	Date Published	Location
1.	Eugene Bikeways Master Plan	November-74	LCOG, City of Eugene
2.	Eugene-Springfield Transportation Alternatives	September-75	LCOG
3.	Eugene-Springfield Area 2000 Transportation Plan	December-78	LCOG
4.	Evaluation of the Eugene Bikeways Master Plan	January-79	LCOG, City of Eugene
5.	Springfield Bikeway Plan	April-82	LCOG, City of Springfield
6.	Evaluation Report of the Eugene-Springfield Area 2000 Transportation Plan	May-84	LCOG
7.	Eugene-Springfield Area Metropolitan Area Transportation Plan	May-86	LCOG
8.	Eugene/Springfield Metro Area General Plan	April-87	LCOG
9.	Lane County Long Range Paratransit Plan - Final Metro Paratransit Plan	April-92	LCOG
10.	Lane Council of Governments TransPlan Update Base Line Data	April-93	LCOG
11.	Trends, Issues, and Opportunities	November-93	LCOG
12.	Glossary of Transportation and Land Use Terms	December-93	LCOG
13.	Eugene Sidewalk Program	December-93	LCOG, City of Eugene
14.	Transportation Rule Implementation Project (TRIP) Code Amendments as adopted by the Eugene City Council	December-93	LCOG, City of Eugene
15.	Picture Your Future - TransPlan Visual Preferences	February-94	LCOG
16.	Household Activity and Travel Survey Technical Memorandum, Stated Preference Focus Groups Report	March-94	LCOG
17.	LTD May 1994 Origin and Destination Survey: Summary Report	May-94	LCOG, LTD
18.	Transportation System Improvement Final Report	June-94	LCOG
19.	Land Use Measures Strategies Document	June-94	LCOG
20.	Transportation Demand Management Task Force Final Report	June-94	LCOG
21.	Proposed Design Principles for Nodal Development	September-94	LCOG
22.	Citizen's Guide to Transportation Planning	November-94	LCOG
23.	Strategies to Balance and Improve Our Transportation System	December-94	LCOG

<b>Doc No.</b>	<b>Title</b>	<b>Date Published</b>	<b>Location</b>
24.	1994 Commuter Pack Survey	January-95	LCOG
25.	LTD Market Area Survey	March-95	LCOG, LTD
26.	Household Activity and Travel Survey Final Report	March-95	LCOG
27.	Eugene/Springfield Urban Rail Feasibility Study - Potential Rail Corridor Screening	April-95	LCOG
28.	1994 Origin-Destination Surveys Final Report Volume II: Eugene Surveys	May-95	LCOG
29.	Nodal Development Strategy Implementation Options, Working Paper	June-95	LCOG
30.	Design Team Report and Recommendations to the Land Use Measures Task Force	June-95	LCOG
31.	Design Principles for Mixing Uses and Increasing Densities - Workshop Process, Key Findings, and Recommendations	June-95	LCOG
32.	A Comparison of Development Costs in Eugene/Springfield: Standard Subdivision vs Nodal Development	June-95	LCOG
33.	How Do We Grow From Here?	June-95	LCOG
34.	Regional Parking Inventory Eugene/Springfield Final Report	July-95	LCOG
35.	Pacific Northwest High Speed Rail Southern Terminus Study	July-95	LCOG
36.	Urban Rail Feasibility Study - Final Report	July-95	LCOG
37.	Transportation Demand Management Strategies: Technical Evaluation and Model Results	July-95	LCOG
38.	Eugene-Springfield Metropolitan Area Transportation Plan: Summary Descriptions of Proposed Nodal Development Areas	August-95	LCOG
39.	Pricing Study (Technical Memo)	September-95	LCOG
40.	TransPlan Focus Groups with Area Residents	February-96	LCOG
41.	User Manual for Land Use Allocation Spreadsheets	April-96	LCOG
42.	Transportation-Efficient Development	May-96	LCOG
43.	TransPlan Community Survey Report	June-96	LCOG
44.	Exploratory Research on TransPlan with Area Business Owners/Managers	June-96	LCOG
45.	Exploratory Research on Bus Rapid Transit Report	July-96	LCOG, LTD
46.	TransPlan Update 3rd Symposium Materials	August-96	LCOG
47.	Eugene Local Street Plan	August-96	LCOG, City of Eugene
48.	Market Demand Study for Nodal Development	October-96	LCOG
49.	Policy Makers' Decision Package for Draft Plan Direction	November-96	LCOG
50.	TransPlan and Metro Plan Periodic Review Future Land Use Assumptions	May-97	LCOG
51.	Improving Our Transportation Choices newsletter (Public Decision Document)	June-97	LCOG
52.	Springfield Conceptual Local Street Map	June-97	LCOG, City of Springfield
53.	Draft Design Guidelines for Multi-Unit Housing	June-97	LCOG
54.	Metro Area General Plan, 1987 Update with Amendments	July-97	LCOG
55.	Analysis and Findings on the Potential for Public Transportation in the Eugene-Springfield Area	August-97	LCOG



<b>Doc No.</b>	<b>Title</b>	<b>Date Published</b>	<b>Location</b>
56.	Analysis of the Suitability and Effectiveness of Transportation Demand Management Strategies in Selected Areas	August-97	LCOG
57.	Eugene-Springfield Area Transportation Improvement Program FY 1997-98 to FY 2000-2001	September-97	LCOG
58.	Local Jurisdiction Review Edition Draft TransPlan	November-97	LCOG
59.	Evaluating Redevelopment Potential in the Eugene/Springfield Metropolitan Area	December-97	LCOG
60.	Draft TransPlan	February-98	LCOG
61.	Springfield Bike Plan	June-98	LCOG, City of Springfield
62.	Draft TransPlan Reference Materials for Joint Planning Commission/RAC Worksession	September-98	LCOG
63.	Revised Draft TransPlan	May-99	LCOG
64.	Oregon Highway Plan	May-99	LCOG, ODOT
65.	Residential Lands Study	August-99	LCOG, City of Eugene, City of Springfield
66.	Eugene Arterial and Collector Street Plan	November-99	LCOG, City of Eugene
67.	Public Testimony - Volumes I, II and Alternative Performance Measures	November-99	LCOG
68.	Land Use Code Update	February-01	City of Eugene
69.	TransPlan Update Public Involvement Documentation Working Paper	June-01	LCOG
70.	Joint Adopting Officials Schedule	June-01	LCOG
71.	Alternative Measures Approved by LCDC	June-01	LCOG

# Appendix E: Glossary and Acronyms

## Table of Contents

Glossary .....	1
List of Acronyms .....	11

## Glossary

### **Access management**

Measures that regulate access to streets, roads, and highways from public roads and private driveways while simultaneously preserving traffic flow on the surrounding road system in terms of safety, capacity, and speed. Measures may include but are not limited to restrictions on the siting of interchanges, restrictions on the type and amount of access to roadways, and the use of physical controls, such as signals and channelization, including raised medians, to reduce impacts of approaching road traffic on the main facility.

### **Accessibility**

Physical proximity and ease of reaching destinations throughout the urban metropolitan area.

### **Alternative modes**

Means of travel such as rail, transit, bicycles, and walking that provide transportation alternatives to the use of the automobile.

### **Americans with Disabilities Act (ADA)**

Federal civil rights legislation signed into law in 1990 that includes requirements for accessible public transportation services for persons with disabilities. Services include complementary or supplemental paratransit services for persons who are unable to use regular bus service due to a disability in areas where fixed-route transit service is operated. All new construction and modifications must be accessible to individuals with disabilities. For existing facilities, barriers to services must be removed if readily achievable.

### **Average daily traffic (ADT)**

The average number of vehicles passing a specified point in a typical 24-hour timeframe.

### **Benchmarks**

Target objectives for *TransPlan's Performance Measure* assessment method. Benchmarks are required by the Transportation Planning Rule for use in evaluating progress at five-year intervals. Transportation system plans must be amended to include new or additional efforts where benchmarks are not met.

**Bikeways**

A facility intended to accommodate bicycle travel for recreational or commuting purposes. Examples include striped lanes, bike routes, and multi-use paths. Bikeways are not necessarily separate facilities; they may be designed and operated to be shared with other traffic modes.

**Bus Rapid Transit (BRT)**

High-frequency, fast bus service along major transportation corridors that is intended to emulate the positive characteristics of a light rail system. Feeder service in neighborhoods using small buses connect the BRT corridor service with nearby activity centers.

**Clean Air Act Amendments of 1990 (CAAA)**

Federal law that established criteria for attaining and maintaining National Ambient Air Quality Standards. A *nonattainment* area is a region that fails to meet one or more of the standards. CAAA shifts the emphasis of conformity analysis from a system-level review of the State Implementation Plan towards a more project-oriented approach. Transportation agencies are interested in projects that help to reduce pollutant levels by reducing vehicle congestion and vehicle miles traveled.

**Capacity**

The maximum rate of flow at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions; capacity is usually expressed as vehicles per hour or persons per hour.

**Capital improvement program (CIP)**

A plan for future capital infrastructure and program expenditures that identifies each capital project, its anticipated start and completion, and allocates existing funds and known revenue sources for a given period of time.

