BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING CHAPTER 1 OF THE REGIONAL TRANSPORTATION PLAN UPDATE	RESOLUTION NO. 96-2327 Introduced by Mike Burton Executive Officer

WHEREAS, The 1992 revision of the Regional Transportation Plan, adopted by Ordinance No. 92-433, remains in effect as the regional functional plan required by ORS 268.390 until it is replaced by the *Regional Transportation Plan Update* ordinance; and

WHEREAS, Portions of "Regional Transportation Policy," Chapter 1 of the 1992 *Regional Transportation Plan*, may be amended in September 1996 at the same time that a new *Urban Growth Management Functional Plan* with land use and transportation policies is adopted by ordinance; and

WHEREAS, The full draft ordinance with the amended regional transportation system is scheduled to begin public review as the new regional functional plan, the regional Transportation System Plan (TSP) under the Transportation Planning Rule, and *Regional Framework Plan* transportation component in December 1996; and

WHEREAS, The 1995 *Interim Federal Regional Transportation Plan*, adopted by Resolution No. 95-2138A, was adopted to meet federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and Clean Air Act of 1990 requirements for a financially constrained and air quality-tested basis for federal transportation funds; and

WHEREAS, The 2040 Growth Concept policies of Metro's adopted regional goals and objectives connect land use and transportation

in a new regional urban form; and

WHEREAS, The first phase of the *Regional Transportation Plan* update has focused on an amended policy framework that considers the Transportation Planning Rule requirements for the regional TSP and transportation aspects of the 2040 Growth Concept; now, therefore,

BE IT RESOLVED:

That the Metro Council hereby declares:

1. That Chapter 1, entitled "Regional Transportation Policy" of the *Regional Transportation Plan Update*, attached and incorporated as Exhibit A as amended by the May 7, 1996 CAC memorandum attached as Exhibit B, is hereby adopted as the proposal for a new policy framework for the *Regional Transportation Plan Update* that will be the basis for development of the new transportation system and proposed improvements.

2. That JPACT recommendations for revisions in response to public comment, attached as Exhibit C, be incorporated into Exhibit A. (Note: Exhibit D, the July 16, 1996 engrossed version of Chapter 1, incorporates amendments contained in Exhibits B and C.)

3. That Chapter 1 shall be combined with a new transportation system and proposed improvements in a draft *Regional Transportation Plan Update* for compliance with LCDC's Transportation Planning Rule to be adopted in 1997.

4. That any amendments to Chapter 1 suggested by the time the full draft Regional Transportation Plan Update shall be

considered during JPACT and Metro Council consideration of a resolution to propose it at the time of RTP adoption.

ADOPTED by the Metro Council this 25th day of July, 1996.

Jon Kvistad, Presiding Officer

Approved as to Form:

Daniel B. Cooper, General Counsel

ACC:lmk
96-2327.RES/7-16-96

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING CHAPTER ONE OF THE REGIONAL TRANSPORTATION PLAN UPDATE	))))	Resolution No. 96-2327 Introduced by Mike Burton, Executive Officer

WHEREAS, The 1992 revision of the Regional Transportation Plan, adopted by Ordinance No. 92-433, remains in effect as the regional functional plan required by ORS 268.390 until it is replaced by the Regional Transportation Update ordinance; and

WHEREAS, Portions of "Regional Transportation Policy," Chapter One of the 1992 Regional Transportation Plan, may be amended in September, 1996 at the same time that a new Urban Growth Management Functional Plan with land use and transportation policies is adopted by ordinance; and

WHEREAS, The full draft ordinance with the amended regional transportation system is scheduled to begin public review as the new regional functional plan, the regional Transportation System Plan (TSP) under the Transportation Planning Rule, and Regional Framework Plan transportation component in December, 1996; and

WHEREAS, The 1995 Interim Federal Regional Transportation Plan, adopted by Resolution No. 95-2138A, was adopted to meet federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and Clean Air Act of 1990 requirements for a financially constrained and air quality tested basis for federal transportation funds; and

WHEREAS, The 2040 Growth Concept policies of Metro's adopted regional goals and objectives connect land use and transportation in a new regional urban form; and

WHEREAS, The first phase of the Regional Transportation Plan Update has focused on an amended policy framework that considers the Transportation Planning Rule requirements for the regional TSP and transportation policy aspects of the 2040 Growth Concept; now, therefore,

BE IT RESOLVED:

That the Metro Council hereby declares:

1. That Chapter 1, entitled "Regional Transportation Policy" of the Regional Transportation Plan Update, attached and incorporated as Exhibit A, is hereby adopted as the proposal for a new policy framework for the Regional Transportation Plan Update that will be the basis for development of the new transportation system and proposed improvements.

2. That Chapter 1 shall be combined with a new transportation system and proposed improvements in a draft Regional Transportation Update for compliance with LCDC's Transportation Planning Rule to begin public review in December, 1996.

3. That any amendments to Chapter 1 suggested by the time the full draft Regional Transportation Plan Update shall be considered during JPACT and Metro Council consideration of a resolution to propose it in December, 1996.

ADOPTED by the Metro Council this _____ day of _____ 1996.

_____
Jon Kvistad, Presiding Officer

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

jcp i:\r-o\1268.doc

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 96-2327 FOR THE PURPOSE OF APPROVING CHAPTER 1 OF THE REGIONAL TRANSPORTATION PLAN UPDATE

Date: June 19, 1996 Presented by: Andrew C. Cotugno

PROPOSED ACTION

Adoption of this resolution would establish the regional transportation policy framework for the *Regional Transportation Plan* (RTP) *Update*. The RTP update process will be the basis for the development of a new transportation system and for defining the transportation system improvements necessary to implement the Region 2040 Growth Concept through the *Regional Framework Plan*. The updated RTP will satisfy state Transportation Planning Rule (TPR) requirements for Transportation System Plans and Metro Charter requirements for a Transportation Element of the *Regional Framework Plan*.

TPAC has reviewed Chapter 1 of the *Regional Transportation Plan Update* and recommends approval of Resolution No. 96-2327.

FACTUAL BACKGROUND AND ANALYSIS

Context

Chapter 1, Regional Transportation Policy, establishes guiding principles for a balanced regional transportation system as well as goals and objectives for various transportation modes and coordination between those modes. The chapter presents the overall policy framework for the specific transportation goals, objectives and actions contained in the RTP. It also sets a direction for future planning and decision-making by the Metro Council for the remainder of the RTP update, which will define the regional transportation systems and the 20-year improvements to those systems consistent with the state TPR.

More importantly, this RTP policy chapter provides the basis for coordinating the development of a complete RTP with the Region 2040 Growth Concept and the *Regional Framework Plan*. The chapter also provides the policy context and framework for transportation system planning required under the state TPR for cities and counties. Finally, the chapter updates the regional policy for consistency with the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and the Clean Air Act Amendments of 1990.

This Chapter 1 Regional Transportation Policy will ultimately be combined with a new transportation system component, including proposed improvements, in a draft *Regional Transportation Plan Update*. That plan update will be the basis for compliance with the state TPR and begin public review in December 1996. This chapter also provides the basis for the policies contained in the Transportation Element of the *Regional Framework Plan*, scheduled for review in 1997.

Key Chapter 1 Elements

The following is a summary of the key policy components contained in Chapter 1, Regional Transportation Policy:

1. Regional Transportation Vision/Guiding Principles. The new Chapter 1 provides a concise, clear vision for the RTP. The overriding concept is to strategically implement a multi-modal transportation system that facilitates development of the 2040 Growth Concept.

2. Accessibility. The concept of accessibility is introduced as a guiding principle as a supplement to mobility. Accessibility ties land use activities of places to the ability to travel to those places on the transportation system. The promotion of accessibility will lead to better balance between land uses and the transportation system.

3. Urban Form. The 2040 land use concepts (central city, regional centers, town centers, etc.) are incorporated into the RTP and complementary transportation system approaches are identified for each of the concept types.

4. Systemwide Goals and Objectives. Specific goals and objectives are listed to expand on the RTP Vision. Objectives relate to providing a safe, cost-efficient system that implements the 2040 Growth Concept and protects the region's natural environment.

5. Street Design. Regional street design goals and objectives are included to introduce the concept of providing street designs that support 2040 land uses.

6. Modal Elements. System goals and objectives and functional classification descriptions are provided for regional transportation modes relative to motor vehicles, public transportation, freight, bicycles, and pedestrians.

7. Transportation System Management (TSM), Transportation Demand Management (TDM). Better operation of the system through TSM strategies such as traffic signal coordination and managing demand through TDM strategies such as carpooling and flextime are emphasized through specific goals and objectives. Parking management objectives are included within this area.

8. Congestion Level-of-Service. The policy chapter recognizes the need for revised measures to evaluate congestion and methods to address it. Policies will be included to reflect this recognition.

Update Process

The Chapter 1 Regional Transportation Policy document represents proposed policy changes as recommended by the 21-member RTP Citizens Advisory Committee (CAC). The CAC has worked with Metro staff, the RTP work teams, and the Transportation Policy Alternatives Committee (TPAC) to formulate their recommendations. In addition to the CAC recommendations, JPACT and the Metro Council will be asked to consider comments

from the public and TPAC prior to taking a final action.

Upon completion of the policy chapter, the CAC, Metro staff, TPAC, the inter-agency RTP work teams and the public will proceed to develop the full RTP over the next seven months. A draft of the full RTP is scheduled for release in December 1997.

MH:lmk
96-2327.RES
6-28-96

AUDUBON SOCIETY OF PORTLAND
Inspiring people to love and protect nature.

To: Metro Growth Mgmt. Committee
McCain, Morissette, McCaig
Metro Council
Mike Burton
John Fregonese

From Mike Houck

Re: Written TESTIMONY TO Metro Growth Mgmt. Committee

Please distribute to above list and put into written record.

Thanks,
Mike Houck

5151 NW Cornell Road, Portland, Oregon 97210 503/292-6855 FAX 503/292-1021

7/27/96

Metro Growth Management Committee
600 NE Grand
Portland, OR 97232

Dear Chair McLain and Councilors Morissette and McCaig,

During July 16th's hearing concerning the Urban Growth Management Functional Plan it became clear to us that a primary issue of concern is the "what if" question. What if the provisions of the Functional Plan are not implemented either quickly or broadly enough to accommodate future growth? What if individual jurisdictions do not, in fact, do what is necessary to ensure they meet their density targets? What if citizen and neighborhood resistance to increased densities and other Functional Plan elements means that Metro's projections on acreage necessary to accommodate growth are inaccurate?

We agree that it is important to : 1) Track the effectiveness of the Functional Plan; 2) Ascertain why we are or are not successfully implementing those provisions; 3) Establish measures to address inadequacies which are identified through the monitoring process; and 4) If necessary, make adjustments that would first revise policies so they do work or make either advisory or recommended policies mandatory or, as a last measure, adjust the Urban Growth Boundary.

We do not, however, want to establish a monitoring program that is merely used by local jurisdictions to avoid making the commitment to implement these policies. Let's not reward those who fail to make a good faith effort to implement Region 2040 which would, in effect, penalize those who have made such an effort. Metro should not establish a monitoring program which simply enables local jurisdictions to sit back and document their failure to implement the Functional Plan.

The purpose of the monitoring program should be to identify tools that will ensure successful implementation of the Functional Plan. The monitoring program should be put in place and data should be collected over a two to four year period to allow time for the Functional Plan to have an impact before any adjustments are made to either the Functional Plan or the Urban Growth Boundary. If good data documents the failure of specific Titles, or Title elements, within the Functional Plan there could be immediate adjustments if they can be shown to be consistent with successful implementation of Region 2040 goals. Monitoring should be tailored to assess the efficacy of meeting the objectives of each Title within the Functional Plan and progress toward the overall 2040 vision.

The monitoring program should also establish quantifiable criteria by which the Functional Plan is measured. Some work has already been done through the Future

Vision process and the City of Portland's environmental indicators project. There are also examples of quantifiable indicators being developed elsewhere in the country. We will, of course, need to devise our own indicators but we should look at other models for potential elements which we could adapt to the regional work.

The Coalition also feels strongly that criteria need to be developed which would guide whether and where any UGB expansions should be made and what requirements should be associated with any specific UGB expansion, whether due to difficulties of Functional Plan implementation or future growth in the region. We urge Metro to establish procedures which ensure we do not repeat mistakes of the past by excluding those URSA's which clearly do not qualify logically for UGB expansion vis a vis farm and forest resource lands, significant natural resource values or or are too costly to provide infrastructure. In addition, any URSA which eventually is selected for potential UGB expansion must be subjected to a rigorous "preplanning" or masterplan process which would ensure the URSA meets all Region 2040 growth management objectives. Metro's UGB statute should be amended to require, by law, URSA-wide preplanning or masterplan before any land is allowed to be included in the UGB.

Through this process Metro will assure "certainty" in future planning processes by having already: 1) identified those Greenspaces which should not be developed; 2) removed unbuildable lands (floodplains, wetlands, stream corridors, flood prone soils and steep slopes) from consideration for development and establish a plan to retain their functions and values; 3) ensured transportation facilities that guarantee walkable communities and alternative transportation modes that do not adversely impact water quality and quantity and natural resources; 4) established infrastructure needs; and 5) identified equitable funding for infrastructure, including affordable housing and parks.

Respectfully,

Rex Burkholder, Bicycle Transportation Alliance & CLF Transportation Reform Working Group

Tasha Harmon, Community Development Network and Chair, CLF Affordable Housing Working Group

Mike Houck, Audubon Society of Portland & Chair, CLF Natural Resources Working Group

Mary Kyle McCurdy, 1000 Friends of Oregon and Chair, CLF Metro Working Group

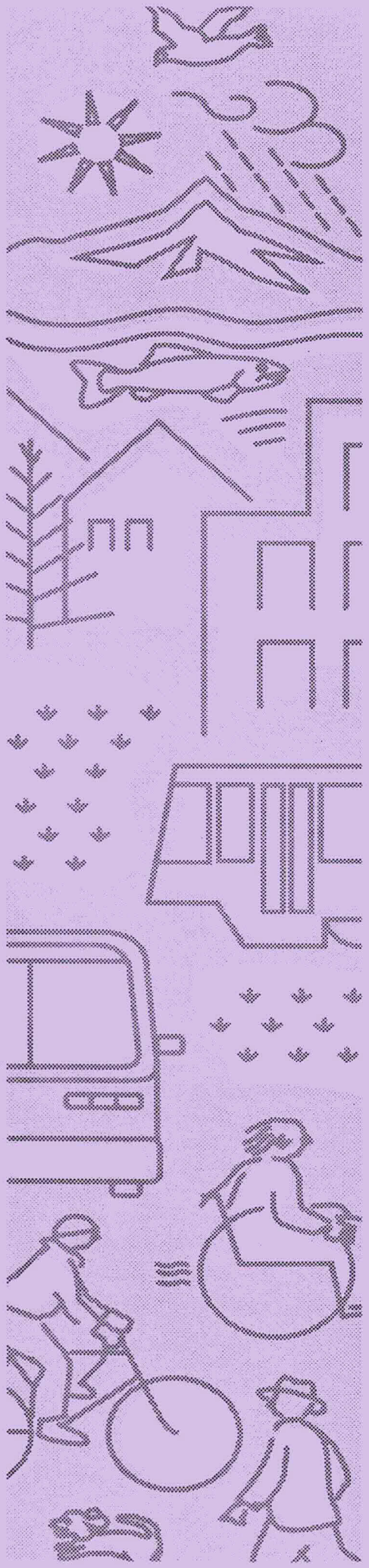
Marcy McInelly, American Institute of Architects & Chair, CLF Urban Design Working Group

Mike Pullen, The Urban League of Portland & CLF Economic Development & Revitalization Working Group

EXHIBIT A

April 19, 1996 CAC Draft of Chapter 1 of the Regional Transportation Plan

(Chapter 1 is not included in this packet;
copies are available at Metro and will be provided at all meetings)



Citizen Advisory Committee
Policy Recommendations
Final Draft

Regional Transportation Plan Update

April 19, 1996

METRO

Citizen Advisory Committee

Paul Koch, chair
Resident delegate, Clackamas County

Lois Achenbach
Resident delegate,city of Portland

Gregory Goodman
Business delegate, city of Portland

Charles J. Becker, Vice Chair
Resident delegate, cities of Multnomah County

Paul Spanbauer
Business delegate, cities of Multnomah County

Marjorie Schmunk
Resident delegate, Multnomah County

Karl Rohde
Resident delegate, cities of Clackamas County

Joseph Intile
Business delegate, cities of Clackamas County

Jan Campbell
Resident delegate, cities of Washington County

Charles Noble
Business delegate, cities of Washington County

Robert Enninga
Resident delegate, Washington County

Mark Heintz
Clark County/city of Vancouver delegate

Don MacGillivray
Metro Committee for Citizen Involvement at-large delegate

Gerri Sue Lent
Alternative mode at-large delegate

Joe Walicki
Alternative Mode at-large delegate

Vacant
Freight at-large delegate

Patricia Lee
Senior Citizen at-large delegate

Anne O'Ryan
Motorist at-large delegate

Chris Wrench
Environmental Interest Group, at-large delegate

Kevin Kincaid
Transit Union, at-large delegate

David Hurt
Youth, at-large delegate

Honorable Members of the Metro Council, the Joint Policy Advisory Committee on Transportation and citizens of the region:

Enclosed is the final version of Regional Transportation Plan policies developed and recommended by your Citizen Advisory Committee. The policies are the result of a very extensive process that looked, in depth, at every aspect of the regional transportation system and the implications for the future as it relates to the 2040 growth concept. This document is the result of a successful and positive partnership between citizens and public employees.