**Conformity**

Process to assess the compliance of any transportation plan, program, or project with air quality control plans. The Clean Air Act defines the conformity process.

**Development review process**

Process used by local governments to assess development proposals on a case-by-case basis.

**Development standards**

A measure of physical attributes and/or policy conformance that shall be satisfied to allow a proposed land use or development to be established or modified.

**Differential nodal development infrastructure cost**

The additional cost for infrastructure in nodal development areas that would not be built in typical development, such as street modifications, pedestrian amenities, transit centers and public open space. [Eugene-specific definition]

## **Functional classification**

Street classification system that describes streets according to their purpose and capacity. The four main categories are detailed below.

### **Principal arterial**

A street that serves the major centers of activity of a metropolitan area, the highest traffic volume corridors and the longest trip needs. Principal arterials should carry a high proportion of the total urban area travel on a minimum of mileage and provide important intra-urban as well as inter-city bus routes.

### **Minor Arterial**

Includes all arterials not classified as principal arterials and offers a lower level of traffic mobility than the higher street classifications. Such facilities may carry local bus routes and provide intra-community continuity, but ideally should not penetrate identifiable neighborhoods.

### **Collector**

A street designed to provide both land access service and traffic circulation within residential neighborhoods, commercial, and industrial areas. The primary function of a collector street is to distribute local trips to the arterial system.

### **Local**

All streets that are not collectors or arterials. These facilities serve primarily to provide direct access to abutting land and access to the higher order systems. They offer the lowest level of mobility and usually contain no bus routes. Service to through traffic movement is usually discouraged.

The four jurisdictions participating in *TransPlan* have slightly differing classifications for arterial and collector streets. The breakdown and a source document for each are listed below.

*City of Eugene*: Major arterial, minor arterial, major collector neighborhood collector, and local (Eugene Arterial and Collector Street Plans, 1999)

*City of Springfield*: Major arterial, minor arterial collector, and local (Springfield Development Code Article 32)

*Lane County*: Principal arterial, minor arterial, major collector, minor collector, and local (Lane County Code, 15.010(3))

*Oregon Department of Transportation*: Interstate highway, state-wide highway, regional highway, and district highway. All Oregon Department of Transportation roads are arterials. (Oregon Highway Plan, 1992)

## **Goal**

Broad statement of philosophy that describes the hopes of the community's residents for the community's future. A goal may never be completely attainable, but it is a point towards which to strive.

**High-occupancy vehicle (HOV)**

Any passenger vehicle carrying more than one person. The term HOV is sometimes used to refer to lanes on large-volume roadways that are specifically set aside for the exclusive use of carpools, vanpools, and buses.

**Implementation actions**

Specific measures for achieving *TransPlan* policies.

**Infill development**

Development that consists of either construction on one or more lots in an area that is mostly developed or new construction between existing structures. Development of this type can conserve land and reduce sprawl.

**Intelligent Transportation Systems Technology (ITS)**

Computer and communication technology that provide information to travelers about road and transit conditions. Research in the field may eventually lead to a system that monitors, guides, and/or controls the operation of vehicles.

**Intermodal**

Connecting individual modes of transportation and/or accommodating transfers between such modes. Intermodal transportation emphasizes the transfer of people or freight in a single journey through connections, provides options to facilitate trip making, and promotes coordination among transportation providers.

**Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991**

The 1991 federal transportation funding legislation that provides for a new direction in transportation planning, with an emphasis to protect the environment and reduce congestion, relying on the most efficient transportation mode, and providing increased flexibility to state and local governments on the use of federal funds.

**Level of service**

A qualitative rating of how well a unit of transportation supply (e.g., street, intersection, sidewalk, bikeway, transit route, ferry) serves its current or projected demand.

- A: Free flow conditions, 32% of capacity
- B: Reasonably free flow conditions, 51% of capacity
- C: Operation stable, but becoming more critical, 75% of capacity
- D: Lower speed range of stable flow, 92% of capacity
- E: Unstable flow, 100% of capacity
- F: Forced flow, +100% of capacity, stop-and-go operation

**Major investment study (MIS)**

A method of analyzing and evaluating the transportation needs and related problems of a corridor or subarea within a region. The MIS may identify a multi-modal set of investment and policy options to address identified needs and problems, develop measures of benefits, calculate costs, and determine impacts. The process is intended to provide decision makers with better and more complete information on the options available for addressing identified transportation problems before decisions are made.

**Metro Plan**

The *Eugene-Springfield Metropolitan Area General Plan, 1987 Update*, amendments incorporated as of July 1997, 1998 Reprint. The official document adopted by local governments that contains the general, long-range policies on how the community's future development should occur.

**Metropolitan planning organization (MPO)**

The organizational entity designated by law to have the lead responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more in population. MPOs are established by agreement of the Governor and units of general purpose local government that together represent 75 percent of the affected population of an urbanized area. Lane Council of Governments is the MPO for the Eugene-Springfield metropolitan area.

**Mixed-use development**

A development that has a mixture of land uses that may include office and other commercial uses, residential uses, parks and public places, and supporting public facilities and services.

**Mobility**

The ease with which a person is able to travel from place to place. It can be measured in terms of travel time.

**Modal split**

The proportion of total persons using a particular mode of travel.

**Mode**

A means of moving people and/or goods. Modes may include motor vehicles, public transit, bicycles, railroads, airplanes, waterways, pipelines, and pedestrian walkways.

**Multi modal**

Refers to the diversity of transportation options for the same trip. Also, an approach to transportation planning or programming that acknowledges the existence of or need for transportation options.

**Nodal development (Node)**

Nodal development is a mixed-use, pedestrian-friendly land use pattern that seeks to increase concentrations of population and employment in well-defined areas with good transit service, a mix of diverse and compatible land uses, and public and private improvements designed to be pedestrian and transit oriented. Fundamental characteristics of Nodal development require:

- Design elements that support pedestrian environments and encourage transit use, walking, and bicycling;
- A transit stop which is within walking distance (generally 1/4 mile) of anywhere in the node;
- Mixed uses so that services are available within walking distance;
- Public spaces, such as parks, public and private open space, and public facilities, that can be reached without driving; and
- a mix of housing types and residential densities that achieve an overall net density of at least 12 units per net acre.

Nodal developments will vary in the amount, type, and orientation of commercial, civic, and employment uses; target commercial floor area ratios; size of buildings; and the amount and types of residential uses.

### **Objective**

An attainable target that the community attempts to reach in striving to meet a goal. An objective may also be considered as an intermediate point that will help fulfill the overall goal.

### **1991 Oregon Highway Plan (OHP)**

Document that outlines the policies and strategies that will guide the Highway Division's operation and fiscal activities during the 1991-2012 period. The current document represents an update to the 1985 Highway Plan.

### **Oregon Statewide Planning Goals**

A mandated statewide program for land use planning in place since 1973. The foundation of the program is a set of 19 goals that express the state's policies on land use and related topics such as natural resources (Goal 5), housing (Goal 10), and transportation (Goal 12).

### **Oregon Transportation Plan (OTP)**

The comprehensive, long-range plan for a multi-modal transportation system for the state that encompasses economic efficiency, orderly economic development, safety, and environmental quality. The OTP was adopted by the Oregon Transportation Commission in 1992.

### **Overlay zone**

A set of zoning specifications that is imposed on an area, in addition to the underlying zoning district's requirements.

### **Paratransit**

Transit alternative known as *special or specialized* transportation that often includes flexibly scheduled and routed transportation services that use low-capacity vehicles, such as vans, to operate within normal urban transit corridors or rural areas. Services usually cater to the needs of persons who cannot use standard mass transit services. Common patrons are the elderly and persons with disabilities.

### **Park-and-Ride**

Public parking lots whose primary purpose is to provide access to public transportation services. These parking areas may function as shared use parking areas.

#### **Major Park-and-Rides**

Park-and-Rides provide public parking for access to public transportation. In general, this type of Park-and-Ride includes capacity for 100 cars or more. A major Park-and-Ride generally includes buses operating on-site and passenger amenities such as a larger style bus shelter, lighting, and passenger information and may include restrooms for operators. Major Park-and-Rides are not transfer points and usually are on-street bus stops.

**Minor Park-and-Rides**

A minor Park-and-Ride is smaller in scale than a major Park-and-Ride, with capacity for fewer than 100 cars. Buses typically will not operate on-site. Buses may serve the Park-and-Ride via an on-street bus stop, which may include a bus turnout and standard LTD bus shelter adjacent to the bus stop. A minor Park-and-Ride generally is a public parking lot less than two acres in size. These stops are not transfer points and the bus stop is on-street.

**Parking management**

Management strategies designed to address the supply and demand for vehicle parking. They contribute to balancing the travel demand within the region among the modes of transportation.

**Pavement Condition Rating (PCR)**

Pavement condition ratings provide an assessment of pavement condition. Local and state road agencies use a pavement management process that provides, analyzes, and summarizes information for use in selecting and implementing cost-effective pavement construction, rehabilitation, and maintenance programs designed to accommodate current and forecasted traffic.

**Performance measure**

Predetermined indicators monitored during the 20-year life of *TransPlan* as a method of evaluating the plan's effectiveness. To provide numerical targets needed to assess plan progression, *benchmarks* are established for each performance measure at five-year intervals.

**Person trip**

A movement from one address to another by one person by any mode.

**Policy**

Statement adopted as part of a plan to provide a specific course of action that moves the community towards attainment of its goals.

**Regional roadway system**

Streets with classifications of arterial and major collector.

**Single-occupant vehicle (SOV)**

A vehicle, usually referring to a private automobile, that is carrying only one person.

**Special transportation area (STA)**

As defined by the OHP, STAs are designated existing or future compact, mixed-use areas within an urban growth boundary in which growth management considerations outweigh the considerations underlying the highway level-of-service policy. STAs include central business districts, transit-oriented development areas and other activity centers that emphasize non-auto travel. They are high-density areas with an interconnected local street network. They are not located on interstates or limited-access highways and are not encouraged on major designated freight routes.



**State implementation plan (SIP)**

An air quality plan mandated by the Federal Clean Air Act that contains procedures to monitor, control, maintain, and enforce compliance with federal air quality standards.

**Statewide Transportation Improvement Program (STIP)**

Statewide budget and programming document for funding. Required by the ISTEA legislation as a prioritized, fiscally constrained list of transportation projects that covers, at a minimum, a three-year period. STIPs are compiled by the Oregon Department of Transportation in order to program authorized levels of federal funding.

**Systems development charge (SDC)**

A fee collected from new development by local governments to pay for offsite public facility improvements to mitigate impacts associated with development. SDCs are imposed on development projects by local governments to cover the capital costs for certain types of infrastructure and public facilities needed to serve those developments. Under Oregon's SDC Act of 1989, transportation facilities are eligible capital improvements that may be funded by SDCs. Examples include arterial and collector streets; acquisition of street rights-of-way, easements, and other property interests necessary to construct a capital improvement; and traffic control devices.

**Traffic calming**

A variety of techniques designed to reduce the speed and impacts of motor vehicle traffic. It is an attempt to mix the different modes of transportation and to create an efficient mix between them. Examples include road humps, roundabouts, and woonerfs.

**Transit station****Major transit station**

Provides room for three or more buses for customer transfers and facilitate bus operations. A major transit station typically includes a larger facility than minor stations to accommodate passenger transfers (to three or more routes and/or serves major destinations) and may include parking for customers and restrooms for Lane Transit District employees or the public. A major station is usually an off-street facility.

**Minor transit station**

Provides room for two or three buses. Minor transit stations are primarily large bus turnouts near key intersections to facilitate customer transfers (to two to four routes) or bus operations. Minor stations may include parking. Typically, a minor transit station is an on-street facility.

**Transit-oriented development (TOD)**

A mix of residential, retail, and office uses and a supporting network of roads, bicycle, and pedestrian ways focused on a major transit stop designed to support a high level of transit use. The key features of transit-oriented development include:

- A mixed-use center at the transit stop, oriented principally to transit riders and pedestrian and bicycle travel from the surrounding area;
- High density of residential development proximate to the transit stop sufficient to support transit operation and neighborhood commercial uses within the TOD; and

- A network of roads, and bicycle and pedestrian paths to support high levels of pedestrian access within the TOD and high levels of transit use.

### **TransPlan**

The Eugene-Springfield Metropolitan Area Transportation Plan. A 20-year policy document intended to guide regional transportation system planning in the Eugene-Springfield metropolitan area by setting forth goals, policies, and implementation actions.

### **Transportation Demand Management (TDM)**

*Demand-based* techniques that are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity. Methods include the use of alternative modes, ride-sharing and vanpool programs, and trip-reduction ordinances.

### **Transportation disadvantaged**

Persons who must rely on public transit or paratransit services for most of their transportation. Typically refers to individuals without access to a personal vehicle.

### **Transportation improvement program (TIP)**

Required by the ISTEA legislation as a prioritized fiscally constrained list of transportation projects that covers, at a minimum, a three-year period. TIPs are compiled by a metropolitan planning organization in order to program authorized levels of federal funding.

### **Transportation Planning Rule (TPR)**

A state planning administrative rule, adopted by the Land Conservation and Development Commission in 1991 and amended in 1995 and 1998, to implement state land use planning Goal 12, *Transportation*. The TPR requires metropolitan areas to show measurable progress towards reducing reliance on the automobile.

### **Transportation pricing measures**

Market-based user fees used to manage traffic congestion and to partially support financing of future infrastructure and transportation services.

### **Transportation Rule Implementation Project (TRIP)**

Document that contains recommended amendments to the Eugene code to address the requirements of the Transportation Planning Rule. The recommendations were prepared by a multijurisdictional team that consisted of staff from the City of Eugene, Lane County, and Lane Transit District.

### **Transportation System Improvements (TSI)**

Supply side improvements of the transportation system. Strategies include the full range of system improvements from improving the capacity and efficiency of the existing system to the construction or expansion of a new facility. TSI strategies are not limited to improvements for the automobile but also incorporate system improvements, expansion, and construction for transit, bicycles, and pedestrians.

### **Transportation system plan (TSP)**

A plan for one or more transportation facilities that are planned, developed, operated, and maintained in a coordinated manner to supply continuity of movement between modes, and within and between geographic and jurisdictional areas. Specific requirements are detailed in the Transportation Planning Rule.

**Travel forecasting model**

A technique for predicting future human choices in travel by using current travel trends in conjunction with future population, employment, and land use projections.

**Unified Planning Work Program (UPWP)**

An annual document that describes the transportation planning activities for a metropolitan area. ISTEA requires that each metropolitan planning organization develop this document as a prerequisite to obtaining federal planning funds.

**Urban standards**

Standards for all arterial and collector streets that include curb, gutter, underground drainage, and sidewalks, unless otherwise noted. When provisions for bicycles are anticipated, they are specifically mentioned.

**Vehicle miles of travel (VMT)**

Each mile traveled by a private vehicle. For example, one vehicle that makes a five-mile car trip would generate five vehicle miles of travel. A requirement of the state Transportation Planning Rule is to reduce vehicle miles traveled per capita.

**Vehicle trip**

Each time a private vehicle goes from one address to another for a purpose, a vehicle trip is counted, regardless of the number of people in the vehicle.

# List of Acronyms

ACSP	Arterial and Collector Street Plan
ACT	Area Commissions on Transportation
ADA	Americans with Disabilities Act
ADT	Average daily traffic
BRT	Bus Rapid Transit
CAAA	Clean Air Act Amendments of 1990
CATS	Central Area Transportation Study
CIP	Capital improvement program
CO	Carbon monoxide
Decision Package	Policy Makers' Decision Package for Draft Plan Direction
DEQ	Department of Environmental Quality
DLCD	Department of Land Conservation and Development
EPA	U.S. Environmental Protection Agency
EQC	Environmental Quality Commission
ESATS	Eugene-Springfield Area Transportation Study
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HCM	Highway Capacity Manual
HCS	Highway capacity software
HOV	High-occupancy vehicle
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent transportation systems technology
LCDC	Land Conservation and Development Commission
LCOG	Lane Council of Governments
LOS	Level of service
LRAPA	Lane Regional Air Pollution Authority
LTD	Lane Transit District
LUM	Land use measures
Metro Plan	Eugene-Springfield Metropolitan Area General Plan
MIS	Major investment study
MPC	Metropolitan Policy Committee
MPO	Metropolitan Planning Organization
MTIP	Metropolitan Transportation Improvement Program
NAAQS	National Ambient Air Quality Standards
ND	Nodal Development
NHS	National Highway System
O <sub>3</sub>	Ozone
O&M	Operations and maintenance
OM&P	Operations, maintenance, and preservation
OAR	Oregon Administrative Rules
ODOT	Oregon Department of Transportation
OHP	1991 Oregon Highway Plan
ORFS	Oregon Roads Finance Study
OTC	Oregon Transportation Commission
OTP	Oregon Transportation Plan

PCR	Pavement Condition Rating
PM <sub>10</sub>	Particulate matter
RAC	Lane County Roads Advisory Committee
RCI	Roadway Congestion Index
ROW	Right-of-way
SDC	Systems development charge
SHTF	State Highway Trust Fund
SIP	State Implementation Plan
SOV	Single-occupant vehicle
STA	Special transportation areas
STFAC	Special Transportation Fund Advisory Committee
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TCM	Transportation control measure
TDM	Transportation demand management
TEA 21	Transportation Equity Act for the 21 <sup>st</sup> Century
TIP	Transportation improvement program
TMA	Transportation Management Association
TOD	Transit-oriented development
TPC	Transportation Planning Committee
TPR	Transportation Planning Rule
TRIP	Transportation Rule Implementation Project
TSI	Transportation system improvements
TSP	Transportation system plan
TUF	Transportation utility fee
UGB	Urban growth boundary
UPWP	Unified Planning Work Program
V/C	Volume to capacity
VMT	Vehicle miles of travel