For the past year, the 21 members of the CAC spent countless hours reviewing transportation-related issues, shared individual and interest group ideas and concerns and communicated openly to work out transportation policies that would serve the region for many years to come. During some months, the committee members committed to many meetings and extended hours in order to develop a high-quality product.

As representatives of the various jurisdictions and citizens of the three-county area, the committee seriously considered every aspect of transportation-and growth- related issues. Because of the broad interests represented, the CAC spent much time openly communicating, discussing various strategies and developing common solutions to the regions' complex transportation and growth challenges.

In this time of negative feelings and criticism of government, it was rewarding for all of us to sit as citizens, working to establish a flexible framework that will provide the opportunities for solving the transportation problems of the region. Members of the committee learned first hand that there are no easy solutions. Thanks to the strong commitment of a very professional and highly qualified staff, the committee was educated about the issues, options and implications of action. We understand what must be done and trust that the policies will lead to positive action by the appropriate governing bodies of the region.

On behalf of the CAC, I thank you for giving us the opportunity to participate in the process. I also thank you for providing us with the opportunity to work with outstanding public employees who went well beyond the call of duty in assisting the committee. We now hope that the region will move forward in harmony to meet the needs of the citizens of the region.

Sincerely,

Paul Koch
Chair, Regional Transportation Plan Citizens Advisory Committee

How can you get involved?

Release of this document triggers a public comment period for Chapter 1 policy changes recommended by the Regional Transportation Plan Citizen Advisory Committee. Now is the time for you to express your vision for the region's transportation system and how it can serve your needs. We want to know what is important to you!

To get involved:

- provide comments by phone, letter, fax or e-mail
- testify at the Metro Council's May 23 public hearing

Policy Adoption Schedule

May 7 – Citizen Advisory Committee meeting; public testimony received

May 16 – Joint Policy Advisory Committee on Transportation (JPACT) considers final adoption of Chapter 1 of the Regional Transportation Plan

May 17 – Public comment period on final recommendation ends

May 23 – Metro Council public hearing at 6 p.m. at Metro Regional Center, 600 NE Grand, Portland; public testimony received

May 30 – Metro Council considers final adoption of Chapter 1 of the Regional Transportation Plan

Please call the transportation hotline to confirm dates and meeting times.

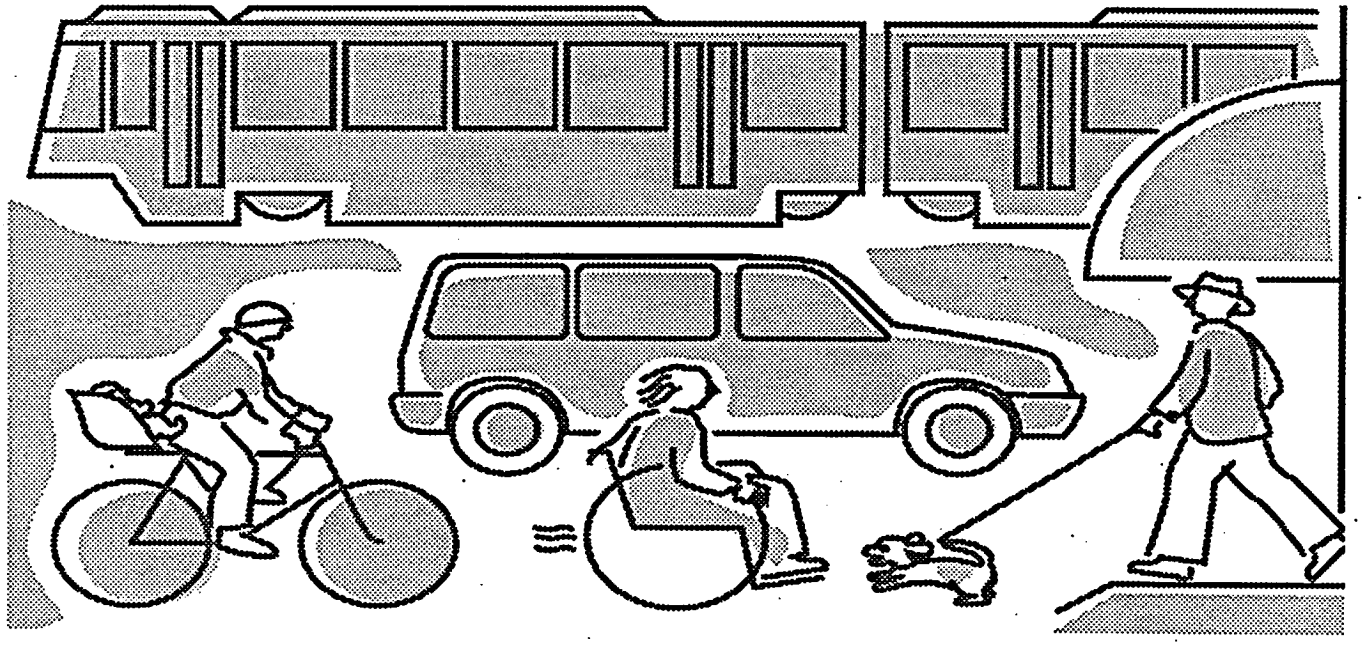
To comment on Regional Transportation Plan policies:

phone – call the transportation hotline, (503) 797-1900 or T.D.D. (503) 797-1804

mail – Metro, Transportation Department, 600 NE Grand Ave., Portland, OR 97232-2736

fax – (503) 797-1794

e-mail – trans@metro.or.gov



Regional Transportation Plan

The transportation system plays a critical role in the continued economic health and livability of this region. To address these and other issues, Metro is updating the Regional Transportation Plan, a 20-year blueprint for the region's transportation system that addresses how best to move people and goods in and through the region.

Chapter 1 of the plan establishes guiding principles for a balanced regional transportation system as well as goals and objectives for all ways of traveling in and through our region. These goals and objectives are important because they will form the basis for future decisions about what transportation projects will be funded in this region, as well as guide local jurisdictions in the development of their local transportation plans.

The Regional Transportation Plan is updated every three years. In May 1995, the Regional Transportation Plan Citizen Advisory Committee was appointed by the Metro Council as part of the update process. The 21-member group provides citizen perspectives on transportation issues and is advisory to the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council. This "discussion draft" summarizes the policy recommendations made by the Citizen Advisory Committee and further describes the Regional Transportation Plan, the Regional Framework Plan and the 2040 Growth Concept, including their relationship to each other.

Growth in our region – The Portland metropolitan region is a fast growing area with a diverse, improving economy. People are attracted to this region for its jobs, natural beauty and livability. Important measures of livability include access to jobs, affordable housing and a clean environment.

In 1995, there were approximately 1,597,100 people living in this region. According to population projections, there will be 2,507,600 people in the region by 2040 (including Clark Co., Washington). This represents an increase of nearly 900,000 new residents between 1995 and 2040.

Considering these projections, the challenge is clear. If the region is to preserve its acclaimed quality of life, we must deal proactively with the issues accompanying a rapid increase in new residents – increasing traffic congestion, vanishing open space, rising housing costs and diminishing environmental quality.

2040 Growth Concept – To meet this challenge of increased population, Metro developed the 2040 Growth Concept. Adopted by the Metro Council in 1994, the 2040 Growth Concept is a plan that establishes a vision for how our region should grow during the next 50 years.

In general, the 2040 Growth Concept envisions compact development throughout the region, concentrating new jobs, services and housing in centers. The following are the land-use components defined in the 2040 Growth Concept:

- Central City
- Regional Centers
- Industrial Areas
- Station Communities
- Town Centers
- Main Streets
- Corridors
- Employment Areas
- Inner Neighborhood
- Outer Neighborhood

These centers vary in terms of size and types of activities present. Town centers, for example, are envisioned to provide housing with shopping and other commercial services within a two to three-mile radius.

Transportation investments that support town centers and the other land-use components defined in the 2040 Growth Concept are a key part of making the concept work. This means spending money on transportation projects that will provide the right mix of road, pedestrian, bus, bicycle and freight improvements to support this more compact urban form.

It is important to note that the 2040 Growth Concept is not the final plan for the region. Rather, the 2040 Growth Concept will be used to develop the Regional Framework Plan which will specify ways for the region and local communities to implement the vision outlined in the 2040 Growth Concept.

Regional Framework Plan – The purpose of the Regional Framework Plan is to examine a number of issues that are involved in managing this region's growth. We are not, for example, examining only land-use issues. We are also looking at the transportation system, the urban growth boundary, water resources, air quality and

housing densities. Dealing with these issues together will help us create the kind of region most of us want for future generations.

A draft Regional Framework Plan will be developed with input from citizens, local governments, businesses and other interested groups by the end of 1996. During 1997, these same groups will have additional opportunities to deliberate and provide input to the plan before final action by the Metro Council. Metro's voter-approved charter requires that the Regional Framework Plan be adopted by December 31, 1997.

Regional Transportation Plan – The Regional Transportation Plan is a key element of the Regional Framework Plan. The Regional Transportation Plan addresses how best to move people and goods in and through the region. To do this, the Regional Transportation Plan identifies existing and future transportation needs and the projects or programs needed to address those needs. Policies established in Chapter 1 of the Regional Transportation Plan set both short and long-term priorities for funding of regional transportation projects.

The Regional Transportation Plan is updated every three years. Metro's 1992 Regional Transportation Plan is currently being updated to incorporate the components of the 2040 Growth Concept. The new Regional Transportation Plan, when adopted, will serve as the transportation element of the Regional Framework Plan.

Phase I of the Regional Transportation Plan update focused on bringing the plan into compliance with the federal Intermodal Surface Transportation Efficiency Act (ISTEA), the Clean Air Act Amendments (CAAA) of 1990 and the Americans with Disabilities Act (ADA) of 1990. Phase I was completed in July 1995 and produced an interim Regional Transportation Plan. This interim plan met all federal transportation planning requirements, most notably, the development of a 20-

year list of projects meeting Clean Air Act requirements that could be built with money that is "reasonably anticipated to be available."

Phase II of the Regional Transportation Plan update will focus on integrating regional transportation policies and the 2040 Growth Concept. Successful implementation of the 2040 Growth Concept hinges on transportation policies and investments that encourage and support the land use components envisioned by the 2040 Growth Concept.

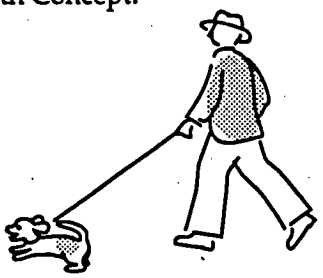
Phase II will also meet state level transportation requirements. The state transportation planning rule requires that metropolitan areas develop strategies to:

- integrate land-use and transportation planning
- build communities that promote biking, walking and transit as viable options to driving an automobile
- reduce the number of people traveling alone in a car

To achieve these regional and statewide goals, Phase II is broken down into a policy component and a system component. The policy component (Chapter 1) of the Regional Transportation Plan will be considered for adoption by the Metro Council this May and will provide transportation direction for implementation of the 2040 Growth Concept.

A basic assumption in the goals and objectives of Chapter 1 is that transportation systems do more than meet travel demand; they have a significant effect on the areas they serve. As such, the goal of the Regional Transportation Plan is to tie investments in the region's transportation system to regional and community goals and values in order to maintain the quality of life that area residents presently enjoy.

To this end, the Regional Transportation Plan will balance investments in highways, streets, transit, freight, bikes and pedestrians, so that regional funds go to transportation projects that support the land-use components in the 2040 Growth Concept.



The Regional Transportation Plan update process – The Metro Council will make the final decision about regional transportation policies. However, the Regional Transportation Plan update process is structured to promote citizen involvement, interagency communication and coordination at several levels.

The Joint Policy Advisory Committee on Transportation (JPACT) consists of elected officials from area cities and counties as well as agency leaders in the region. This committee's role is to evaluate transportation needs and give recommendations to the Metro Council. JPACT's discussions are usually based on technical input from the Transportation Policy Alternatives Committee (TPAC), whose membership includes technical staff from the same agencies as JPACT and six citizens appointed at-large by the Metro Council.

Several work teams also meet regularly to identify strategies and projects that address transportation needs for all ways of traveling in and through the region. These work teams are composed of citizens and city, county, regional and state agency planners.

The 21-member Regional Transportation Plan Citizen Advisory Committee was appointed by the Metro Council in May of 1995 to provide citizen perspectives on transportation issues during the Regional Transportation Plan update. The committee members live and work throughout the region and bring a broad range of experiences and views to the process (see page 1 for a list of members). The committee suggests and reviews proposed changes to the Regional Transportation Plan and will make advisory recommendations to JPACT and the Metro Council. These recommendations will shape regional transportation policies.

A new direction for Transportation

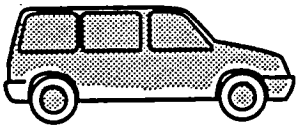
The Regional Transportation Plan identifies six major components that focus on the movement of people and goods in and through the region. These components are motor vehicles, street design, freight, pedestrian access, bicycles and transit.

In addition, the Regional Transportation Plan includes a transportation demand management program. This program promotes shared ride, biking, walking and transit as ways to reduce demand on the region's transportation system, especially during the most congested times of the day.

The following are a summary of the Citizen Advisory Committee's policy recommendations for Chapter 1 of the Regional Transportation Plan. These recommendations will be considered by the Metro Council in May.