# Appendix F: *Metro Plan* Text Amendments

## Table of Contents

Introduction.....	1
Part 1: Metro Plan Section F: Transportation Element.....	2
Goals.....	3
Land Use.....	3
Transportation Demand Management.....	6
Transportation System Improvements: System-Wide.....	7
Transportation System Improvements: Roadways.....	8
Transportation System Improvements: Transit.....	10
Transportation System Improvements: Bicycle.....	11
Transportation System Improvements: Pedestrian.....	11
Transportation System Improvements: Goods Movement.....	12
Transportation System Improvements: Other Modes.....	13
Finance.....	13
Part 2: Metro Plan Other Amendments.....	16
Chapter I: Introduction.....	16
Chapter II: Plan Principles.....	16
Chapter III: Specific Elements.....	19
Chapter V: Glossary.....	23

## Introduction

The portions of the *Metro Plan* that will be amended concurrent with the adoption of *TransPlan* are:

1. **Metro Plan Section F: Transportation Element.** The entire transportation element—including the Introduction, Findings, Goals, Objectives, and Policies—will be revised to reflect the update of *TransPlan*.
2. **Metro Plan Section E: The Plan Diagram.** This section will be amended to include new *Metro Plan* diagram designations to implement nodal development.
3. **Metro Plan Other Amendments.** Amendments to other sections of the *Metro Plan* for consistency with the revised Transportation Element.
4. **Capital Investment Project List.** As required by state administrative rule, the final, fiscally constrained 20-year project list will be incorporated into the *Metro Plan* by policy. The draft Capital Investment Action project list is provided in Chapter 3 of the draft *TransPlan*.

The *Metro Plan* Transportation Element and Other Amendments are presented below.

# Part 1: Metro Plan Section F: Transportation Element

Chapter III-F, Transportation Element of the *Eugene-Springfield Metropolitan Area General Plan (Metro Plan)*, is replaced with a new Chapter III-F to read as follows:

## F. Transportation Element

The Transportation Element addresses surface and air transportation in the metropolitan area. *TransPlan*, the *Eugene-Springfield Metropolitan Area Transportation Plan*, provides the basis for the surface transportation portions of this element and the *Eugene Airport Master Plan* provides the basis for the air transportation portions.

*TransPlan* guides regional transportation system planning in the metropolitan area for a 20-year period and serves the transportation planning needs of the projected population of 296,500. *TransPlan* establishes the framework upon which all public agencies can make consistent and coordinated transportation planning decisions. Goals and policies in *TransPlan* are contained in this Transportation Element and are part of the adopted *Metro Plan*. *TransPlan* project lists and project maps are also adopted as part of the *Metro Plan*.

This element complies with State Transportation Goal 12, “To provide and encourage a safe, convenient, and economic transportation system.” Three types of transportation planning strategies are reflected in the goals and policies in this element: Transportation demand management (TDM), land use, and system improvements. TDM strategies focus on reducing demands placed on the transportation system, and thus system costs, by providing incentives to redistribute or eliminate vehicle trips and by encouraging alternative modes. Land use strategies focus on encouraging development patterns that reduce the need for automobiles, reduce trip lengths, and support the use of alternative modes. System improvements focus on increasing efficiency and adding capacity or new facilities to the existing highway, transit, bicycle, and pedestrian systems.

Together, these strategies form a balanced policy framework for meeting local and state transportation goals to: increase urban public transit ridership; reduce reliance on the automobile; substitute automobile trips with alternative modes, such as walking and biking; and reduce automobile energy consumption and transportation costs. Consistent with this approach, the policies in this element are presented in the following categories:

1. Land Use
2. Transportation Demand Management
3. Transportation System Improvements
  - a) System-Wide
  - b) Roadways
  - c) Transit
  - d) Bicycle
  - e) Pedestrian

- f) Goods Movement
  - g) Other Modes
4. Finance

Not all Transportation Element policies will apply to a specific transportation-related decision. When conformance with adopted policy is required, policies in this and other *Metro Plan* elements will be examined to determine which policies are relevant and can be applied. When policies support varying positions, decision makers will seek a balance of all applicable policies. Goals are timeless, but some policies will expire as they are implemented.

## Goals

1. Provide an integrated transportation and land use system that supports choices in modes of travel and development patterns that will reduce reliance on the automobile and enhance livability, economic opportunity, and the quality of life.
2. Enhance the Eugene-Springfield metropolitan area's quality of life and economic opportunity by providing a transportation system that is:
  - a) Balanced,
  - b) Accessible,
  - c) Efficient,
  - d) Safe,
  - e) Interconnected,
  - f) Environmentally responsible,
  - g) Supportive of responsible and sustainable development,
  - h) Responsive to community needs and neighborhood impacts, and
  - i) Economically viable and financially stable.

## Land Use

### Findings

1. The *Oregon Transportation Plan (OTP)* (1992) states that Oregon's land use development patterns have tended to separate residential areas from employment and commercial centers, requiring people to drive almost everywhere they go; that the results have been increased congestion, air pollution, and sprawl in the metropolitan areas and diminished livability; that these auto-dependent land use patterns limit mobility and transportation choices; and that reliance on the automobile has led to increased congestion, travel distances, and travel times.



2. Studies annotated in the *Land Use Measures Task Force Report Bibliography* have found that land use development patterns have an impact on transportation choices; that separation of land uses and low-density residential and commercial development over large areas makes the distance between destinations too far apart for convenient travel by means other than a car; and that people who live in neighborhoods with grid pattern streets, nearby employment and shopping opportunities, and continuous access to sidewalks and convenient pedestrian crossings tend to make more walking and transit trips.
3. The *Oregon Highway Plan* (OHP)(January 1999) states that focusing growth on more compact development patterns can benefit transportation by: reducing local trips and travel on state highways; shortening the length of many vehicle trips; providing more opportunities to walk, bicycle, or use available transit services; increasing opportunities to develop transit, and reducing the number of vehicle trips to shop and do business.
4. OTP policies emphasize reducing reliance on the automobile and call for transportation systems that support mixed-land uses, compact cities, and connections among various transportation modes to make walking, bicycling, and the use of public transit easier. The OTP provides that the state will encourage and give preference to projects and grant proposals that support compact or infill development or mixed use projects. The OTP also contains actions to promote the design and development of infrastructure and land use patterns that encourage alternatives to the single-occupant automobile.
5. The Oregon Transportation Planning Rule (TPR) [OAR 660-012-0060 (1)(c,d)(5)] encourages plans to provide for mixed-use, pedestrian-friendly development, based on information that documents the benefits of such development and the Land Conservation and Development Commission's policy interest in encouraging such development to reduce reliance on the automobile. The rule [OAR 660-012-0045 (4)(a and e)] requires local governments to adopt land use regulations that allow transit-oriented developments on lands along transit routes and require major developments to provide either a transit stop on site or connection to a transit stop when the transit operator requires such an improvement. The rule [OAR 660-012-0045 (3) ] also requires local governments to adopt land use regulations that provide for safe and convenient pedestrian and bicycle access within new developments and from these developments to adjacent residential areas and transit stops and to neighborhood activity centers.
6. A 24-member Citizen Task Force, representing a broad range of interests in the Eugene-Springfield area, created, evaluated, and refined the nodal development land use strategy over a seven-month period as part of the update of *TransPlan*. The Task Force intended the strategy to encourage development patterns that will support a multi-modal transportation system.

7. Nodal development is consistent with the policy direction of Policy 1B of the OHP to coordinate land use and transportation decisions to efficiently use public infrastructure investments to:
  - Maintain the mobility and safety of the highway system;
  - Foster compact development patterns in communities;
  - Encourage the availability and use of transportation alternatives; and
  - Enhance livability and economic competitiveness.
8. Nodal development is consistent with the Special Transportation Area designation defined in the draft OHP. The designation is intended to guide planning and management decisions for state highway segments inside nodal development areas.
9. Nodal development supports the fundamental principles, goals, and policies of the adopted *Metro Plan* to achieve compact urban growth, increase residential densities, and encourage mixed-use developments in designated areas. The *Land Use Measures Strategies Document* found that nodal development also supports increased use of alternative modes of transportation and increased opportunities for people to live near their jobs and to make shorter trips for a variety of purposes.
10. Based on an analysis of the *Regional Travel Forecasting Model* results, an overall outcome of nodal development implementation will be that the percentage of person trips under one mile can be increased to approximately 15.9 percent of all trips; and, on a regional basis, that trip lengths will be slightly shorter in 2015 than under existing conditions, due, in part, to reduced trip lengths within nodal development areas.
11. Based on an analysis of the *Regional Travel Forecasting Model* results, investments in non-auto modes, particularly Bus Rapid Transit (BRT), and implementation of nodal development strategies will improve transportation choices by helping to increase the percentage of non-auto trips from 14.4% to 17.0% by the year 2015. Increases in the percentage of households and workers with access to ten-minute transit service will result in a 49 percent increase in the percent of trips taken by bus.
12. The *Market Demand Study for Nodal Development* (ECONorthwest and Leland Consulting Group, 1996) recommended that the public strategy for nodal development should be flexible and opportunistic and include use of financial incentives, targeted infrastructure investments, public-private partnerships, and an inviting administrative atmosphere.
13. During the public review of the nodal development strategy, many comments were received that identified the need for incentives for developers, builders, property owners, and neighborhoods to ensure that nodal developments would be built consistent with design guidelines. The type of support and incentives suggested ranged from public investments in infrastructure to technical assistance and economic incentives.