Regional Street System – Metro's regional street system goals and objectives focus on improving traffic circulation through new street connections, and developing street designs that integrate the 2040 Growth Concept land-use components and the needs of various ways to travel. Specific changes to the regional street system goals and objectives in Chapter 1 of the Regional Transportation Plan address:

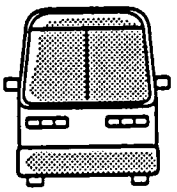
- creating regional street design classifications that link transportation and land-use
- considering implementation of the 2040 Growth Concept when determining funding priority for transportation projects and programs



- integrating land use, automobile, bicycle, pedestrian, freight and transit needs in regional street designs

For more information on the regional street system, contact Tom Kloster, project manager, 797-1832, or T.D.D. 797-1804.

Motor Vehicle System – Metro's motor vehicle system provides access to the 2040 Growth Concept land-use components with an emphasis on mobility between these destinations. Although, principally designed to accommodate the car, the motor vehicle system also serves pedestrian, bicycle, bus and freight travel. Specific motor vehicle system goals and objectives in Chapter 1 of the Regional Transportation Plan address:



- connecting and supporting the various 2040 Growth Concept land-use components
- maintaining access to important regional destinations
- limiting the impacts of motor vehicles on pedestrian, bicycle and transit oriented areas

For more information on the motor vehicle system, contact Tom Kloster, project manager, 797-1832, or T.D.D. 797-1804.

Transit System – Metro's transit system goals and objectives focus on providing appropriate levels of access to transit service for everyone living within the urban growth boundary. Specific changes to the transit goals and objectives in Chapter 1 of the Regional Transportation Plan address:

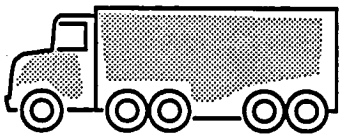
- making transit vehicles, transit stops and areas surrounding transit stops more accessible to customers with disabilities

- linking transit service to land use components of the 2040 Growth Concept (i.e., station communities, regional centers, etc.,)

- identifying new types of transit services needed to serve the 2040 Growth Concept, including high-capacity bus service that is similar to light rail in speed, frequency and comfort

- improving the existing level of safety and security on the transit system to encourage transit use

For more information on the transit element of the regional transportation plan, contact Rich Ledbetter, project manager, 797-1761, T.D.D. 797-1804, or Ken Zatarain, Tri-Met Service Planning, 238-4970.



Freight System – Metro's freight program acknowledges that the movement of goods and services makes a significant contribution to this region's economy and wealth. Regional freight system goals and objectives focus on vitality of the region's industries through efficient freight movement. Specific changes to the freight system goals and objectives in Chapter 1 of the Regional Transportation Plan address:

- enhancing the flow of goods from the region to national and international markets

- reducing conflicts between freight and non-freight traffic

- developing adequate freight loading and parking areas in central cities, town centers and main streets

For more information on the freight element of the regional transportation plan, contact Mike Hoglund, project manager, 797-1743, T.D.D. 797-1804 or Jane McFarland, Port of Portland, 731-7049.

Pedestrian System – Metro's pedestrian system goals and objectives focus on making the region more walkable and pedestrian friendly by providing safe and convenient access to pedestrian destinations within a short distance. For example, improving walkway connections between office and commercial districts and surrounding neighborhoods provide opportunities for residents to walk to work, shopping or to run personal errands. This reduces traffic congestion and air pollution, and helps create livelier communities.

A major goal of the pedestrian program is to encourage walking for short trips and improve access to the transit system through pedestrian improvements. Examples of pedestrian improvements are: sidewalks, curb ramps and marked street crossings at all intersections. Features that make walking or waiting for a bus more appealing are street lighting, bus shelters and benches, landscaping and wide planting strips that create a buffer for pedestrians between the curb and the sidewalk.

The pedestrian system goals and objectives in Chapter 1 of the Regional Transportation Plan address:

- designing communities so that walking is convenient

- implementing projects that are most likely to increase and benefit pedestrian travel

- improving pedestrian connections to bus stops and transit stations

- encouraging pedestrians, bicyclists and motorists to share the road safely through regional public awareness programs

For more information on Metro's pedestrian program, contact, Allison Dobbins, project manager, 797-1748 , or T.D.D. 797-1804.

Bicycle System – Metro's bicycle system goals and objectives focus on increasing the number of bicycle trips in the region, providing a regional network of bikeways and encouraging bicyclists and motorists to share the road safely. Specific changes to bicycle system goals and objectives in Chapter 1 of the Regional Transportation Plan address:

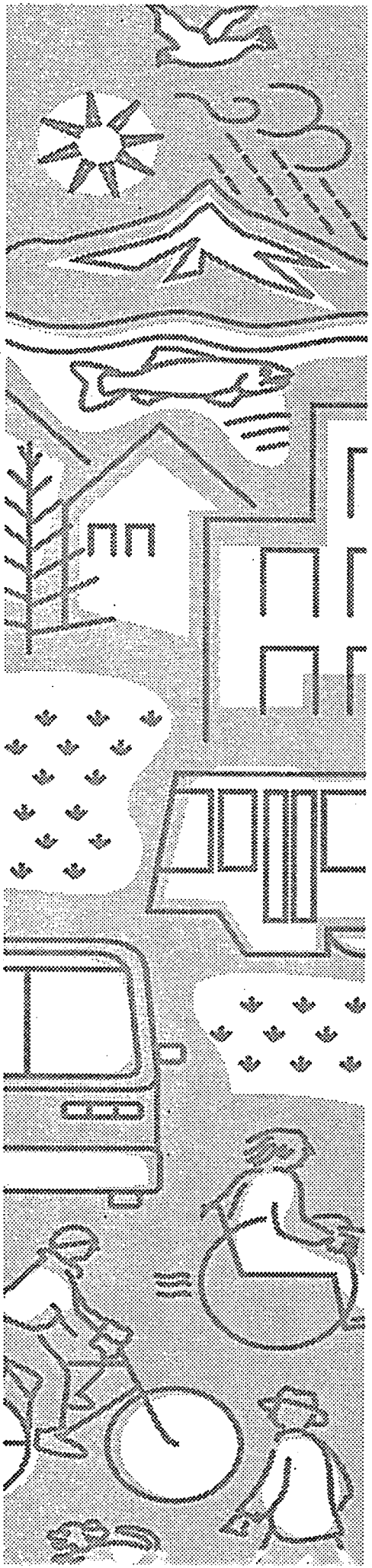
- providing a convenient, safe, accessible and appealing regional system of bikeways that are integrated with other ways of traveling
- increasing the number of bicycle trips made throughout the region
- encouraging bicyclists and motorists to share the road safely through regional public awareness programs
- ensuring that all regional transportation improvements include appropriate bikeway facilities

For more information on the regional bicycle program, contact Bill Barber, project manager, 797-1758, or T.D.D. 797-1804.

TDM Program – Metro's transportation demand management (TDM) goals and objectives focus on promoting shared ride, biking, walking and transit, especially during the most congested times of the day. Specific changes to the transportation demand management program in Chapter 1 of the Regional Transportation Plan address:

- increasing public awareness of transportation demand management as a tool to reduce congestion and air pollution and to implement the 2040 Growth Concept
- making it more efficient and convenient for people to use transit, share rides, bike and walk
- providing incentives for development to occur in 2040 Growth Concept centers

For more information on the TDM element of the regional transportation plan, contact Rich Ledbetter, project manager, 797-1761, or T.D.D. 797-1804.



Regional Transportation
Plan Update

Chapter 1
Regional Transportation Policy

Citizen Advisory Committee
Final Draft

April 19, 1996

METRO

METRO

Chapter 1
Regional Transportation Policy
for the Portland Metropolitan Region

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ACRONYMS

CHAPTER 1

Regional Transportation Policy

A. Introduction

This chapter presents the overall policy framework for the specific transportation goals, objectives and actions contained in the Regional Transportation Plan (RTP). It also sets a direction for future planning and decision-making by the Metro Council and the implementing agencies, counties and cities. The chapter is organized as follows:

- Transportation Vision Statement and Guiding Principles: This section establishes the basic mission of the plan as a means for implementing the Metro 2040 Growth Concept.

- Urban Form and Land Use: This section describes the individual transportation needs of the 2040 Growth Concept land use components and the relative importance of these components to the region.

- RTP Goals and Objectives: This section describes the policy direction of the plan and establishes in measurable terms how the plan implements the 2040 Growth Concept and what level of accessibility the transportation system is expected to provide.

- Transportation System Design: This section provides objectives regarding the performance and function of each modal element of the transportation system.

B. Regional Vision and Guiding Principles

Implementation of the 2040 Growth Concept requires a departure from traditional transportation planning. Concentrating development in the high-density activity centers envisioned in the 2040 Growth Concept may produce levels of congestion that exceed existing standards, yet signal positive urban development for these areas. Conversely, the continued economic vitality of important industrial areas and intermodal facilities largely depends on preserving or improving access to these areas and maintaining reasonable levels of mobility on the region's throughways. The unifying theme of the 2040 Growth Concept is to preserve the region's livability while accommodating expected growth -- a principle which calls for transportation planning that is finely tailored to the specific needs of each 2040 Growth Concept land use component.

Transportation Vision Statement

The Regional Transportation Plan seeks to enhance the region's livability through implementation of the 2040 Growth Concept with a transportation system that:

- anticipates the region's future travel needs;
- promotes an appropriate mix of travel modes; and
- supports key elements of the growth concept with strategic system improvements.

Guiding Principles

The Regional Transportation Plan vision has four guiding principles:

1. Provide complete information, timely public notice, full public access to key decisions and support broad-based, early and continuing involvement of the public;
2. Facilitate development of the 2040 Growth Concept land use components with specific strategies that address mobility and accessibility needs and use transportation investments to leverage desired land use patterns;
3. Ensure that the allocation of fiscal resources is driven by both land use and transportation benefits; and
4. Place a priority on protecting the region's natural environment and livability in all aspects of transportation planning process.

The transportation system plays a critical role in the continued economic health and livability of the region. The regional forecast for the year 2015 predicts nearly 615,000 new residents and more than 500,000 new jobs above 1995 levels for the metro area (excluding Clark County). Substantial investment in transportation improvements is needed to accommodate this growth in a manner that supports the 2040 Growth Concept and preserves the region's livability.

Important measures of livability include mobility and access to jobs, schools, services and recreation, movement of goods and clean air. The RTP must address these needs by improving choices for how people travel within the region, while seeking a balance between accessibility, system cost, strategic timing and prioritization of improvements and environmental impacts.

Public Involvement

Metro's public involvement policy for regional transportation planning and funding activities is intended to support and encourage broad-based public participation in the development and review of Metro's transportation plans, programs and projects. The policy was developed in response to citizen interest, recent changes in state and federal transportation

planning, and in an effort to reach traditionally underserved portions of the population. The public involvement policy was adopted in July 1995.

The public involvement program for the RTP update is tied to the Regional Framework Plan public involvement process, and includes a widely distributed newsletter, periodic workshops, open houses, public meetings and statistical research using focus groups and surveys.

The 21-member RTP Citizen Advisory Committee (CAC) was appointed to a two-year term in April 1995 and provides an ongoing, in-depth public dialogue on all aspects of the RTP update process. Members of the CAC were selected as delegates for specific constituencies, representing various citizen, demographic, business and special interest perspectives.

Accessibility and Mobility

Accessibility is the ability to reach a given destination, and is measured in terms of travel costs in both time and money to a given destination. The more places that can be reached for a given cost, the greater the accessibility. Of equal importance is the range and quality of travel choices to a given destination. Therefore, the relative level of accessibility within the region is governed by both land use patterns and the number of travel alternatives provided in the regional transportation system.

In contrast, mobility is defined as the ability to move people and goods. Mobility improves when the transportation network is refined or expanded to improve capacity, thus allowing people and goods to move more quickly toward a particular destination.

Access to services and markets throughout the urban metropolitan area and maintaining adequate levels of mobility on key components of the regional system are principal objectives of the transportation plan and central to successful implementation of the 2040 Growth Concept. Residents of the region must have reasonable access to jobs, affordable housing, shopping, personal services and recreation. Commerce in the region depends on both access to statewide, interstate and international travel networks, and general mobility on the regional transportation system. The region's quality of life and economy would suffer if we do no meet these accessibility and mobility objectives.

System Cost

A cost-effective transportation system will provide adequate levels of accessibility and mobility while minimizing the need for public investment. The RTP emphasizes preservation and efficient use of existing facilities as the best approach to providing an adequate transportation system. Therefore, the cost-effectiveness of the transportation system as a whole is dependent on solutions that provide adequate capacity and connectivity at the lowest total cost.

Timing and Prioritization of System Improvements

The 2040 Growth Concept has established a broad regional vision that will guide all future comprehensive planning at the local and regional levels, including development of the Regional Transportation Plan. The growth concept contains a series of land use building blocks that establish basic design types for the region. Of these, the central city, regional center and industrial area/intermodal facility components are most critical in terms of their regional significance and role in implementing the other components of the growth concept.

Because the 2040 Growth Concept is a 50-year plan, many areas envisioned as important centers of urban activity, including several regional centers, station communities and main streets, are currently underdeveloped. Substantial public and private investment will be needed in these areas over the long-term to realize the 2040 Growth Concept vision. These areas provide the best opportunity for public policy to shape new development, and are, therefore, the best candidates for more immediate transportation system improvements.

During the past several years, the region has experienced unprecedented growth -- a trend that is predicted to continue in the 2015 regional forecast. Subsequently, a significant amount of urbanization is likely to occur while local jurisdictions are in the process of adopting local ordinances that implement the 2040 Growth Concept. Therefore, the phasing of RTP projects and programs will reflect this period of transition, with project identification and selection increasingly tied to implementation of the growth concept.

The RTP includes three implementation scenarios based on varying financial assumptions. The "preferred" system (Chapter 5) includes an optimal package of regional transportation projects and programs that best addresses the region's needs over the 20-year plan period. The "constrained" system (Chapter 7) is limited to those improvements to the regional transportation system that can be made by projecting existing revenue sources for the plan period, and does not adequately meet the region's 20-year needs. The "strategic" system (Chapter 8) includes a mix of regional projects and programs from both the preferred and financially constrained systems. The strategic system represents the minimum set of actions needed to adequately serve the region's 20-year transportation needs, and thus establishes a target for additional funding.

Environmental, Economic & Social Impacts

Transportation systems have a significant effect on the physical and socioeconomic characteristics of the areas they serve. As such, transportation planning must consider larger regional and community goals and values, such as protection of the environment, the regional economy and the quality of life that area residents presently enjoy.

The RTP measures economic and quality of life impacts of the proposed system by evaluating key indicators, such as job and retail service accessibility, economic benefits to the business community and transportation for the traditionally underserved, including low income and minority households and the disabled. Other key system indicators include travel speeds, congestion, energy costs, protection of natural resources and air quality impacts. RTP objectives

are sometimes in conflict, so each transportation project or program must be evaluated in terms of relative tradeoffs, and how it best achieves an overall balance between those conflicting goals.

C. Urban Form And Land Use

Regional Urban Growth Goals and Objectives

The Regional Urban Growth Goals and Objectives (RUGGOs) were adopted in 1991 in response to direction by the Oregon Legislature to develop regional land use goals and objectives that would replace those adopted by the Columbia Region Association of Governments. The RUGGOs establish a process for coordinating planning in the metropolitan area in an effort to preserve regional livability. The RUGGOs also provide a policy framework for guiding Metro's regional planning program, including development of functional plans and management of the region's urban growth boundary.