## Policies

- F-1. Apply the nodal development strategy in areas selected by each jurisdiction that have identified potential for this type of transportation-efficient land use pattern.<sup>1</sup>
- F-2. Support application of the nodal development strategy in designated areas through information, technical assistance, or incentives.
- F-3. Provide for transit-supportive land use patterns and development, including higher intensity, transit-oriented development along major transit corridors and near transit stations; medium- and high-density residential development within ¼ mile of transit stations, major transit corridors, employment centers, and downtown areas; and development and redevelopment in designated areas that are or could be well served by existing or planned transit.
- F-4. Require improvements that encourage transit, bicycles, and pedestrians in new commercial, public, mixed-use, and multi-unit residential development.
- F-5. Within three years of TransPlan adoption, apply the ND, Nodal Development, designation to areas selected by each jurisdiction, adopt and apply measures to protect designated nodes from incompatible development and adopt a schedule for completion of nodal plans and implementing ordinances.

## Transportation Demand Management

### Findings

- 14. TDM addresses federal *Transportation Equity Act for the 21<sup>st</sup> Century* (TEA 21) and state TPR requirements to reduce reliance on the automobile, thus helping to postpone the need for expensive capital improvements. The need for TDM stems from an increasing demand for and a constrained supply of road capacity, created by the combined effects of an accelerated rate of population growth (41% projected increase from 1995 to 2015) and increasing highway construction costs; for example, the City of Eugene increased the transportation systems development charge by a total of 15 percent to account for inflation from 1993-1996.
- 15. The *Regional Travel Forecasting Model* estimates that average daily traffic on most major streets is growing by 2-3 percent per year. Based on *1994 Commuter Pack Survey* results, half of the local residents find roads are congested at various times of the day; and the vast majority finds roads are congested during morning and evening rush hours.
- 16. The *COMSIS TDM Strategy Evaluation Model*, used in August 1997 to evaluate the impact of TDM strategies, found that vehicle miles traveled (VMT) and vehicle trips are reduced up to 3 percent by voluntary strategies (e.g., employer-paid bus pass program) and up to 10 percent by mandatory strategies (e.g., mandatory employer support); that

---

<sup>1</sup> See Glossary for definitions of nodal development.  
*TransPlan*

requiring employers to increase the cost of employee parking is far more effective than reducing employee transit costs; and that a strong package of voluntary strategies has a greater impact on VMT and vehicle trips than a weak package of mandatory strategies.

17. Transit system ridership has increased 53 percent since the first group pass program was implemented in 1987 (with University of Oregon students and employees).
18. The OHP recognizes that TDM strategies can be implemented to reduce trips and impacts to major transportation facilities, such as freeway interchanges, postponing the need for investments in capacity-increasing projects.
19. *An Evaluation of Pricing Policies for Addressing Transportation Problems* (ECONorthwest, July 1995) found that implementation of congestion pricing in the Eugene-Springfield area would be premature because the level of public acceptance is low and the costs of implementation are substantial; and that parking pricing is the only TDM pricing strategy that would be cost-effective during the 20-year planning period.

## **Policies**

- F-6. Expand existing TDM programs and develop new TDM programs. Establish TDM bench marks and if the bench marks are not achieved, mandatory programs may be established.
- F-7. Increase the use of motor vehicle parking management strategies in selected areas throughout the Eugene-Springfield metropolitan area.
- F-8. Implement TDM strategies to manage demand at congested locations.

## **Transportation System Improvements: System-Wide**

### **Findings**

20. The number of vehicles, VMT, and use of the automobile are all increasing while use of alternatives is decreasing. Between 1970 and 1990, the number of vehicles in Lane County increased by 83 percent, while the number of households increased by 62 percent. Between 1980 and 1990, VMT grew at a rate seven times that of the population growth. The *Regional Travel Forecasting Model* projects that, by the year 2015, without implementation of proposed *TransPlan* projects, non-commercial VMT will increase 52 percent while the percentage who bike will drop from 3.7% to 3.3%, walk from 8.9% to 7.9%, and the percentage who bus will increase only slightly from 1.8% to 1.9%.
21. The OHP recognizes that access management strategies can be implemented to reduce trips and impacts to major transportation facilities, such as freeway interchanges, and that communities with compact urban designs that incorporate a transportation network of arterials and collectors will reduce traffic impacts on state highways, postponing the need for investments in capacity-increasing projects.

22. OHP policy supports investment in facilities that improve intermodal linkages as a cost-effective means to increase the efficient use of the existing transportation system.
23. Current literature and research speaks to the relationship between street design and travel behavior, finding that neighborhood impacts, such as through-traffic and speeding on neighborhood streets, are affected by street design. For example, research by Richard Dowling and Steven Colman reported in the article, *Effects Of Increased Highway Capacity: Results of a Household Travel Behavior Survey* (1998) found that drivers' number one preferred response to congestion was to find a faster route if the current one becomes congested; and Calthorpe and Duany/Platter-Zybecks and Anton Nelleson have found that the layout and design of buildings and streets will influence user behavior and that streets can be designed to reduce travel speeds and reduce cut-through trips.

## **Policies**

- F-9 Adopt by reference, as part of the *Metro Plan*, the 20-Year Capital Investment Actions project lists contained in *TransPlan*. Project timing and estimated costs are not adopted as policy.
- F-10. Protect and manage existing and future transportation infrastructure.
- F-11. Develop or promote intermodal linkages for connectivity and ease of transfer among all transportation modes.
- F-12. Preserve corridors, such as rail rights-of-way, private roads, and easements of regional significance, that are identified for future transportation-related uses.
- F-13. Support transportation strategies that enhance neighborhood livability.

## **Transportation System Improvements: Roadways**

### **Findings**

24. The *Regional Travel Forecasting Model* forecasted increased traffic congestion on roadways over the next 20 years, ranging from almost two to over four times the existing congestion levels.
25. Level of service (LOS) standards are a nationally accepted means for measuring the performance of roadway facilities. LOS analysis methods are standardized through the Transportation Research Board's *Highway Capacity Manual*.
26. The OHP establishes performance standards for all state highways in Oregon. OAR 660-012-0015 requires coordination of transportation system plans with the state.

### **Policies**

F-14. Address the mobility and safety needs of motorists, transit users, bicyclists, pedestrians, and the needs of emergency vehicles when planning and constructing roadway system improvements.

F-15. Motor vehicle level of service policy:

1. Use motor vehicle level of service standards to maintain acceptable and reliable performance on the roadway system. These standards shall be used for:
  - a) Identifying capacity deficiencies on the roadway system.
  - b) Evaluating the impacts on roadways of amendments to transportation plans, acknowledged comprehensive plans and land-use regulations, pursuant to the TPR (OAR 660-12-0060).
  - c) Evaluating development applications for consistency with the land-use regulations of the applicable local government jurisdiction.
2. Acceptable and reliable performance is defined by the following levels of service under peak hour traffic conditions: LOS E within Eugene's Central Area Transportation Study (CATS) area, and LOS D elsewhere.
3. Performance standards from the OHP shall be applied on state facilities in the Eugene-Springfield metropolitan area.

In some cases, the level of service on a facility may be substandard. The local government jurisdiction may find that transportation system improvements to bring performance up to standard within the planning horizon may not be feasible, and safety will not be compromised, and broader community goals would be better served by allowing a substandard level of service. The limitation on the feasibility of a transportation system improvement may arise from severe constraints including but not limited to environmental conditions, lack of public agency financial resources, or land use constraint factors. It is not the intent of TSI Roadway Policy #2: Motor Vehicle Level of Service to require deferral of development in such cases. The intent is to defer motor vehicle capacity increasing transportation system improvements until existing constraints can be overcome or develop an alternative mix of strategies (such as: land use measures, TDM, short-term safety improvements) to address the problem.

F-16. Promote or develop a regional roadway system that meets combined needs for travel through, within, and outside the region.

F-17. Manage the roadway system to preserve safety and operational efficiency by adopting regulations to manage access to roadways and applying these regulations to decisions related to approving new or modified access to the roadway system.