In 1992, the region's voters approved a charter for Metro that formally gave responsibility for regional land use planning to the agency, and requires adoption of a Regional Framework Plan that integrates land use, transportation and other regional planning mandates. In late 1995, the Metro Council adopted the 2040 Growth Concept, a document that serves as the first step in developing the framework plan. Like the RUGGOs, the growth concept is not a final plan for the region, but rather, is a starting point for developing the Regional Framework Plan, which will be a more focused vision for the future growth and development of this region. The growth concept includes a series of regional measures intended to accelerate both development of the framework plan elements and local implementation of growth concept principles. The 1996 Regional Transportation Plan serves as a functional plan and will be the transportation element of the Regional Framework Plan.

While the 2040 Growth Concept is primarily a land use framework, success of the concept, in large part, hinges on regional transportation policy. The following are the 2040 Growth Concept land use components and a description of their associated transportation elements. The land use components are grouped according to their relative significance in the region:

Primary Components

The central city, regional centers, industrial areas and intermodal facilities are centerpieces of the 2040 Growth Concept, and form the geographic framework for more locally oriented components of the plan. Thus, implementation of the overall growth concept is largely dependent on the success of these primary components. For this reason, these components are the focus of 2040 Growth Concept implementation policies and infrastructure investments.

- **Central City and Regional Centers**
  Portland's central city already forms the hub of the regional economy. Regional centers in suburban locales such as Gresham, Beaverton and Hillsboro are envisioned in the 2040 Growth Concept as complementary centers of regional economic activity. These areas have

the region's highest development densities, the most diverse mix of land uses and the greatest concentration of commerce, offices and cultural amenities. They are the most accessible areas in the region by both auto and transit, and have very pedestrian-oriented streets.

In the 2040 Growth Concept, the central city is highly accessible by a high-quality transit system, multi-modal street network and a regional freeway system of through-routes. Light rail lines radiate from the central city, connecting to each regional center. The street system within the central city is designed to encourage transit, bicycle and pedestrian travel, but also accommodate auto and freight movement. Of special importance are the bridges that connect the east and west sides of the central city, and serve as critical links in the regional transportation system.

Regional centers also feature a high-quality radial transit system serving their individual trade areas and connecting to other centers, as well as light rail connections to the central city. In addition, a fully improved network of multi-modal streets tie regional centers to surrounding neighborhoods and nearby town centers, while regional through-routes will be designed to connect regional centers with one another and points outside the region. The street design within regional centers encourages transit, bicycle and pedestrian travel while also accommodating automobile and freight movement.

- **Industrial Areas and Intermodal Facilities**
  Industrial areas serve as "sanctuaries" for long-term industrial activity. These areas are primarily served by a network of major street connections to both the regional freeway system and intermodal facilities. Many industrial areas are also served by freight rail, and have good access to intermodal facilities. Freight intermodal facilities, including air and marine terminals, freight rail yards and common carrier truck terminals are an area of regional concern. Access to these areas is centered on rail, the regional freeway system, transit, bikeways and key roadway connections. While industrial activities often benefit from roadway improvements largely aimed at auto travel, there are roadway needs unique to freight movement that are critical to the continued vitality of industrial areas and intermodal facilities.

Secondary Components

While more locally oriented than the primary components of the 2040 Growth Concept, town centers, station communities, main streets and corridors are significant centers of urban activity. Because of their density and pedestrian-oriented design, they play a key role in promoting transit, bicycling and walking as viable travel alternatives to the automobile, as well as conveniently close services for surrounding neighborhoods. As such, these secondary components are an important part of the region's strategy for achieving state goals for reducing per-capita automobile travel.

- **Station Communities**
  Station communities are located along light rail corridors and feature a high-quality pedestrian and bicycle environment. These communities are designed around the

transportation system to best benefit from the public infrastructure. While they include some local services and employment, they are mostly residential developments that are oriented toward the central city, regional centers and other areas that can be accessed by rail for most services and employment.

- **Town Centers and Main Streets**
  Town Centers function as local activity areas that provide close access to a full range of local retail and service offerings within a few miles of most residents. While town centers will not compete with regional centers in scale or economic diversity, they will offer some specialty attractions of regional interest. Though the character of these centers varies greatly, each will function as strong business and civic communities with excellent multi-modal arterial street access and high quality transit service with strong connections to regional centers and other major destinations. Main streets feature mixed-use, storefront style development that serve the same urban function as town centers, but are located in a linear pattern along a limited number of bus corridors. Main streets feature street designs that emphasize pedestrian, transit and bicycle travel.

- **Corridors**
  Corridors will not be as intensively planned as station communities, but similarly emphasize a high-quality bicycle and pedestrian environment and convenient access to transit. Transportation improvements in corridors will focus on nodes of activity -- often at major street intersections -- where transit and pedestrian improvements are especially important. Corridors can include auto-oriented land uses between nodes of activity, but such uses are carefully planned to preserve the pedestrian orientation and scale of the overall corridor design.

Other Urban Components

Some components of the 2040 Growth Concept are primarily of local significance, including employment centers and neighborhoods. Urban activities in these areas often impact the regional transportation system, but are best addressed through the local planning process.

- **Employment Centers**
  Employment centers allow mixed commercial and industrial uses, including some residential development. These areas are primarily served by a network of arterial connections to both the regional freeway system and intermodal facilities. Some employment centers are also served by freight rail. Employment centers are often located near industrial areas, and thus may benefit from freight improvements primarily directed toward industrial areas and intermodal facilities.

- **Neighborhoods**
  In recent decades, the newest neighborhoods have become the most congested, largely due to a lack of street connections. A lack of street connections discourages walking and bicycling for local trips in these areas, and forces local auto trips onto the regional multi-modal arterial network. The 2040 Growth Concept envisions master street plans in all areas to increase the number of local street connections to the regional roadway network. However,

new connections must be designed to discourage through-travel on local neighborhood streets.

Exurban Components

- **Urban Reserves**
  These reserves, which are currently located outside the UGB, are relatively undeveloped, with limited transportation facilities. Urban reserves are intended to accommodate future growth and will eventually require multi-modal access to the rest of the region. Because they may be added to the urban area during the 20-year RTP planning period, they are included in the RTP functional classification scheme (Chapter 4). General street and transit planning is completed prior to urbanization as part of the RTP process, and based on specific 2040 Growth Concept land use policies for these areas. Once urban reserves are brought within the UGB, more detailed transportation system planning at the regional and local level occurs in conjunction with detailed land use planning.

- **Rural Reserves**
  These largely undeveloped reserves are also located outside the UGB, and have very limited transportation facilities. Roadways in these areas are intended to serve rural industry, and urban travel on these routes is accommodated with designs that are sensitive to their basic rural function. Rural reserves will be protected from urbanization for the foreseeable future through county zoning ordinances, intergovernmental agreements and by limiting rural access to urban through-routes.

- **Neighboring Cities and Green Corridors**
  Neighboring cities are separated from the main urban area by rural reserves, but are connected to regional centers within the metropolitan area by limited-access green corridor transportation routes. Green corridor routes will include bicycle and transit service to neighboring cities. Neighboring cities will be encouraged, through intergovernmental agreements, to balance jobs and households in order to limit travel demand on these connectors. The region also has an interest in maintaining reasonable levels of through-travel on major routes that pass through neighbor cities and function as freight corridors. Growth of neighboring cities will ultimately affect through-travel and could create a need for bypass routes. Such impacts will also be addressed through coordination with county and state agencies, as well as individual neighboring cities.

D. Transportation System Design

Systemwide Goals and Objectives

The overall goal of the RTP is to develop a safe and cost-effective transportation system that serves the region's future travel needs and implements the 2040 Growth Concept while also recognizing the financial constraints and environmental impacts associated with that system. The remainder of this section: (1) presents the systemwide goals and objectives of this Plan; (2) defines adequate accessibility, mobility and safety and the types of fiscal and

environmental constraints that must be addressed; and (3) details the criteria against which the performance of the system will be measured.

System Goal 1 - Implement a transportation system that serves the region's future travel needs and implements the 2040 Growth Concept.

1. **Objective:** Provide the highest levels of access by multiple modes to, between and within the central city, regional centers, intermodal facilities and industrial areas.

2. **Objective:** Provide high levels of access by multiple modes to, between and within station communities, town centers, main streets and corridors.

3. **Objective:** Provide access by multiple modes to, between and within areas in the region not identified above.

4. **Objective:** Provide adequate levels of mobility for people and goods within the region.

System Goal 2 - Provide a cost-effective transportation system.

1. **Objective:** Maintain and preserve the existing transportation infrastructure.

2. **Objective:** Improve the efficiency of the existing transportation system.

3. **Objective:** Consider a full range of costs and benefits in the allocation of transportation funds.

System Goal 3 - Protect the region's livability.

1. **Objective:** Enhance livability with all regional transportation projects and programs.

2. **Objective:** Give priority to transportation projects and programs that best enhance livability.

System Goal 4 - Protect the region's natural environment.

1. **Objective:** Meet applicable standards for air and water quality.

2. **Objective:** Minimize the environmental impacts associated with transportation project construction and maintenance activities.

3. **Objective:** Promote alternative modes that help to meet air quality standards.

System Goal 5 - Improve the safety of the transportation system.

1. **Objective:** Promote safety in the design and operation of the transportation system.

2. **Objective:** Minimize conflicts between modes, particularly between motor vehicles, pedestrians and bicycles.

3. **Objective:** Develop and implement regional safety and education programs.

Regional Street System

In 1991, sweeping changes at the federal, state and regional levels changed the scope of transportation planning. While additional public investments in the regional street system are needed to provide the region with an adequate level of mobility and accessibility, the federal ISTEA has dramatically altered the funding priorities for projects that include federal support. Meanwhile, the state transportation planning rule (TPR) emphasizes the need to promote travel alternatives to the automobile, and sets aggressive goals for reducing per capita automobile travel. At the regional level, the Metro charter directs the agency to complete the Regional Framework Plan (RFP), a broad comprehensive plan that will set regional land use and transportation policy.

The federal ISTEA specifies a planning process that discourages projects that primarily benefit single occupancy vehicle (SOV) travel, and calls for consideration of alternative modes in all transportation planning decisions. In particular, funding for projects that primarily benefit SOV auto travel on the roadway system may be limited, while projects that benefit bicycle, pedestrian, transit and freight travel are more likely to be funded.

The TPR focuses on the link between land use and transportation, and requires the region to consider land use policies when developing transportation plans. At the local level, cities and counties are required to revise development standards to promote transit, pedestrian and bicycle travel, orient new buildings toward major transit stops and local street designs that require less right-of-way width and improve pedestrian circulation. Under the TPR, local transportation plans must also include policies that promote completion of local street networks.

The Regional Framework Plan will echo many of these issues, and provide a land use and transportation context for local comprehensive plans. The policies and key system elements of the RTP will serve as the transportation component of the Regional Framework Plan. The regional urban growth goals and objectives (RUGGOs), adopted by the region in 1991, will guide development of the framework plan.

Together, these requirements have elevated the importance of street designs in regional planning. This section addresses these mandates with street design concepts intended to mix land use and transportation planning in a manner that supports individual 2040 Growth Concept land use components. These design concepts reflect the fact that streets perform many, often conflicting functions, and the need to reconcile conflicts among travel modes. The design classifications will work in tandem with the modal system maps shown in Chapter 4 of this plan.

Regional Street Design Goals and Objectives

Goal 1 - Provide regional street design concepts to guide local implementation of the 2040 Growth Concept.

1. **Objective:** Develop a system of regional street design concepts that fully integrate automobile, transit, pedestrian, bicycle and freight needs as they relate to 2040 Growth Concept land use components.

2. **Objective:** Develop and maintain a regional street design map in Chapter 4 of this plan that identifies appropriate street design classifications for facilities of regional significance. This map shall:

   - respond to regional land use needs presented by the 2040 Growth Concept;
   - be consistent with the regional motor vehicle, transit, freight, bicycle and pedestrian system maps in Chapter 4 of this plan; and
   - be developed with parcel-specific design designations.

3. **Objective:** Develop standards for appropriate transition areas between street design types.

Goal 2 - Develop street performance standards for implementation of regional street design concepts in local transportation system plans (TSPs).

1. **Objective:** Provide model street designs as a resource for local TSP development.

2. **Objective:** Develop RTP street design guidelines to support local TSP development.

3. **Objective:** Develop RTP street design standards where regional design interests warrants consistency among local design standards.

4. **Objective:** Consider right-of-way, environmental and topographic constraints, while satisfying the general intent of the regional street design concepts.

Goal 3 - Manage the regional street system to achieve the access and mobility needs of the 2040 land use components.

1. **Objective:** Provide for through travel on major routes that connect major regional destinations and emphasize efficient travel speeds.

2. **Objective:** Provide access from local areas to adjacent regional or community-scale activity centers.

Regional Street Design Concepts

The regional street design concepts are intended to serve multiple modes of travel in a manner that supports the specific needs of the 2040 land use components. The street design concepts fall into five broad classifications:

- *Throughways* that emphasize motor vehicle travel and connect major activity centers;
- *Boulevards* that serve major centers of urban activity and emphasize transit and pedestrian travel while balancing the many travel demands of intensely developed areas;
- *Streets* that serve transit corridors, main streets and neighborhoods with designs that integrate many modes of travel and provide easy pedestrian and transit travel;
- *Roads* that are traffic oriented; with designs that integrate all modes but primarily serve motor vehicles; and
- *Local streets* that complement the regional system by serving neighborhoods and carrying local traffic.

These design concepts apply to the regional system as it relates to specific 2040 Growth Concept land use components. The following is a detailed description of the purpose and design emphasis of each design type:

Throughways

The purpose of these facilities is to connect major activity centers within the region, including the central city, regional centers, industrial areas and intermodal facilities to one another and to points outside the region. Throughways are divided into limited access Freeway designs where all intersections have separated grades, and Highways that include a mix of separate and at-grade intersections.

Both Freeways and Highways are designed to provide high speed travel for longer motor vehicle trips throughout the region, are primary freight routes and serve all 2040 Growth Concept land use components. In addition to facility designs that promote mobility, Throughways may also benefit from access management and Advanced Traffic Management System (ATMS) techniques. These facilities may carry transit through-service, with supporting amenities limited to transit stations. These facilities may also incorporate transit-priority design treatment where appropriate, and may incorporate light rail or other high-capacity transit.

Freeways

Freeways usually consist of four to six vehicle travel lanes, with additional lanes in some situations. They are completely divided, with no left turn lanes. Freeway designs have

few street connections, and they always occur at separated grades with access controlled by ramps. There is no driveway access to Freeways or buildings oriented toward these facilities, and only emergency parking is allowed. Freeway designs do not include pedestrian amenities, with the exception of improved crossings on overpasses and access ramps. Bikeways designed in conjunction with Freeway improvements usually follow parallel routes.

Highways

Highways usually consist of four to six vehicle travel lanes, with additional lanes in some situations. Highway designs have few street connections, and they may occur at same-grade or on separate grades. Highways are usually divided with a median, but also have left turn lanes where at-grade intersections exist. There are few driveways on Highways, and buildings are not oriented toward these facilities. On-street parking is usually prohibited in Highway designs, but may exist in some locations. Highway designs include striped bikeways and sidewalks with optional buffering. Improved pedestrian crossings are located on overpasses and at same-grade intersections.

Boulevards

Boulevards are designed with special amenities that promote pedestrian and transit travel in the districts they serve. Boulevards serve the multi-modal needs of the region's most intensely developed activity centers, including the central city, regional centers, station communities, town centers and some main streets. As such, these facilities may benefit from access management, traffic calming and ATMS techniques that reinforce pedestrian and transit travel. Boulevards are divided into regional and community scale designs.