# Transportation System Improvements: Transit

## Findings

27. The *1990 U.S. Census of Population* reported that about 10 percent of all households in the Eugene-Springfield area did not own a vehicle.
28. Transit services are particularly important to the transportation disadvantaged population: persons who are limited in meeting their travel needs because of age, income, location, physical or mental disability, or other reasons. The Americans with Disabilities Act (ADA) requires fixed-route systems like LTD's to provide a comparable level of service to the elderly and persons with disabilities who are unable to successfully use the local bus service. LTD's *Americans with Disabilities Act Paratransit Plan, 1994-1995 Update*, January 18, 1995, was found to be in full compliance with the ADA by the Federal Transit Administration.
29. The role of urban public transit in meeting trip needs has increased within the metropolitan area since 1970. In 1971, there were 2,260 LTD passenger trips on a weekday and, in 1995, ridership had increased to 20,000 per day, or 1.8% of all metropolitan trips. The Regional Travel Forecasting Model forecasts transit use to increase to 2.7% of trips by 2015 with proposed *TransPlan* projects and policy implementation.
30. The *Urban Rail Feasibility Study Eugene/Springfield Area* (July 1995) concluded that projected 2015 ridership for an urban rail system was too low to be competitive with other cities seeking federal rail transit funding; and that Bus Rapid Transit (BRT) could significantly improve transit service for substantially less capital investment and lower operational costs than urban rail.
31. OHP policy supports investment in Park-and-Ride facilities as a cost-effective means to increase the efficient use of the existing transportation system.

## Policies

- F-18. Improve transit service and facilities to increase the system's accessibility, attractiveness, and convenience for all users, including the transportation disadvantaged population.
- F-19. Establish a BRT system composed of frequent, fast transit service along major corridors and neighborhood feeder service that connects with the corridor service and with activity centers, if the system is shown to increase transit mode split along BRT corridors, if local governments demonstrate support, and if financing for the system is feasible.
- F-20. Implement traffic management strategies and other actions, where appropriate and practical, that give priority to transit and other high occupancy vehicles.
- F-21. Expand the Park-and-Ride system within the metropolitan area and nearby communities.

## **Transportation System Improvements: Bicycle**

### **Findings**

32. In 1995, there were 126 miles of bikeways in the metropolitan area. Implementation of proposed *TransPlan* projects would approximately double the lane miles for bicycles.
33. Over the past 20 years, Eugene and Springfield have built an extensive bikeway system. The focus over the next 20 years is on the construction of “Priority Bikeway Projects” which consist of those projects that are along an essential core route on which the overall system depends, fill in a critical gap in the existing bicycle system, or overcome a barrier where no other nearby existing or programmed bikeway alternatives exist, or significantly improve bicycle users safety in a given corridor.
34. OAR 660-012-0045 (3) requires local governments to adopt land use regulations to require bikeways along new and reconstructed arterial and major collector streets and to connect new development with nearby neighborhood activity centers and major destinations.

### **Policies**

- F-22. Construct and improve the region’s bikeway system and provide bicycle system support facilities for both new development and redevelopment/expansion.
- F-23. Require bikeways along new and reconstructed arterial and major collector streets.
- F-24. Require bikeways to connect new development with nearby neighborhood activity centers and major destinations.
- F-25. Give funding priority (ideally within the first 3 to 5 years after adoption of *TransPlan*, subject to available funding) to stand-alone bikeway projects that are included in the definition of “Priority Bikeway Miles” and that increase the use of alternative modes.

## **Transportation System Improvements: Pedestrian**

### **Findings**

35. OAR 660-012-0045 (3) requires local governments to adopt land use regulations to provide for a pedestrian environment that is well integrated with adjacent land uses and designed to enhance the safety, comfort, and convenience of walking; a continuous pedestrian network with reasonably direct travel routes between destination points; and sidewalks along urban arterial and collector roadways, except freeways.

### **Policies**



- F-26. Provide for a pedestrian environment that is well integrated with adjacent land uses and is designed to enhance the safety, comfort, and convenience of walking.
- F-27. Provide for a continuous pedestrian network with reasonably direct travel routes between destination points.
- F-28. Construct sidewalks along urban area arterial and collector roadways, except freeways.

## **Transportation System Improvements: Goods Movement**

### **Findings**

- 36. The OTP recognizes that goods movement of all types makes a significant contribution to the region's economy and wealth and contributes to residents' quality of life. OTP Policy 3A promotes a balanced freight transportation system that takes advantage of the inherent efficiencies of each mode.
- 37. There are no maritime port or navigation facilities in the metropolitan area.
- 38. Goods movement is directly supported by system-wide and roadway transportation system improvements.

### **Policies**

- F-29. Support reasonable and reliable travel times for freight/goods movement in the Eugene-Springfield region.

## Transportation System Improvements: Other Modes

### Findings

39. The Eugene Airport is located outside the urban growth boundary (UGB) to protect it from incompatible development as well as to reduce airport-related impacts on development within the UGB. The area of the airport designated Government and Education on the *Metro Plan* diagram receives municipal water, wastewater, fire, and police services.
40. The *Pacific Northwest High Speed Rail Southern Terminus Study* (Wilbur Smith Associates, 1995) found that rail-related infrastructure improvements needed along the corridor include improved signals, grade crossings, track, and depots. These improvements are important to the success of high speed rail because Eugene-Springfield is the southern terminus to the high speed rail corridor.
41. OTP Policy 1F provides for a transportation system with connectivity among modes within and between urban areas, with ease of transfer among modes and between local and state transportation systems.

### Policies

- F-30. Support public investment in the Eugene Airport as a regional facility and provide land use controls that limit incompatible development within the airport environs. Continue to use the *Eugene Airport Master Plan* as the guide for improvements of facilities and services at the airport.
- F-31. Support provision of rail-related infrastructure improvements as part of the Cascadia High Speed Rail Corridor project.
- F-32. Support improvements to the passenger rail station and inter-city bus terminals that enhance usability and convenience.

## Finance

### Findings

42. Transportation costs are rising while revenues are shrinking and this trend is expected to continue. The 1999 Oregon Highway Plan estimated total 20-year highway needs of about \$29 billion, but projected revenues of only about \$14 billion.
43. *TransPlan* estimates that operations, maintenance, and preservation (OM&P) of the metropolitan transportation system will cost \$1.266 billion in 1997 dollars to maintain at current levels to the year 2021. Revenues for OM&P, including a regularly increasing state gas tax and federal forest receipts at current non-guaranteed levels after the guarantee expires, are estimated at \$1.031 billion, leaving a conservative estimated

shortfall of about \$235 million over the planning period before the implementation of fiscal constraint strategies.

44. The projects proposed in *TransPlan* demonstrate that nearly all of the region's travel over the next 20 years will rely on existing streets, highways, and bicycle and pedestrian facilities, emphasizing the importance of preservation and maintenance of these facilities.
45. Historically, the State Highway Trust Fund (SHTF) and federal Forest Receipts, significant sources of transportation revenues, have funded OM&P of the regional transportation system. Currently, SHTF revenues are not increasing with inflation and federal Forest Receipts are declining.
46. According to estimates prepared for the *TransPlan* Finance Committee, about 130 miles of roads (about 15 percent of the system) are currently in need of either resurfacing or reconstruction with an estimated cost of \$61 million in 1995 dollars.
47. Funding allocations of State cigarette tax revenues designated for special need transit services are guided by the Special Transportation Fund Advisory Committee as per ORS 391.800-391.830 and OAR 732-05, 732-10, 732-20 governing the Special Transportation Fund Program.
48. Currently, systems development charge (SDC) methodologies charge new development only for the city's portion of the arterial-collector system; metro area state and county facilities are excluded from the calculation of SDC rates; and assessments only partially fund projects that are improving existing facilities to urban standards.
49. Focus groups convened during the *TransPlan* update process expressed the preference for mixed-use development to be encouraged and facilitated rather than required. Offering financial incentives and other support for nodal development is consistent with focus groups responses.
50. Under the TEA 21, 10 percent of Surface Transportation Program funds allocated to the state must be used for transportation enhancement activities, including construction of facilities for bicycles and pedestrians, but a local match is required. State funding for bikeways is primarily limited to Oregon Department of Transportation (ODOT) Highway Funds, which are used mainly for adding bicycle lanes to existing and new streets, but may be used for other bicycle projects in the right-of-way. Local jurisdictions may also fund bikeways through the local road construction and maintenance budget and from general funds, park district funds, special bond levies, and SDCs. Regarding transit, *TransPlan* anticipates that discretionary federal grant funds will pay for up to 80 percent of the capital cost of the BRT system, based on trends in federal funding for LTD capital projects over the last ten years.

## **Policies**

- F-33. Support development of a stable and flexible transportation finance system that provides adequate resources for transportation needs identified in *TransPlan*.

- F-34. Operate and maintain transportation facilities in a way that reduces the need for more expensive future repair.
- F-35. Set priorities for investment of ODOT and federal revenues programmed in the region's Transportation Improvement Program to address safety and major capacity problems on the region's transportation system.
- F-36. Require that new development pay for its capacity impact on the transportation system.
- F-37. Consider and include among short-term project priorities, those facilities and improvements that support mixed-use, pedestrian-friendly nodal development, and increased use of alternative modes.
- F-38. The City of Eugene will maintain transportation performance and improve safety by improving system efficiency and management before adding capacity to the transportation system under Eugene's jurisdiction. (Eugene-Specific finance policy)

## Part 2: Metro Plan Other Amendments

The following sections of the *Eugene-Springfield Metropolitan Area General Plan (Metro Plan)* are amended in order to be consistent with the findings and policies of the Transportation Element. These revisions are listed in order as they appear in the *Metro Plan*. They are indicated by chapter, section, and page number of the July 1997 reprint of the 1987 *Metro Plan*. Deletions to the text are shown in strike-out and additions are in bold.