Regional Boulevards

Regional Boulevards mix a significant amount of motor vehicle traffic with transit, bicycle and pedestrian travel where dense development is oriented toward the street. These designs feature low to moderate vehicle speeds and usually include four vehicle lanes. Additional lanes or one-way couplets may be included in some situations. Regional Boulevards have many street connections and some driveways, although combined driveways are preferable. These facilities may include on-street parking when possible. The center median serves as a pedestrian refuge and allows for left turn movements at intersections.

Regional Boulevards are designed to be transit-oriented, with high-quality service and substantial transit amenities at stops and station areas. Pedestrian improvements are substantial on boulevards, including broad sidewalks, pedestrian buffering, special street lighting and crossings at all intersections with special crossing amenities at major intersections. These facilities have striped or shared bikeways. They also serve as primary freight routes, and often include loading facilities within the street design.

Community Boulevards

Community Boulevards mix motor vehicle traffic with transit, bicycle and pedestrian travel where dense development is oriented toward the street. These facilities are designed for low motor vehicle speeds and usually include four vehicle lanes and on-street parking. Fewer vehicle lanes may be appropriate in some situations, particularly when necessary to provide on-street parking. Community Boulevards have many street connections and some driveways, although combined driveways are preferable. Where appropriate, center medians offer a pedestrian refuge and allow for left turn movements at intersections.

Community Boulevards are designed to be transit-oriented, with high quality service that is supported by substantial transit amenities at stops and station areas. Pedestrian improvements are also substantial, including broad sidewalks, pedestrian buffering, special street lighting and crossings at all intersections with special crossing amenities at major intersections. Community Boulevards have striped or shared bikeways and some on-street parking. These facilities also serve as secondary freight routes, and may include loading facilities within the street design.

Streets

Streets are designed with amenities that promote pedestrian and transit travel in the districts they serve, particularly where development densities warrant special transit and pedestrian design considerations. Streets serve the multi-modal needs of the region's corridors, neighborhoods and some main streets. As such, these facilities may benefit from access management, traffic calming and ATMS techniques that enhance pedestrian and transit travel, while providing appropriate motor vehicle mobility. Streets are divided into regional and community scale designs.

Regional Streets

Regional Streets are designed to carry significant vehicle traffic while also providing for transit, bicycle and pedestrian travel. These facilities serve a development pattern that ranges from low density residential neighborhoods to more densely developed corridors and main streets, where buildings are often oriented toward the street at major intersections and transit stops. Regional Street designs accommodate moderate motor vehicle speeds and usually include four vehicle lanes. Additional motor vehicle lanes may be appropriate in some situations. These facilities have some to many street connections, depending on the district they are serving. Regional Streets have few driveways that are combined whenever possible. On-street parking may be included, and a center median serves as a pedestrian refuge and allows for left turn movements at intersections.

These facilities are designed to be transit-oriented, with high-quality service and substantial transit amenities at stops and station areas. Although less substantial than in Boulevard designs, pedestrian improvements are important along Regional Streets, including sidewalks that are buffered from motor vehicle travel, crossings at all

intersections and special crossing amenities at major intersections. Regional Streets have striped or shared bikeways. They also serve as primary freight routes, and may include loading facilities within the street design, where appropriate.

Community Streets

Community Streets are designed to carry vehicle traffic while providing for transit, bicycle and pedestrian travel. These facilities serve low density residential neighborhoods as well as more densely developed corridors and main streets, where buildings are often oriented toward the street at main intersections and transit stops. Regional Street designs allow for moderate motor vehicle speeds and usually include four motor vehicle lanes and on-street parking. However, fewer travel lanes may be appropriate when necessary to provide for on-street parking. These facilities have some to many street connections, depending on the 2040 Growth Concept land-use components they serve. Community Streets have few driveways that are shared when possible. A center median serves as a pedestrian refuge and allows for left turn movements at intersections.

Community Streets are transit-oriented in design, with transit amenities at stops and station areas. Although less substantial than in Boulevard designs, pedestrian improvements are important on Community Streets, including sidewalks that are buffered from motor vehicle travel, crossings at all intersections and special crossing features at major intersections. Community Streets have striped or shared bikeways. These facilities also serve as secondary freight routes, and may include loading facilities within the street design, where appropriate.

Roads

Roads are traffic-oriented designs that provide motor vehicle mobility to the 2040 Growth Concept land use components they serve and accommodate a minimal amount of pedestrian and transit travel. These facilities may benefit from access management and ATMS techniques. Roads serve the travel needs of the region's low density industrial and employment areas as well as rural areas located outside the urban growth boundary (UGB). Roads are, therefore, divided into urban and rural designs.

Urban Roads

These facilities are designed to carry significant motor vehicle traffic while providing for some transit, bicycle and pedestrian travel. Urban Roads serve industrial areas, intermodal facilities and employment centers where buildings are rarely oriented toward the street. These facilities also serve new urban areas (UGB additions) where plans for urban land use and infrastructure are not complete. Urban Roads are designed to accommodate moderate vehicle speeds and usually include four motor vehicle lanes, although additional lanes may be appropriate in some situations. These designs have some street connections, but few driveways. Urban Roads rarely include on-street parking, and a center median primarily serves to optimize motor vehicle travel and to allow for left turn movements at intersections.

Urban Roads serve as important freight routes, and often include special design treatments to improve freight mobility. These facilities are designed for transit through-service, with limited amenities at transit stops. Sidewalks are included in Urban Road designs, although buffering is optional. Pedestrian crossings are included at intersections. Urban Roads have striped bikeways.

Rural Roads

Rural Roads are designed to carry rural traffic while accommodating limited transit, bicycle and pedestrian travel. This facilities serve urban reserves, rural reserves and green corridors, were development is widely scattered and usually located away from the road. These facilities are designed to allow moderate motor vehicle speeds and usually consist of two to four motor vehicle lanes, with additional lanes appropriate in some situations. Rural Roads have some street connections and few driveways. On-street parking occurs on an unimproved shoulder, and is usually discouraged. These facilities may include center turn lanes, where appropriate.

Rural Roads serve as important freight routes and often provide important farm-to-market connections. Special design treatments to improve freight mobility are therefore important in these designs. Rural Roads rarely serve transit, but may include limited amenities at rural transit stops where transit service does exist. Bicycles and pedestrians share a common striped shoulder on these facilities, and improved pedestrian crossings occur only in unique situations (such as rural schools or commercial districts).

Local Street Design

Local streets serve the immediate travel needs of the region at the neighborhood level. These facilities are multi-modal, and are designed to serve most short automobile, bicycle and pedestrian trips. They generally do not carry freight in residential areas, but are important to freight movement in industrial and commercial areas. Local streets may serve as transit routes in some situations. Local street designs include many connections with other streets, and bicycle and pedestrian connections where topography or development patterns prevent full street extensions.

The design of local street systems is generally beyond the scope of the RTP. However, the aggregate effect of local street design impacts the effectiveness of the regional transportation system when local travel is restricted by a lack of connecting routes, and local trips are forced onto regional facilities. The following connectivity principles should guide future development of local street designs:

- Planning jurisdictions should create local street system plans or performance standards to ensure connections that meet regional connectivity goals. Local streets include all facilities not identified on the regional design map in Chapter 4 of this plan;

- Local street system plans should anticipate opportunities to incrementally extend and connect local streets over time in primarily developed areas, and local design codes should encourage these connections as part of the development review process;

- Local street design codes should allow street systems to serve a mix of development types within a continuous street pattern;

- Local street designs should encourage pedestrian travel by ensuring that the shortest, most direct routes are provided to nearby existing or planned commercial services, schools, parks and other neighborhood destinations;

- Local street design and zoning ordinances should ensure that neighborhood residents have access to existing or planned commercial services that provide for daily or weekly needs, including groceries, pharmacies and gas stations, without using Throughways, Regional Boulevards, Regional Streets or Urban Roads;

- Where appropriate, local design codes should allow narrow street designs to conserve land, calm traffic or promote connectivity; and

- Closed street systems and cul-de-sac designs should be limited to situations where topography or development patterns prevent full street extensions.

Regional Street System Management

Identifying land use priorities and serving the associated transportation needs is the first step of the transportation planning process. Once appropriate transportation systems are defined (e.g., freeways, transit, freight, etc.) and as additions to existing systems are built, the next critical step is to define the best ways of operating the facilities and systems. The following RTP goals and policies establish the region's heightened commitment to Transportation System Management (TSM). TSM addresses travel demand by managing existing transportation facilities rather than by building new roadways. TSM can relieve congestion, improve the safety and efficiency of transportation facilities during all times of day, and benefit all users of the regional system. Appropriate TSM techniques will be used to achieve specific goals of the regional street design concepts described in this section. There are four broad categories of TSM:

Facility Design

Facility design techniques address roadway safety and operations with minor roadway reconstruction. Projects might include re-striping travel lane widths, realigning roadways to enhance sight distances and geometry at intersection approaches, channeling of turning movements (e.g., stripping or roadway widening to provide left turn pockets, right turn lanes, bus pullouts, etc.), improved signage of cross streets and activity centers and signalization control and phasing adjustment.

Access Management

Access management techniques reduce opportunities for conflict between through-movements and vehicles turning off and onto the roadway. They also reduce conflict between motor vehicles, pedestrians and bicycles. Examples include closing and/or consolidating commercial driveways, minimizing connection of local streets to regionally significant arterials and selectively prohibiting left turn and "U-turn" movements at and between intersections.

Traffic Calming

Traditionally, traffic calming techniques have been applied to existing neighborhood streets and collectors to protect them from *intrusion of through-traffic* seeking to avoid congested major facilities during peak periods and high-speed traffic at all hours. These "retrofit" techniques include speed bumps, traffic-rounds and traffic barriers and are rarely appropriate for use on larger regional facilities. They are, however, critical design elements that address secondary local effects of the regional system and operational policies promoted in the RTP.

Another class of calming techniques is defined in the RTP and are embedded in the design of streetscapes serving pedestrian-oriented land uses. These include narrowed travel lanes, wider sidewalks, curb-corner extensions, planted median strips and other features designed to unobtrusively reduce motor vehicle speeds and buffer pedestrians from the myriad effects of adjacent motor vehicle movements.

Advanced Traffic Management System (ATMS)

ATMS refers to proven traffic management techniques that use computer processing and communications technologies to optimize performance of multi-modal roadway and transit systems. A mature ATMS will integrate freeway, arterial and transit management systems. A blueprint of the region's planned ATMS system is described in the ODOT/FHWA sponsored Portland-area ATMS Plan published in 1993. The ATMS Plan recognizes the inter-relationships between high-speed, limited access through-routes and the parallel system of regional and local minor arterials and collectors. ATMS provides techniques and management systems to facilitate region-wide auto, truck and transit vehicle mobility (i.e., ATMS prioritizes longer trips on freeway and arterial through-routes). ATMS systems also manage "short-trip" facilities that emphasize access to commercial/residential uses. Most important, the ATMS Plan emphasizes the importance of fully integrating through-route and local-system traffic management for optimum performance.

Goal 1 - Use TSM techniques to optimize performance of the region's transportation systems. Selection of appropriate TSM techniques will be according to the regional street design concepts.

1. **Objective:** Implement an integrated, regional ATMS program addressing:

- Freeway Management (such as ramp meters and automated incident detection or rapid response)

- Arterial Signal Coordination (such as comprehensive adjustment of signal timing to minimize stop-and-go travel, consistent with adjacent land use and which coordinates with freeway and interchange operations)

- Transit Operation (such as expanded reliance on Tri-Met's computer-aided fleet location and dispatch system and its integration with freeway and arterial management systems, with special emphasis on relaying incident detection data to allow rerouting of buses)

- Multi-Modal Traveler Information Services

2. **Objective:** Develop access management plans for urban areas that are consistent with regional street design concepts. For rural areas, access management should be consistent with Rural Reserve and Green Corridor land use objectives.

3. **Objective:** Integrate traffic calming elements into new street designs consistent with regional street design concepts, and as a method to optimize regional street system operation without creating excessive local travel on the regional system.

4. **Objective:** Continue to restripe and/or fund minor reconstruction of existing transportation facilities consistent with regional street design concepts.

Regional Street System Implementation

While the primary mission of the RTP is implementation of the 2040 Growth Concept, the plan must also address other important transportation issues that may not directly assist in implementing the growth concept. The plan must also protect the region's existing investments by placing a high priority on projects or programs that maintain or preserve infrastructure. The following goals and objectives reflect this need to integrate 2040 Growth Concept objectives with other important transportation needs or deficiencies in the development of the preferred, financially constrained and strategic RTP systems contained in Chapters 5, 7 and 8:

Goal 1 - Implement a regional transportation system that supports the 2040 Growth Concept through the selection of complementary transportation projects and programs.

1. **Objective:** Place the highest priority on projects and programs that best serve the transportation needs of the central city, regional centers, intermodal facilities and industrial areas.

2. **Objective:** Place a high priority on projects and programs that best serve the transportation needs of station communities, town centers, main streets and corridors.

3. **Objective:** Place less priority on transportation projects and programs that serve the remaining components of the 2040 Growth Concept.

Goal 2 - Emphasize the maintenance and preservation of transportation infrastructure in the selection of the RTP projects and programs.

Goal 3 - Anticipate and address system deficiencies that threaten the safety of the traveling public in the implementation of the RTP.

1. **Objective:** Place the highest priority on projects and programs that address safety-related deficiencies in the region's transportation infrastructure.

2. **Objective:** Place less priority on projects and programs that address other deficiencies in the region's transportation infrastructure.

Regional Street System Performance

> *At their May 7, 1996 meeting, the CAC will consider expanding the following section to include a more detailed discussion of performance measures for congestion, reflecting work underway in Phase I of the Regional Framework Plan.*

Implementation of the 2040 Growth Concept requires a departure from past transportation planning practice. Concentrating development in high-density activity centers, including the central city and regional centers will result in greater use of alternative travel modes, but may produce levels of congestion that signal positive urban development for these areas.

Conversely, the continued economic vitality of industrial areas and intermodal facilities largely depends on preserving or improving access to these areas and maintaining reasonable levels of mobility on the region's throughways. Therefore, regional congestion standards and other regional system performance measures are tailored to reinforce the specific development needs of the individual 2040 Growth Concept land use components.

Regional Motor Vehicle System

The motor vehicle system provides access to the central city, regional centers, industrial areas and intermodal facilities, with an emphasis on mobility between these destinations. Traditionally, the automobile has been the dominant form of passenger travel, and much of the region's roadway system has been designed to accommodate growing automobile demands. However, the motor vehicle system also plays an important role in the movement of freight, providing the backbone for commerce in the region. The motor vehicle system also serves the bus element of the regional transit system (which carries the largest share of transit riders).

Although focused on motor vehicle travel, the system described in this section is multi-modal, with design criteria intended to serve motor vehicle mobility needs, while reinforcing

the urban form of the 2040 Growth Concept. While the motor vehicle system usually serves bicycle and pedestrian travel, the system is designed to limit impacts of motor vehicles on pedestrian and transit-oriented districts.

Motor Vehicle System Goals and Objectives

Goal 1: Provide a regional motor vehicle system of arterials and collectors that connect the central city, regional centers, industrial areas, intermodal facilities and other regional destinations, and provide regional mobility.

1. **Objective:** Maintain a system of principal arterials for long distance, high speed, interstate, inter-region and intra-region travel.

2. **Objective:** Maintain an appropriate level of mobility on the motor vehicle system during periods of peak demand.

3. **Objective:** Maintain an appropriate level of mobility on the motor vehicle system during off-peak periods of demand.

Motor Vehicle Classification System

The motor vehicle system includes principal arterials, major arterials and minor arterials and collectors of regional significance. These routes are designated on the motor vehicle system map in Chapter 4. Local comprehensive plans also include additional minor arterials, collectors and local streets. The following are the regional functional classification categories:

Principal Arterials : These facilities form the backbone of the motor vehicle network. Motor vehicle trips entering and leaving the urban area follow these routes, as well as those destined for the central city, regional centers, industrial areas or intermodal facilities. These routes also form the primary connection between neighbor cities and the urban area. Principal arterials serve as major freight routes, with an emphasis on mobility. These routes fall within regional freeway, highway and road design types.

Principal Arterial System Design Criteria:

- Principal arterials should provide an integrated system that is continuous throughout the urbanized area and also provide for statewide continuity of the rural arterial system.

- The principal arterial system should serve the central city, regional centers, industrial areas and intermodal facilities, and should connect key freight routes within the region to points outside the region.

- A principal arterial should provide direct service: (1) from each entry point to each exit point or (2) from each entry point to the central city. If more than one route is

available, the most direct route will be designated as the principal arterial when it supports the planned urban form.

- Principal arterial routes outside the Urban Growth Boundary should be treated as "Green Corridors," with very limited access and intergovernmental agreements designed to protect rural areas from the effects of urban through-travel.

Major Arterials: These facilities serve as primary links to the principal arterial system. Major arterials, in combination with principal arterials, are intended to provide general mobility for travel within the region. Motor vehicle trips between the central city, regional centers, industrial areas and intermodal facilities should occur on these routes. Major arterials serve as freight routes, with an emphasis on mobility. These routes fall within regional boulevard, regional street, urban road and rural road design types.

Major Arterial System Design Criteria:

- Major arterials should provide motor vehicle connections between the central city, regional centers, industrial areas and intermodal facilities and connect to the principal arterial system. If more than one route is available, the more direct route will be designated when it complements urban form .

- Major arterials should serve as primary connections to principal arterials, and also connect to other arterials, collectors and local streets, where appropriate.

- Freight movement should not be restricted on the principal arterial network.

- The principal and major arterial systems in total should comprise 5-10 percent of the motor vehicle system and carry 40-65 percent of the total vehicle miles traveled.*

Minor Arterials: The minor arterial system complements and supports the principal and major arterial systems, but is primarily oriented toward motor vehicle travel at the community level connecting town centers, corridors, main streets and neighborhoods. As such, minor arterials usually serve shorter trips than principal and major arterials, and therefore must balance mobility and accessibility demands. Minor arterials serve as freight routes, providing both access and mobility. These routes fall within community boulevard, community street, urban road and rural road design types.

Minor Arterial System Design Criteria:

- Minor arterials generally connect town centers, corridors, main streets and neighborhoods to the nearby regional centers or other major destinations.

- Minor arterials should connect to major arterials, collectors, local streets and some principal arterials, where appropriate.

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* *These system percentages will be evaluated as part of the RTP system development phase to verify their appropriateness.*

- The principal, major and minor arterial system should comprise 15-25 percent of the motor vehicle system and carry 65-80 percent of the total vehicle miles traveled.*

Collectors: While some collectors are of regional significance, the collector system operates at the community level to provide local connections to the minor and major arterial systems. As such, collectors carry fewer motor vehicles than arterials, with reduced travel speeds. However, an adequate collector system is needed to serve these local motor vehicle travel needs. Collectors should serve as freight access routes, providing local connections to the arterial network. Collectors fall within the plan's local street design type.

Collector System Design Criteria:

- Collectors should connect neighborhoods to nearby centers, corridors, station areas, main streets and other nearby destinations.

- Collectors should connect to minor and major arterials and other collectors, as well as local streets.

- The collector system should comprise 5-10 percent of the motor vehicle system and carry 5-10 percent of the total vehicle miles traveled.*

Local Streets: The local street system is used throughout the region to provide for local circulation and access. However, arterials in the region's newest neighborhoods are often the most congested due to a lack of local street connections. The lack of local street connections forces local auto trips onto the principal and major arterial network, resulting in significant congestion on many suburban arterials. These routes fall within the plan's local street design type.

Local Street System Design Criteria:

- Local streets should connect neighborhoods, provide local circulation and give access to adjacent centers, corridors, station areas and main streets.

- The local street system should be designed to serve local, low speed motor vehicle travel with closely interconnected local streets intersecting at no more than 660-foot intervals. Closed local street systems are appropriate only where topography, environmental or infill limitations exist. Local streets should connect to major and minor arterials and collectors at a density of 8-20 connections per mile.*

- Direct freight access on the local street system should be discouraged, except where alternatives would create an unusual burden on freight movement.

- Local streets should comprise 65-80 percent of the motor vehicle system and carry 10-30 percent of the total vehicle miles traveled.

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* *These system percentages will be evaluated as part of the RTP system development phase to verify their appropriateness*

Regional Public Transportation

The regional public transportation system is a key component in providing access to the region's most important activity centers, and for 25 years has been the centerpiece to the region's strategies to improve air quality and reduce reliance on the automobile as a mode of travel. Since the construction of the transit mall in the early 1970s, peak-hour transit ridership to downtown Portland has grown to more than 40% of work trips. The system also has been expanded to include light rail transit.

In 1994, the region's residents overwhelmingly approved funds to extend light rail as part of the South/North transit project. Public transportation service is also prominent in Metro's 2040 Growth Concept, such that key elements of the concept, including regional centers, town centers, corridors, main streets and station communities, are strongly oriented toward existing and planned public transportation. The overarching goal of the public transportation system within the context of the 2040 Growth Concept is to provide an appropriate level of access to regional activities to everyone residing within the Urban Growth Boundary (UGB).

Transit service should be provided to serve the entire urban area, and the hierarchy of service types described in this section define what level of service is appropriate for specific areas. The public transportation section is divided into two parts. The first defines the regional public transportation system components that are the basis for implementing the 2040 Growth Concept. The second section provides specific goals and objectives for implementing the appropriate level and type of public transportation service for each 2040 Growth Concept land use designation.

Regional Public transportation System Components

The following public transportation system components establish a network that serves the needs of individual 2040 land use components. This system serves as the framework for consistency among plans of local jurisdictions and Tri-Met. Underlying this network of fast and frequent service is a secondary network of local bus, park-and-ride and demand responsive type service that provide local public transportation. Specific elements of the secondary network will be developed by Tri-Met and local jurisdictions. The following sections present a description of the modes that comprise the regional public transportation system (primary and secondary), the principal 2040 Growth Concept land uses (primary and secondary) served by each mode, and facility design guidelines to provide an appropriate operating environment and level of pedestrian and bicycle accessibility.

Primary Transit Network

The Primary Transit Network (PTN) is a long range transit network designed to serve the growth patterns adopted in the 2040 Growth Concept. The PTN supports intensification of specific land uses identified in the growth concept by providing convenient transit access and improved transit service connectivity. The PTN consists of four major transit modes (e.g., Light

Rail Transit (LRT), Regional Rapid Bus, Frequent Bus and primary bus service) that operate at frequencies of 15 minutes or less all day. Specific modes of the PTN will target service to primary land use components of the 2040 Growth Concept including central city, regional centers, industrial areas and intermodal facilities (includes the Portland International Airport). Some secondary land-use components such as station communities, town centers, main streets and corridors will also be served by the PTN. Any transit trip between two points in the central city, regional centers, town centers, mainstreets, stations areas or corridors can be completed on the PTN. The functional and operational characteristics of the PTN's major transit modes are described below.

Light Rail Transit

Light rail transit (LRT) is a high speed, high-capacity service that operates on a fixed guideway within an exclusive right-of-way (to the extent possible) that connect the central city with regional centers. LRT also serves existing regional public attractions (such as the civic stadium, the convention center, and the Rose Garden) and station communities (a secondary land use component). LRT service runs at least every 10 minutes during the weekday and weekend midday base periods, operates at higher speed outside of the central city and makes very few stops. A high level of passenger amenities are provided at transit stations and station communities including schedule information, ticket machines, lighting, benches and bicycle parking. The speed and schedule reliability of LRT can be maintained by the provision of signal preemption at grade crossings and/or intersections. Other rail options include commuter rail along existing heavy rail lines, which may become economically feasible for serving specific destinations in the greater metropolitan region.

Regional Rapid Bus

Regional Rapid Bus provides high frequency, high speed service along major transit routes with limited stops. This service is a high-quality bus that emulates LRT service in speed, frequency and comfort. A high level of transit amenities are provided at major transit stops and at station communities. Regional Rapid Bus passenger amenities include schedule information, ticket machines, lighting, benches, covered bus shelters and bicycle parking.

Frequent Bus

Frequent Bus provides high frequency local service along major transit routes with frequent stops. This services include a high level of transit preferential treatments and passenger amenities along the route such as covered bus shelters, curb extensions, reserved bus lanes, lighting, median stations and/or signal preemption.

Primary Bus

Primary bus service is provided on most major urban streets. This type of bus service operates with maximum frequencies of 15 minutes with conventional stop spacing along the route. Transit preferential treatments and passenger amenities such as covered bus shelters, lighting, signal preemption and curb extensions are appropriate at high ridership locations.

Secondary Transit Network (STN)

The secondary transit network is comprised of secondary bus, mini-bus, paratransit and park-and-ride service. Secondary service is focused more on accessibility, frequency of service along the route and coverage to a wide range of land use options rather than on speed between two points. Secondary transit is designed as an alternative to the single-occupant vehicle by providing frequent, reliable service. Secondary bus service generally is designed to serve travel with one trip end occurring within a secondary land use component.

Secondary Bus

Secondary bus lines provide coverage and access to primary and secondary land use components. Secondary bus service runs as often as every 30 minutes on weekdays. Weekend service is provided as demand warrants.

Minibus

These services provide coverage in lower density areas by providing transit connections to primary, and secondary land use components. Minibus services, which may range from fixed route to purely demand responsive including dial-a-ride, employer shuttles and bus pools, provide at least a 60 minute response time on weekdays. Weekend service is provided as demand warrants.

Paratransit

Paratransit service is defined as non-fixed route service that serves special transit markets, including "ADA" service throughout the greater metro region.

Park-and-Ride

Park-and-ride facilities provide convenient auto access to regional trunk route service for areas not directly served by public transportation. Bike and walk access as well as bike accommodations for parking and storage are considered in the siting process of new park-and-ride facilities. In addition, the need for a complementary relationship between park-and-ride facilities and regional and local land use goals exists and requires periodic evaluation over time for continued appropriateness.

Other Transit Options

Other transit options may become economically feasible for serving certain destinations in the metropolitan areas. These include commuter rail along existing heavy rail lines, passenger rail connecting the region to other urban areas, and inter-city bus service that provide statewide access to the region's rail and air terminals.

Regional Public Transportation System Goals and Objectives

Figure 1-1 on the following page provides a hierarchy of public transportation service for 2040 Growth Concept land use components. "Core service" is defined as the most efficient level of public transportation service planned for a given land use and is indicated with a solid square(s). Specific goals and objectives reference Figure 1-1.

Figure 1.1

Hierarchy of Public Transportation Services for the 2040 Growth Concept Land Use Components

		Primary Components				Secondary Components				Other Urban Components		
		Central City	Regional Centers	Industrial Areas	Intermodal Facilities	Station Communities	Town Centers	Main Streets	Corridors	Employment Areas	Inner Neighborhood	Outer Neighborhood
Service Types	LRT	■	■		□**	■	□					
	Regional Rapid Bus	■	■			□			□			
	Frequent Bus	■	■			□	□	■	□			
	Primary Bus	■	■	□		□	■	□	■			
	Secondary Bus	□	□	■	■	□	□	□	□	□	■	□
	Mini-bus	□	□	□		□	□	□	□	■	□	■
	Paratransit	□	□	□		□	□	□	□	□	□	□
	Park-and-Ride		□			□	□		□		□	■

■ *Best transit mode(s) designed to serve growth concept land use components*

□ *Additional transit mode(s) that may serve growth concept land use components*

** *Anticipated LRT services to Portland International Airport*

Goal 1 - Develop a public transportation system that serves 2040 Growth Concept primary land use components (central city, regional centers, industrial areas, intermodal facilities) with an appropriate level, quality and range of public transportation available.

1. **Objective:** Provide a full range of public transportation to the central city with core service provided by LRT, Regional Rapid Bus and Frequent Bus.

2. **Objective:** Provide a full range of public transportation to regional centers with core service provided by LRT, Regional Rapid Bus, Frequent Bus and primary bus.

3. **Objective:** Serve industrial areas with primary and secondary public transportation with core service provided by secondary bus.

4. **Objective:** Serve intermodal facilities with a mix of primary public transportation with core service to freight facilities provided by secondary bus and core service to the Portland International Airport (passenger facility) provided by LRT.

Goal 2 - Develop a public transportation system to serve the 2040 Growth Concept secondary land use components (station communities, town centers, main streets, corridors) with high quality service.

1. **Objective:** Develop a network of primary and secondary service to growth concept station communities with core service provided by either LRT and/or Regional Rapid Bus.

2. **Objective:** Develop a network of primary and secondary service to growth concept town centers with core service provided by primary bus.

3. **Objective:** Develop a network of primary and secondary service to growth concept main streets with core service provided by Frequent Bus.

4. **Objective:** Develop a network of primary and secondary service to growth concept corridors with core service provided by primary bus.

Goal 3 - Develop a reliable, convenient and accessible system of secondary public transportation to serve the 2040 Growth Concept "other urban components" (e.g., employment areas, outer neighborhoods and inner- neighborhoods).

1. **Objective:** Provide secondary public transportation to employment areas with core service provided by mini-bus.

2. **Objective:** Provide secondary public transportation to inner neighborhoods with core service provided by secondary bus.

3. **Objective:** Provide secondary public transportation to outer neighborhoods with core service provided by mini-bus.

Goal 4 - Continue to develop fixed-route service and complementary paratransit services which comply with the Americans with Disabilities Act of 1990 (ADA).

1. **Objective:** Provide service to persons determined to be eligible for ADA paratransit that is comparable with service provided on the fixed route system.

2. **Objective:** Continue to work with local jurisdictions to make public transportation stops accessible.

Goal 5 - Continue efforts to maintain public transportation as the safest forms of motorized transportation in the region.

1. **Objective:** Improve the existing level of safe public transportation operations.

2. **Objective:** Reduce the number of reportable accidents involving public transportation vehicles.

3. **Objective:** Improve the existing level of passenger safety and security on the public transportation system.

Goal 6 - Expand the amount of information available about the public transportation system to allow more people to use the system.

1. **Objective:** Increase awareness of public transportation and how to use it through expanded education and public information media and easy to understand schedule information and format.

2. **Objective:** Improve the system for receiving and responding to feedback from public transportation riders.

Regional Freight System

Developing and adopting the Regional Freight Network and associated system goals and objectives acknowledges that the movement of goods and services makes a significant contribution to the region's economy and wealth, and that it contributes to our quality of life. The region's relative number of jobs in transportation and wholesale trade exceeds the national average. The regional economy has historically, and continues to be closely tied to the transportation and distribution sectors. This trend is projected to increase. Freight volume is projected (by the 2040 Commodity Flow Analysis) to grow two to three times by 2040 - a rate faster than population growth.

The significant growth in freight projected by the 2040 Commodity Flow Analysis indicates the need to make available adequate land for expansion of intermodal facilities, manufacturing, wholesale and distribution activities, and to continue maintaining and enhancing the freight transportation network. The 2040 Land Use Scenario identifies industrial sanctuaries for distribution and manufacturing activities; the RTP freight network identifies the transportation infrastructure and intermodal facilities that serve these land uses and commodities flowing though the region to national and international markets. The following goals and objectives direct the region's planning and investment in the freight transportation system.