### Chapter I: Introduction

#### B. Purpose

Amend the following text starting on page I-1, sixth paragraph:

“More specifically, the *General Plan Metro Plan* provides the overall framework for the following planning functions. The Plan: ...

11. Identifies the major transportation, ~~sanitary wastewater, and stormwater, sewer,~~ and water projects needed to serve a future population of ~~293,700~~ **301,400.**”

### Chapter II: Plan Principles

#### A. Metropolitan Goals

Amend Section A by replacing the transportation goals with new transportation goals from the proposed Transportation Element, as follows (page II-A-2):

##### Transportation

~~Provide for a more balanced transportation system to give mobility to all segments of the community.~~

~~Serve the existing and future arrangement of land uses with efficient safe, convenient, and economic transportation systems for the movement of people and goods.”~~

**“Provide an integrated transportation and land use system that supports choices in modes of travel and development patterns that will reduce reliance on the automobile and enhance livability, economic opportunity, and the quality of life.**

**Enhance the Eugene-Springfield metropolitan area's quality of life and economic opportunity by providing a transportation system that is:**

- j) Balanced,**
- k) Accessible,**
- l) Efficient,**
- m) Safe,**
- n) Interconnected,**
- o) Environmentally responsible,**
- p) Supportive of responsible and sustainable development,**
- q) Responsive to community needs and neighborhood impacts, and**
- r) Economically viable and financially stable.”**

**B. Growth Management and the Urban Service Area**

Move the following existing Transportation Element Policy 17 (page III-F-7) to B. Growth Management and the Urban Service Area, Policy 32 (page II-B-9):

“~~17.~~ **32.** If expansion of the urban growth boundary is contemplated, all other options should be considered and eliminated before consideration of expanding the urban growth boundary in the area west of Highway 99 and north of Royal Avenue.”

**E. The Plan Diagram**

1. Delete the following text in Section II.E.1. referring to floating nodes (page II-E-3, second paragraph):

~~“In addition, several 10- to 30-acre medium-density residential designations are shown as "floating nodes" with related commercial facilities. This designation reflects statements in the Residential Land Use and Housing, Energy, and Transportation elements directed to the provision of a variety of housing densities, types, and locations and linkage of medium-density housing with urban public transit. Where these "floating nodes" are shown at intersecting arterial streets, they may actually occur on one or more quadrants of the intersection, as determined by local decisions. Where they appear in the midst of otherwise low-density residential neighborhoods, their actual locations require local analysis.”~~

2. Delete the following Section II.E.2.c (page II-E-4):

~~“**c. Floating Node**~~

~~Floating nodes are intended to accommodate a portion of the forecasted demand for commercial land. These nodes are also intended to facilitate achievement of the energy and transportation policies of the *Plan* by encouraging, whenever possible, medium-density residential development adjacent to or surrounding commercial development. The commercial portion of the node may range in scale from neighborhood commercial to community commercial (e.g., 5-20 acres), depending upon the geographic area to be served by the floating node.~~

~~Land designated for commercial and residential uses does not need to be developed simultaneously. The exact location of floating nodes shall be determined by local decisions or a refinement planning process.~~

~~The process for establishment of a floating node must include the following elements:~~

- ~~(1) — identification of the primary geographic area intended to be served by the commercial center;~~
- ~~(2) — an inventory of commercial area/uses presently existing within the primary geographic area; and~~
- ~~(3) — identification of the amount and location of area planned for medium-density residential uses (area[s] for medium density residential use must be shown unless precluded by other *Plan* Policies or absence of available land).~~

~~The identification of a floating node through a refinement plan or other local decision shall be based on the following criteria:~~

- ~~(1) — applicable goals, policies, and background information of the *Metropolitan Plan*;~~
- ~~(2) — applicable refinement and functional plans;~~
- ~~(3) — any applicable provisions of the Capital Improvement Program;~~
- ~~(4) — depending upon the scale of the floating node, consistency with either the locational criteria for neighborhood commercial facilities or community commercial centers as described in the *Plan*; and~~
- ~~(5) — commercial uses are located in an area served by at least a minor arterial street, in accordance with the transportation and energy goals and policies in items 1 and 2 above. The commercial uses can front on a street classified at least as a minor arterial. The conflicts with traffic movement on the arterial can be minimized by the use of frontage roads, side streets, and properly located direct access.” (Page II E 5)~~

3. Add the following text to insert “Nodal Development Area” as a plan designation in a new Section II.E.4 and renumber subsequent sections accordingly (page II-E-10):

#### **“Nodal Development Area (Node)**

**Areas identified as nodal development areas in *TransPlan* are considered to have potential for this type of land use pattern. Other areas, not proposed for nodal development in *TransPlan*, may be determined to have potential for nodal development.**

**Nodal development is a mixed-use pedestrian-friendly land use pattern that seeks to increase concentrations of population and employment in well-defined areas with good transit service, a mix of diverse and compatible land uses, and public and private improvements designed to be pedestrian and transit oriented.**

**Fundamental characteristics of nodal development require:**

- **Design elements that support pedestrian environments and encourage transit use, walking and bicycling;**
- **A transit stop which is within walking distance (generally ¼ mile) of anywhere in the node;**
- **Mixed uses so that services are available within walking distance;**
- **Public spaces, such as parks, public and private open space, and public facilities, that can be reached without driving; and**
- **A mix of housing types and residential densities that achieve an overall net density of at least 12 units per net acre.”**

4. Add the following to the text for the Legend Block on the *Metro Plan* Diagram (Page II-E-18):

“**ND – Nodal Development**” (with ND inside a polygon, but no color to allow underlying designation to show through.)

## Chapter III: Specific Elements

### B. Economic Element

1. Amend Finding 13 as follows (page III-B-3):

“13. Major employment ~~centers~~ **areas** include the Eugene and Springfield central business districts, the University of Oregon **area**, Sacred Heart Hospital, ~~the Southern Pacific railyards~~, the west Eugene industrial area, the ~~east~~ **north** and south Springfield industrial areas, the Highway 99N industrial area, ~~Goodpasture Island~~, **Country Club Road, Chad Drive**, and the Mohawk-Northgate area.”

2. Amend Policy 18, as follows (page III-B-5):

“18. Encourage the development of transportation facilities which would improve access to industrial and commercial areas and improve freight movement capabilities by implementing the policies and projects in the *Eugene-Springfield Metropolitan Area Transportation Plan (TransPlan)* and the ~~Mahlon Sweet Field Eugene Airport Master Plan.~~, ~~as outlined in Chapter 8(a), "On Airport Land Use."~~



3. Delete Policy 13 referring to floating nodes (page III-B-7).

~~“30. The City of Eugene shall initiate refinement plans to determine the type and location of commercial and residential land uses in floating nodes prior to the update of the *Metropolitan Plan* (note: this Policy does not preclude privately initiated refinement plans for the purpose of establishing floating nodes).”~~

### C. Environmental Resources Element

1. Amend the following finding as follows (page III-C-6).

~~“32. Federal Highway Administration noise standards apply to new highway construction, not existing streets. whenever federal funds are used in the construction or reconstruction of a highway. A noise study is required if the construction will add a through-lane of traffic or significantly alter either the horizontal or vertical alignment of the highway. The significance of a change in alignment has to do with the effect that the alignment change has on noise levels. State funded ODOT projects are generally developed in conformance with the federal noise standards. US Housing and Urban Development noise standards apply only to federally assisted housing near existing and proposed highways. The State of Oregon does not have noise standards governing general highway noise levels.”~~

2. Delete Finding 33 (page III-C-6).

~~“33. Forecasted traffic on existing and planned streets indicate 20 miles of existing streets and 40 miles of streets in year 2000 have the potential to exceed noise levels for sensitive land uses such as residences, parks, schools, and hospitals.”~~

3. Replace Finding 34 and with the following text (page III-C-6).

~~“34. As population growth occurs, the associated increase in emissions of carbon monoxide and particulate matter from auto exhaust and residential heating with wood, combined with all the other sources, may eventually cause air quality standards for these pollutants to be exceeded in the metropolitan area. Under these conditions, additional control measures may be necessary. These mitigating measures could include, for example, maximizing efficient traffic flow through critical areas, additional control requirements on existing stationary and mobile sources of emissions, and restricting certain new sources of emissions.”~~

**“34. The Eugene-Springfield area is currently in compliance with national standards for carbon monoxide. The region will continue to be in compliance with the carbon monoxide standard in the future. Vehicle fleet turnover and stricter emission controls on newer vehicles are factors that will contribute to lower emissions in the future.”**

4. Delete Finding 35 (page III-C-6).

~~“35. Transportation related air pollution in the form of emissions from autos, trucks, and buses contributes significantly to the metropolitan area's air quality problems.”~~

D. Willamette River Greenway Element

1. Amend the introductory text, as follows (page III-D-1).

In the metropolitan area, a large portion of land within the Greenway is in public ownership or public parks such as Mount Pisgah, Skinner's Butte, Alton Baker, and Island Park. Future proposed park acquisitions, such as the Goodpasture Island gravel ponds, will further expand the opportunity for public access and enjoyment of the river area. The three jurisdictions cooperated in the development of a bicycle-pedestrian trail system that extends along the Greenway from south of Springfield to north of Eugene and into the River Road area. This system includes ~~three~~ **five** bike bridges across the river.”