Regional Freight System Goals and Objectives

Goal 1 - Provide efficient, cost-effective and safe movement of freight in and through the region.

1. **Objective:** Maintain a reasonable and reliable travel (transit) time for moving freight through the region in freight transportation corridors.

2. **Objective:** Include the movement of freight when conducting multi-modal transportation studies.

3. **Objective:** Work with the private sector, local jurisdictions, ODOT and other public agencies to:

   - develop the regional Intermodal Management System (IMS) and Congestion Management System (CMS);
   - monitor the efficiency of freight movements on the regional transportation network;
   - identify existing and future freight mobility problems and opportunities; and
   - reduce inefficiencies or conflicts on the freight network.

4. **Objective:** Implement TSM improvements that enhance the efficiency of the existing infrastructure; coordinate public policies to reduce or eliminate conflicts between current and future land uses, transportation uses and freight mobility needs, including those relating to:

   - land use changes/encroachments on industrial lands; and
   - transportation and/or land use actions or policies that result in lower speeds or less service on the freight network.

5. **Objective:** Ensure that jurisdictions develop local strategies that provide adequate freight loading and parking strategies in the central city, regional centers, town centers and main streets.

Goal 2 - Maintain and enhance the region's competitive advantage in freight distribution through efficient use of a flexible, continuous, multi-modal transportation network that offers competitive choices for freight movement.

1. **Objective:** Provide high-quality access between freight transportation corridors and the region's intermodal facilities and industrial sanctuaries.

Goal 3 - Protect public and private investments in the freight network.

1. **Objective:** Improve opportunities for partnerships between the private freight transportation industry and public agencies to improve and maintain the region's integrated multi-modal freight network:

    - Work with the private transportation industry, Oregon Economic Development Department, Portland Development Commission, the Port of Portland and others to identify and realize investment opportunities that enhance freight mobility and support the state and regional economy.

2. **Objective:** Analyze market demand and linkages in estimating and expanding the life of public investments in the freight network.

3. **Objective:** Encourage efforts to provide flexible public funding for freight mobility investments.

4. **Objective:** Give priority to investments, projects and actions that enhance efficient freight movement on the designated regional freight network.

    - Where appropriate, make improvements to main freight routes that minimize freight/non freight conflicts on connector routes.

Goal 4 - Ensure the safe operation of the freight system.

1. **Objective:** Correct existing safety deficiencies on the freight network relating to:

    - roadway geometry and traffic controls;
    - bridges and overpasses;
    - at-grade railroad crossing;
    - truck traffic in neighborhoods;
    - congestion on interchanges and hill climbs; and
    - hazardous materials movement.

2. **Objective:** Identify and monitor potential safety problems on the freight network:

    - Collect and analyze accident data related to the freight network using the IMS data base.

Regional Bicycle System

Adoption of the Regional Bicycle Plan element of the RTP continues the region's recognition of bicycling as an important transportation alternative. Metro's 1994 travel behavior survey found that places in the region with good street continuity, ease of street crossing and gentle topography experience more than a three percent bicycle mode share. Implementation of the bicycle plan element will provide for consistently designed, safe and convenient routes for bicyclists between jurisdictions and to major attractions throughout the region, will work toward increasing the modal share of bicycle trips, and will encourage bicyclists and motorists to share the road safely.

Regional Bicycle System Goals and Objectives

Goal 1 - Provide a continuous regional network of safe and convenient bikeways integrated with other transportation modes and local bikeway systems.

1. **Objective:** Integrate the efforts of the state, counties and cities in the region to develop a convenient, safe, accessible and appealing regional system of bikeways.

2. **Objective:** Ensure that the regional bikeway system functions as part of the overall transportation system.

Goal 2 - Increase the modal share of bicycle trips.

1. **Objective:** Develop and update a system of regional bikeways that connect activity centers as identified in the 2040 Growth Concept and the Regional Framework Plan.

2. **Objective:** Promote increased bicycle use for all travel purposes.

3. **Objective:** Coordinate with Tri-Met to ensure improved bicycle access and parking facilities at existing and future LRT stations, transit centers and park-and-ride locations.

4. **Objective:** Develop travel-demand forecasting for bicycles and integrate with regional transportation planning.

Goal 3- Ensure that all transportation projects include bicycle facilities using established design standards appropriate to regional land use and street classifications.

1. **Objective:** Ensure that bikeway projects, bicycle parking and other end-of-trip facilities are designed using established standards, and that bikeways are connected with other jurisdictions and the regional bikeway network.

2. **Objective:** Ensure that jurisdictions implement bikeways in accordance with established design standards.

3. **Objective** Ensure integration of multi-use paths with on-street bikeways using established design standards.

4. **Objective:** Provide appropriate short and long term bicycle parking and other end-of-trip facilities at regional activity centers through the use of established design standards.

Goal 4 - Encourage bicyclists and motorists to share the road safely.

1. **Objective:** Coordinate regional efforts to promote safe use of roadways by bicyclists and motorists through a public awareness program.

2. **Objective:** Expand upon local traffic education programs to provide region wide coverage and actively distribute safety information to local jurisdictions, law enforcement agencies, schools and community organizations that informs and educates bicyclists, pedestrians and motorists.

3. **Objective:** Reduce the number of bicycle accidents in the region.

4. **Objective:** Identify and improve high-frequency bicycle accident locations.

Regional Pedestrian Program

By providing dedicated space for those on foot or using mobility devices, pedestrian facilities are recognized as an important incentive that promotes walking as a mode of travel. Throughout this document, the term "walking" should be interpreted to include individuals traveling on foot as well as those pedestrians using mobility aids, such as wheelchairs. Walking for short distances is an attractive option for most people when safe and convenient pedestrian facilities are available. Combined with adequate sidewalks and curb ramps, amenities such as benches, curb extensions, marked street crossings, landscaping and wide planting strips make walking an attractive and convenient mode of travel. The focus of the regional pedestrian program is to identify areas of high, or potentially high, pedestrian activity in order to target infrastructure improvements that can be made with regional funds.

A well-connected, high–quality pedestrian environment facilitates walking trips by providing safe and convenient access to pedestrian destinations within a short distance Transit use is enhanced by pedestrian improvements, especially those facilities that connect stations or bus stops to surrounding areas or that provide safe and attractive waiting areas. Improving walkway connections between office and commercial districts and surrounding neighborhoods provides opportunities for residents to walk to work, shopping or to run personal errands. This reduces the need to bring an automobile to work and enhances transit and carpooling as commute options. An integrated pedestrian system supports and links every other element of the regional transportation system and complements the region's urban form and growth management goals.

Regional Pedestrian Program Goals and Objectives

Goal 1 - Increase walking for short trips and improve access to the region's transit system through pedestrian improvements and changes in land use patterns, designs and densities.

1. **Objective:** Increase the walk mode share for short trips, including walking to transit, near and within the central city, regional centers, town centers, main streets, corridors and LRT station communities.

2. **Objective:** Improve pedestrian networks serving those transit centers, stations and stops with high frequency transit service.

Goal 2 - Make the pedestrian environment safe, convenient, attractive and accessible for all users.

1. **Objective:** Complete pedestrian facilities (i.e., sidewalks, street crossings, curb ramps) needed to provide safe and convenient pedestrian access to and within the central city, regional centers, town centers, main streets, corridors and to the region's primary transit network.

2. **Objective:** Improve street amenities (e.g., landscaping, pedestrian-scale street lighting, benches and shelters) affecting the pedestrian and transit user near and within the central city, regional centers, town centers, main streets, corridors and the primary transit network.

Goal 3 - Provide for pedestrian access, appropriate to existing and planned land uses, street classification and transit service, as a part of all transportation projects.

1. **Objective:** Focus priority among regionally funded pedestrian projects on those projects which are most likely to increase pedestrian travel, improve the quality of the pedestrian system, and help complete pedestrian networks near and within the central city, regional centers, town centers, main streets, corridors and LRT station communities.

2. **Objective:** Integrate pedestrian access needs into planning, programming, design and construction of all transportation projects.

Goal 4 - Encourage motorists, bicyclists and pedestrians to share the roadway safely.

1. **Objective:** Coordinate regional efforts to promote safe use of roadways by motorists, bicyclists and pedestrians through a public awareness program.

2. **Objective:** Expand upon local traffic education programs to provide region wide coverage, and actively distribute safety information to local jurisdictions, law enforcement agencies, schools and community organizations that informs and educates motorists, bicyclists and pedestrians.

Demand Management Program

The following describes the goals, objectives and performance measures for the region's transportation demand management program.

Transportation Demand Management

Transportation demand management (TDM) is not one action, but rather a series of actions to promote shared ride and the use of alternative modes, especially during the most congested times of the day. The term TDM encompasses the strategies, techniques and supporting actions that encourage non-single occupant vehicle travel (i.e., transit, walk, bike, carpool and telecommute), as well as measures to reduce per-capita vehicle miles traveled (VMT).

The primary benefit of managing travel demand is to minimize the need to expand the capacity of the region's transportation system (i.e., building new highways or adding lanes to existing highways) and make more efficient use of non-SOV modes (transit, walk, bike, carpool and telecommute) of travel. Managing travel demand will also help the region reduce overall per-capita vehicle travel, reduce air pollution and maximize energy conservation in a relatively low-cost manner.

An important consideration for selecting demand management measures is to combine those that are mutually supportive into a comprehensive program. This approach is important to the success of TDM because of the close linkages between many TDM measures and programs at the regional and local level. Therefore, local jurisdictions should consider the design of demand management measures in a comprehensive manner in the preparation of local system plans and incorporate policies that implement those combinations of TDM measures that best support regional goals and that meet local needs for both work and non-work travel.

In addition, the state's Transportation Planning Rule (TPR) requires a 10 percent reduction in VMT per capita by 2015 and a 10 percent reduction in parking spaces per capita by 2015. In order to provide for maximum achievement of the TPR, air quality and accessibility goals, local jurisdictions should incorporate policies that support and help implement the TDM measures and projects listed in Chapter 5.

The following describes the region's TDM program goals, objectives and performance measures. Goals and objectives are in part to assist the region to meet state goals for reducing parking and vehicle miles per capita. It is understood that TDM strategies will be area specific following further analysis as part of the systems element of the RTP (scheduled to be completed in December 1996). Consequently, many of the TDM policies may not be applicable to areas such as the Central City where significant transportation demand management, transit and other alternative mode actions are in place as a result of the Central City Transportation Management Plan (CCTMP).

TDM Program Goals and Objectives

The function of TDM support programs are to: (1) provide the physical amenities necessary to make non-SOV modes more attractive; (2) provide incentives (monetary and non-monetary) to encourage people to use non-SOV modes; and (3) remove barriers such as regulation and/or restrictions that would make it more difficult for people to choose non-SOV modes.

TDM support programs are designed to help the region achieve the TPR VMT per capita and parking space per capita reduction goals, complement local jurisdiction efforts to assist employers in implementing measures to meet DEQ's Employee Commute Options (ECO) rule, and to help the region achieve its 2040 Growth Concept land use accessibility goals.

Goal 1 - Enhance mobility and support the use of alternative transportation modes by improving regional accessibility to transit, carpool, telecommute, bicycle and pedestrian options.

1. **Objective:** Provide transit supportive design and infrastructure in 2040 Growth Concept regional centers, town centers, station communities, mainstreets and along designated transit corridors.

2. **Objective:** Develop local access to Tri-Met's regional carpool matching database.

3. **Objective:** Coordinate with Tri-Met on the provision of regional vanpool service to major employment centers.

Goal 2 - Promote policies and strategies that reduce travel by single occupant vehicles (SOV) in order to help the region achieve the 10 percent reduction in vehicle miles traveled (VMT) per capita and 10 percent reduction in parking spaces per capita as required by the Transportation Planning Rule (TPR) over the planning period, and that improve air quality.

1. **Objective:** Implement appropriate parking ratios and investigate other measures throughout the region that reduce parking demand or lead to more efficient parking design options.

2. **Objective:** Support efforts to provide maximum allowable tax benefits and subsidies to users of alternative modes of transportation

3. **Objective:** Conduct further study of market-based strategies such as parking pricing, congestion pricing and parking-cash out as measures to promote more compact land use, increase alternative mode shares and to reduce VMT.

4. **Objective:** Investigate the use of HOV lanes to reduce roadway congestion.

Goal 3 - Provide incentives for employers and developers to build/locate in the 2040 Growth Concept central city, regional centers, town centers, station communities and transit corridors to promote more compact land use.

1. **Objective:** Provide density bonus for employers and developers who locate or build in the central city, regional centers, town centers, station communities and along transit corridors.

2. **Objective:** As conditions permit, reduce the average local traffic impact fee for development in the 2040 Growth Concept central city, regional centers, town centers, station communities and transit corridors.

3. **Objective:** Include transit oriented design guidelines in local development approval process.

Goal 4 - Continue to coordinate efforts to promote TDM at the regional and local level.

1. **Objective:** Continue to use the TDM Subcommittee as a forum to discuss TDM issues and implementation procedures.

2. **Objective:** Provide TDM materials that outline available regional programs and services.

Goal 5 - Implement TDM support programs to make it more convenient for people to use alternative modes for all trips throughout the region.

1. **Objective:** Encourage development of public/private TDM partnerships with service providers.

2. **Objective:** Promote the establishment of Transportation Management Associations (TMAs) in areas identified as major employment, retail and/or regional centers.

3. **Objective:** Work with local jurisdictions and neighborhood organizations to develop citizen outreach efforts to provide options and marketing material to residential areas.

4. **Objective:** Promote flexible work hours and/or compressed work weeks for employees with public and private sector employers.

5. **Objective:** Work with local employers to promote telecommute as a viable option for commuting (this can include the establishment of centralized telecommute centers).

Goal 6 - Increase public knowledge and understanding about TDM as a tool to reduce congestion, reduce air pollution, implement the 2040 Growth Concept and to help the region meet the TPR VMT per capita and parking per capita reduction targets.

1. **Objective:** Expand Tri-Met's public outreach and education program.

2. **Objective:** Maintain information on TDM services available for local employers.

Parking Management Program

At their May 7, 1996 meeting, the CAC will consider expanding the following section to include a more detailed discussion of parking management policies, reflecting work underway in Phase I of the Regional Framework Plan.

The state's Transportation Planning Rule (TPR) requires that the Regional Transportation Plan (RTP) include methods to reduce parking spaces per capita by 10 percent over the next 20 years. The requirement is one aspect of the rule's overall objective to reduce single-occupant vehicle travel, promote alternative modes and encourage pedestrian friendly urban areas. However, the mode of travel used to make a trip is directly influenced by the convenience and cost of parking. As parking in densely developed areas becomes less convenient and more costly, alternative modes of travel become relatively more attractive. In addition, as alternative modes of travel are increasingly used for work trips, scarce parking spaces are released for shopping and other non-work purposes. Parking management is therefore particularly important in areas that are currently developed at high densities (Central City) and in areas planned for new high-density development such as Regional Centers and Town Centers.

In addition, parking management programs should be complementary to other TDM strategies aimed at meeting DEQ's Parking Ratio Rule and to those aimed at increasing both ridesharing and transit use.

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Chapter 1 Glossary

Bicycle - A vehicle having two tandem wheels, a minimum of 14" in diameter, propelled solely by human power, upon which a person or persons may ride. A three-wheeled adult tricycle is considered a bicycle. In Oregon, a bicycle is legally defined as a vehicle. Bicyclists have the same right to the roadways and must obey the same traffic laws as the operators of other vehicles.