E. Environmental Design Element

1. Delete Policy 9 (page III-E-4).

~~“9. Refinement Plans shall be developed to address compatibility of land uses, safety, crime prevention, and visual impact along arterial and collector streets, within mixed use areas. During the interim period before the adoption of a refinement plan, these considerations shall be addressed by cities in approving land use applications in mixed use areas by requiring conditions of approval where necessary.”~~

G. Public Utilities, Services, and Facilities Element

1. Combine the following existing Transportation Element Policies 9 and 10 (page II-F-6) as one policy, amend as follows, and move to the Public Utilities, Services and Facilities Element, creating Policy 24 (page III-G-7).

~~“9.~~ **24.** The **Eugene Airport Mahlon Sweet Field** shall be served with the necessary urban services required to operate the airport as an urban facility. ~~10.~~ Development ~~within the airport environs but outside the airport proper and outside the urban service area~~ **outside the urban growth boundary in the vicinity of the airport, outside the portion of the airport boundary designated Government and Education in the Metro Plan diagram,** shall not be provided **with** urban services.”

## H. Parks and Recreation Facilities Element

1. Delete reference to Neighborhood Centers in the introductory text and renumber subsequent park types accordingly (page III-H-1).

### ~~6. Neighborhood Centers~~

~~Neighborhood centers, some of which are community schools, emphasize social, civic, and educational programs for young people and adults.”~~

2. Delete Finding 3.e. and re-letter subsequent items in this finding (page III-H-3).

~~“e. Based on NRPA standards, there is a deficiency of neighborhood centers.”~~

3. Amend Policy 5 as follows (page III-H-5)

~~“5. Develop mechanisms and processes by which residents of an area to be served by a neighborhood park, neighborhood center, or play lot can participate in the design, development, and maintenance of the facility.”~~

## K. Citizen Involvement Element

1. Amend Finding 3 as follows (page III-K-2).

~~“3. Springfield, Lane County, and Eugene each use either their local planning commission or a committee for citizen involvement in monitoring citizen involvement in the planning process. There are also several citizen advisory committees involved with individual components of the process, such as housing and transportation planning.”~~

2. Amend Finding 10 as follows (page III-K-2).

~~“10. In 1987, the Metropolitan Planning Committee was replaced by the Metropolitan Policy Committee (MPC). The MPC is comprised of two elected officials each from Eugene, Springfield and Lane County. The chief administrative officers of the three jurisdictions serve as non-voting, ex-officio members of the MPC. When the MPC is considering metropolitan transportation matters, the **two members of the Lane Transit District Board shall serve as voting members and the** General Manager of the Lane Transit District and the Director of the Oregon Department of Transportation shall ~~also~~ serve as non-voting, ex-officio members of MPC.”~~

## Chapter V: Glossary

Add the following definition to the Glossary.

**Nodal development (node): Nodal development is a mixed-use, pedestrian-friendly land use pattern that seeks to increase concentrations of population and employment in well-defined areas with good transit service, a mix of diverse and compatible land uses, and public and private improvements designed to be pedestrian and transit oriented. Fundamental characteristics of Nodal development require:**

- **Design elements that support pedestrian environments and encourage transit use, walking, and bicycling;**
- **A transit stop which is within walking distance (generally 1/4 mile) of anywhere in the node;**
- **Mixed uses so that services are available within walking distance;**
- **Public spaces, such as parks, public and private open space, and public facilities, that can be reached without driving; and**
- **a mix of housing types and residential densities that achieve an overall net density of at least 12 units per net acre.**

**Nodal developments will vary in the amount, type, and orientation of commercial, civic, and employment uses; target commercial floor area ratios; size of buildings; and the amount and types of residential uses.**

# Appendix G: LCDC Order Approving Alternative Plan Performance Measures

BEFORE THE  
LAND CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF THE )  
APPROVAL OF AN ALTERNATIVE )  
STANDARD TO ACCOMPLISH )  
REDUCED RELIANCE ON THE )  
AUTOMOBILE FOR THE EUGENE- )  
SPRINGFIELD METROPOLITAN AREA )  
AS PROVIDED IN OAR 660-012-0035(5) )

COMMISSION ORDER  
ORDER 01-LCDC-024

This matter came before the Land Conservation and Development Commission (Commission) on May 4, 2001, as a request for Commission approval of an alternative standard to accomplish reduced reliance on the automobile pursuant to OAR Chapter 660, Division 012, Section 0035(5). The Commission, having fully considered the Eugene-Springfield Metropolitan area's request, comments of interested parties and the report of the Director of the Department of Land Conservation and Development (Department), now enters its:

## FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. On March 14, 2001, the Lane Council of Governments, acting as the metropolitan planning organization for the Eugene-Springfield Metropolitan area, submitted a proposed alternative standard for reduced reliance on the automobile for review by the Commission (Exhibit A).
2. The Department provided notice to interested parties on March 21, 2001 (Exhibit B).
3. Letters of comment were submitted to the department by Mr. Rob Handy, Ms. Sue Wolling, the Friends of Eugene, and the Oregon Modeling Steering Committee. (Exhibit C).
4. On April 17, 2001, the Director provided a report and recommendation to the Commission regarding the Eugene-Springfield Metropolitan area's request. (Exhibit D).

5. On May 4, 2001, the Commission held a public hearing on the subject request and the Department's report and recommendation. The Commission received oral testimony from Mr. Tom Schwetz, Ms. Jan Childs, Mr. Greg Mott, Ms. Pat Hocken, Mr. Rob Handy, Mr. Rob Zako, Mr. Kevin Mathews, Mr. Thomas Boyatt and Mr. Allen Johnson. Copies of the tape of the Commission's hearing and written materials presented to the Commission as part of this testimony and hearing are included as Exhibit E.
6. Based on its review, the Commission approved the alternative standard proposed by the Eugene-Springfield metropolitan area with the following conditions, that are to be complied with by incorporation of the approved standard into TransPlan when it is adopted locally:
  1. Assure that the methodology for calculating non-auto mode split is adjusted to account for improved counting of non-auto trips to assure that results in achieving this standard are not the result of improved counting of non-auto trips.
  2. Develop a definition of qualifying dwelling units and employment in nodes that includes only those dwelling units and employment that are clearly consistent with implementing the nodal development strategy.
  3. Revise the "interim benchmarks" for dwellings and employment in nodes to be clearly consistent with achieving the 20-year performance standard.
7. Based on its review, the Commission also adopted the following recommendations to provide guidance to Eugene-Springfield Metropolitan area local governments as they prepare and implement the regional transportation system plan, TransPlan:
  1. LCOG should amend TransPlan to include a schedule for implementation of the nodal development strategy. This schedule should incorporate the items listed below and the requirements for an "integrated land use and transportation plan" over the next three years.
  2. Eugene and Springfield need to specify specific areas for nodal development within one year. TransPlan identifies approximately 50 areas as having potential for nodal development. Eugene and Springfield need to move quickly to pick which of the 50 areas to designate as nodes and set general boundaries to guide subsequent detailed planning.
  3. Eugene and Springfield need to adopt Metro Plan designations and zoning amendments for the specified nodes within two years after TransPlan adoption. Currently, most of the identified nodes are planned and zoned to allow continued auto-oriented development. This means inappropriate and poorly designed uses that could easily frustrate nodal development can be located in nodes. To be

successful, nodes generally require a mix of mutually supportive pedestrian and transit-friendly uses and a good network of streets. If interim development includes inappropriate uses or is poorly laid out, the result could be to make a much larger area and perhaps a whole node unsuitable for nodal development.

4. Eugene, Springfield and Lane County need to review plan amendments and zone changes *outside* nodes to assure that they are consistent with the nodal development strategy. The success of nodal development strategy depends on attracting most of the higher density employment and residential development in nodes. Certain uses, such as neighborhood shopping centers are critical to the success of nodal development. Plan amendments to allow such uses outside of nodes undermine the nodal development strategy and hurt prospects for development in nodes.

#### OVERALL CONCLUSION

Based on the foregoing findings, the substantial evidence in the record, and the Director's report, as amended, the Commission concludes that the proposed alternative standard for the Eugene-Springfield metropolitan area complies with OAR 660-012-0035(5) and approves and authorizes its use.

THEREFORE, IT IS ORDERED THAT:

The alternative standard proposed by Eugene-Springfield metropolitan area is approved as provided for in OAR 660-012-0035(5).

DATED THIS 8TH DAY OF MAY 2001.

FOR THE COMMISSION:

---

Richard P. Benner, Director  
Department of Land  
Conservation and Development

NOTE: You are entitled to judicial review of this order. Judicial review may be obtained by filing a petition for review within 60 days from the service of this final order. Judicial review is pursuant to the provision of ORS 183.482.

\*\* Copies of all exhibits are available for review at the Department's office in Salem.