Bicycle Facilities - A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities, all bikeways and shared roadways not specifically designated for bicycle use.

Bike Lane - A portion of a roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

Bicycle Network - A system of connected bikeways that provide access to and from local and regional destinations and to adjacent bicycle networks.

Bikeway - A bikeway is created when a road has the appropriate design treatment for bicyclists, based on motor vehicle traffic volumes and speeds. On-road bikeways include shared roadway, shoulder bikeway, bike lane or bicycle boulevard design treatments. Another type of bikeway design treatment, the multi-use path, is separated from the roadway.

Citizen Advisory Committee (CAC) - Selected for a specific issue, project, or process, a group of citizens volunteer and are appointed by Metro to represent citizen interests. The RTP citizen advisory committee reviews regional transportation issues.

Community - For the purposes of the RTP, this term refers to informal subareas of the region, and may include one or more incorporated areas and adjacent unincorporated areas that share transportation facilities or other urban infrastructure. For example, references to the east Multnomah County community usually includes the cities of Gresham, Troutdale, Fairview and Wood Village, and unincorporated areas that abut these jurisdictions (see "Regional").

Functional Plan - A limited purpose multi-jurisdictional plan for an area or activity having significant district-wide impact upon the orderly and responsible development of the metropolitan area that serves as a guideline for local comprehensive plans consistent with ORS 268.390.

Greater Metropolitan Region - Defined as the greater area surrounding and including Metro's jurisdictional area, including parts of Multnomah, Clackamas and Washington counties as well as urban areas in Marion, Columbia and Yamhill counties (see "Metropolitan Region").

Growth Concept - A concept for the long-term growth management of our region, stating the preferred form of the regional growth and development, including if, where, and how much the urban growth boundary should be expanded, what densities should characterize different areas, and which areas should be protected as open space.

Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 - The most recent federal highway/transit funding reauthorization, which provides regions and states with additional funding and more flexibility in making transportation decisions. Among other things, the Act requires the metropolitan area planning process to consider such issues as land use, intermodal connectivity, methods to enhance transit service, and needs identified through the management systems.

Joint Policy Advisory Committee on Transportation (JPACT) - A 17-member committee of local-area elected officials, Metro councilors and other transportation officials who coordinate transportation decisions for the region.

Land Conservation and Development Commission (LCDC) - The 7-member directorship of Oregon's statewide planning program. The LCDC is responsible for approving comprehensive land use plans promulgating regulations for each of the statewide planning goals.

Local Comprehensive Plan - A generalized, coordinated land use map and policy statement of the governing body of a city or county that inter-relates all functional and natural systems and activities related to the use of land, consistent with state law.

Metro -The regional government and designated Metropolitan Planning Organization (MPO - see below) of the Portland metropolitan area. It is governed by a 7-member Metro Council (see below) elected by and representing districts within Metro's jurisdictional boundaries: all of Multnomah County and generally the urban portions of Clackamas and Washington Counties. Metro is responsible for the Washington Park Zoo, solid waste landfills, the Oregon Convention Center, the Portland Center for the Performing Arts, establishing and maintaining the Urban Growth Boundary (UGB - see below), and for regional transportation planning activities such as the preparation of the RTP (seel below), and the planning of regional transportation projects including light-rail.

Metro Committee for Citizen Involvement (MCCI) - composed of citizen representatives from the Tri-Counties area, to "advise and recommend actions to the Metro Council on matters pertaining to citizen involvement."

Metro Council - composed of 7 members (formerly 13) elected from districts throughout the metropolitan region (urban areas of Clackamas, Multnomah and Washington counties). The Council approves Metro policies, including transportation plans, projects and programs recommended by the Joint Policy Advisory Committee on Transportation (JPACT - see above).

Metro Policy Advisory Committee (MPAC) - Established by the Metro Charter and composed of local elected officials (including representatives from Clark County, WA and the State of Oregon), MPAC is responsible for recommending to the Metro Council adoption of or amendment to any element of the Charter-mandated Regional Framework Plan.

Metropolitan Planning Organization (MPO) - An individual agency designated by the state governor in each federally recognized urbanized area to coordinate transportation planning for that metropolitan region. Metro (see above) is that agency for Clackamas, Washington and Multnomah Counties; for Clark County, Washington, that agency is the Southwest Washington Regional Transportation Council (SWRTC, formally the Intergovernmental Resource Center - see below).

Metropolitan Region - Defined as the area included within Metro's jurisdictional boundary, including parts of Multnomah, Clackamas and Washington counties (see "Greater Metropolitan Region").

Metropolitan Transportation Improvement Program (M-TIP) - a staged, multiyear, intermodal program of transportation projects which is consistent with the metropolitan transportation plan.

Multi-use Path - A bikeway that is physically separated from motor vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way, used by bicyclists, pedestrians, joggers, skaters and other non-motorized travelers.

Neighbor City - Nearby incorporated cities with separate urban areas from the Metro urban area, but connected to the metropolitan area by major highways. Neighbor cities include Sandy, Estacada, Canby, Newberg, North Plains and Scappoose.

Oregon's Statewide Planning Goals - 19 goals in four broad categories: land use, resource management, economic development, and citizen involvement. Locally adopted comprehensive plans and regional transportation plans must be consistent with the statewide planning goals.

Oregon Transportation Plan (OTP) - the State's official statewide, intermodal tranportation plan that will set priorities and state policy in Oregon for the next 40 years. The plan, developed by the Oregon Department of Transportation through the statewide transportation planning process, responds to federal ISTEA requirements (see above) and Oregon's Transportation Planning Rule (TPR - see below).

Regional - For the purposes of the RTP, this term refers to large subareas of the region, or the entire region, and usually includes many incorporated areas and adjacent unincorporated areas that share major transportation facilities or other urban infrastructure (see "Community").

Regional Framework Plan - Required of Metro under the Metro Charter, the Regional Framework Plan must address nine specific growth management and land use planning issues (including transportation), with the consultation and advice of MPAC (see above). To encourage regional uniformity, the regional framework plan shall also contain model terminology, standards and procedures for local land use decision making that may be adopted by lcoal governments.

Regional Transportation Plan (RTP) - The official intermodal transportation plan that is developed and adopted thorough the metropolitan transportation planning process for the metropolitan planning area.

Regional Urban Growth Goals and Objectives (RUGGOs) - An urban growth policy framework that represents the starting point for the agency's long-range regional planning program.

Rural Area - Those areas located outside the Metro Urban Growth Boundary (UGB).

Shared Roadway - A type of bikeway where bicyclists and motor vehicles share a travel lane.

State Transportation Improvement Program (STIP) - A staged, multiyear, statewide, intermodal program of transportation projects with is consistent with the Statewide transportation plan and planning processes and metropolitan plans, TIPs and processes.

Transit-Oriented Development - 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. Key features include: a mixed use center and high residential density.

Transportation Demand Management (TDM) - Actions, such as ridesharing and vanpool programs, the use of alternative modes, and trip-reduction ordinances, which are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity.

Transportation Disadvantaged/Persons Potentially Underserved by the Transportation System - Those individuals who have difficulty in obtaining transportation because of their age, income, physical or mental disability.

Transportation Planning Rule (TPR) - The implementing rule of statewide land use planning goal (#12) dealing with transportation, as adopted by the State Land Conservation and Development Commission (LCDC - see above). Among its may provisions, the Rule includes requirements to preserve rural lands, reduce vehicle miles traveled (VMT) per capita by 20% in the next 30 years, and to improve alternative transportation systems.

Transportation Policy Alternatives Committee (TPAC) - Senior staff-level policy committee which reports and makes policy recommendations to JPACT (see above). TPAC's membership includes technical staff from the same governments and agencies as JPACT, plus representatives of the Federal Highway Administration and the Southwest Washington Regional Transportation Council (SWRTC - see above); there are also six citizen representatives appointed by the Metro Council (see above).

Transportation System Management (TSM) - Strategies and techniques for increasing the efficiency, safety, capacity or level of service of a transportation facility without major new capital improvements. This may include programs that encourage transit, carpooling, telecommuting, alternative work hours, bicycling, walking, signal improvements, channelization, access management, HOV lanes, etc.

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.

Urban Area - Those areas located within the Metro Urban Growth Boundary (UGB).

Urban Growth Boundary - The politicaly defined boundary around a metropolitan area outside of which no urban improvements may occur (sewage, water, etc.). It is intended that the UGB be defined so as to accommodate all projected population and employment growth within a 20-year planning horizon. A formal process has been established for periodically reviewing and updating the UGB so that it accurately reflects projected population and employment growth.

Wide Outside Lane - A wider than normal curbside travel lane that is provided for ease of bicycle operation where there is insufficient room for a bike lane or shoulder bikeway.

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Chapter 1 Acronyms

ADA	Americans with Disabilities Act
ATMS	Advanced Traffic Management System
CBD	Central Business District
FHWA	Federal Highway Administration
FTA	Federal Transit Administration (formerly UMTA)
FY	Fiscal Year
HCT	High Capacity Transit
HOV	High-Occupancy Vehicle
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991 (Federal)
JPACT	Joint Policy Advisory Committee on Transportation (Regional)
LCDC	Land Conservation and Development Commission (State)
LRT	Light Rail Transit (MAX)
MCCI	Metro Council for Citizen Involvement
MPAC	Metro Policy Advisory Committee
MPO	Metropolitan Planning Organization (Metro)
MTIP	Metropolitian Transportation Improvement Program
NHS	National Highway System
OAR	Oregon Administrative Rules
ODOT	Oregon Department of Transportation (State)
ORS	Oregon Revised Statutes
R.O.W.	Right of Way
RTP	Regional Transportation Plan (Metro)
RUGGO	Regional Urban Growth Goals and Objectives
SOV	Single-Occupancy Vehicle
TPAC	Transportation Policy Alternatives Committee (Regional)
TPR	Transportation Planning Rule (State)
Tri-Met	Tri-County Metropolitan Transportation District
TSM	Transportation System Management
UGB	Urban Growth Boundary
USDOT	U.S. Department of Transportation
VMT	Vehicle Miles Traveled

METRO

Metro is the directly elected regional government that serves more than 1.2 million residents in the urban portions of Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan region.

Metro is responsible for the regional aspects of growth management, transportation and land use planning; solid waste management; operation of the Metro Washington Park Zoo; regional parks and greenspaces programs; and technical services to local governments. Metro manages the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Expo Center through the Metropolitan Exposition-Recreation Commission.

Metro is governed by an executive officer and a seven-member council. The executive officer is elected regionwide and the councilors are elected by district. Metro also has an auditor who is elected region-wide.

For more information about Metro or to schedule a speaker for a community group, call 797-1510.

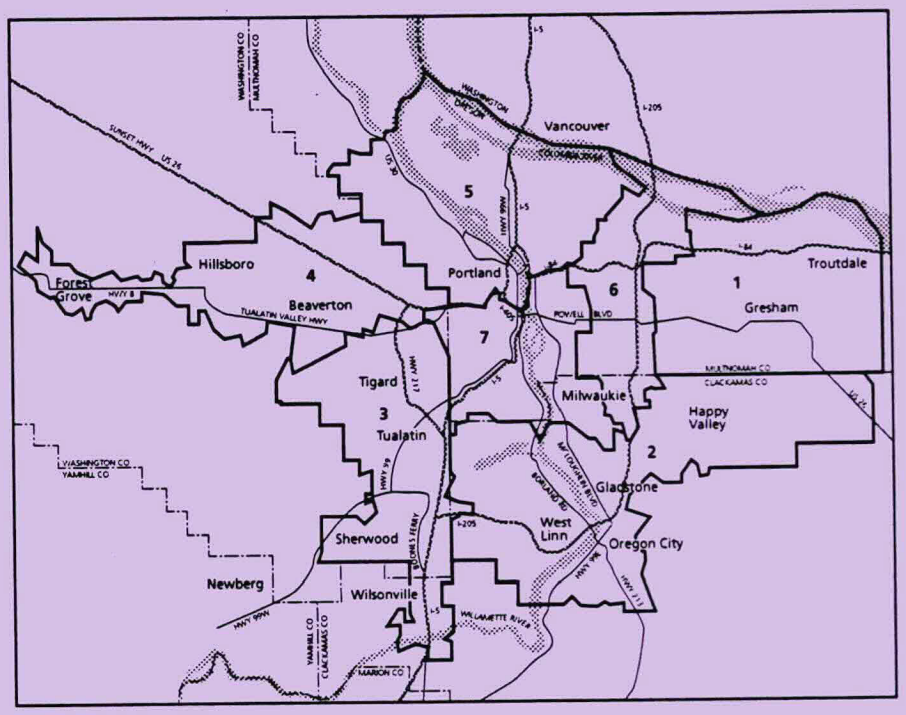

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EXHIBIT B

May 7, 1996 CAC Addendum to the Chapter 1 Draft

M E M O R A N D U M

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METRO

Date: May 23, 1996

To: JPACT/MPAC Members and Interested Parties

From: Andrew C. Cotugno, Transportation Director

Subject: CAC Addendum to Chapter 1 Revisions

* * * * * * *

On May 7, the RTP Citizen Advisory Committee moved to add several revisions to those included in the April 19 Chapter 1 draft. Most of these additional revisions are in response to issues forwarded to the CAC by the Transportation Policy Alternatives Committee (TPAC). Recommended text additions are shown with underscore and deletions shown as ~~strikethru~~:

Introduction

1. Add a preface that explains what parts of Chapter 1 are binding (i.e., goals and objectives vs. more descriptive text), relationship to the Regional Framework Plan (RFP) and the timeline for adoption and subsequent local TSP timelines.

Regional Street System

1. Add a matrix to page 1-12 of the street design section that summarizes the connection between street designs and the various 2040 land use components (similar to that shown on page 1-27 of the transit section).

2. Revise the introductory paragraph to street system implementation on page 1-19 as follows:

   "...or preserve infrastructure. The purpose of this section is to establish these key issues as the most important criteria when selecting transportation projects and programs. The following goals and objectives..."

Regional Motor Vehicle System

1. Revise the fourth bullet in the Local Street section on page 1-23 to read:

   "Direct freight access on the local residential street system should be discouraged~~, except where alternatives would create an unusual burden on freight movement~~."

2. Recognize special needs of motorcycles and mopeds through the following revisions:

   - revise the last sentence of the introductory paragraph on page 1-20 to read:

     "... share of transit riders). Finally, motorcycles and mopeds also use the motor vehicle system, and provide more fuel-efficient alternatives to automobile travel. Although motorcycles and mopeds are governed by the same traffic laws as other motor vehicles, they have special parking and security needs.

Transit Goals and Objectives:

1. Revise the first paragraph on page 1-24 to read:

   "Public Transportation ~~Transit service~~ should ~~be provided to~~ serve the entire urban area, and the hierarchy of service types described in this section define what level of service is appropriate for specific areas. The transit section is divided into two parts. The first..."

2. Revise the "Other Transit Options" section on page 1-26 as follows:

   "Other Public Transportation ~~Transit~~ Options

   Other public transportation may serve ~~transit options may become economically feasible for serving certain destinations in~~ the metropolitan area. These services include commuter rail ~~along existing heavy rail lines~~, passenger rail and bus connecting the region to other urban areas. In addition, private urban services may complement public transit within the urban area and other private services may ~~inter-city bus service that~~ provide statewide access to the region's inter-city bus, rail and air terminals."

3. Replace the word "reportable" with "avoidable" in the second objective of Goal 5 on page 1-29.

4. Revise the transit chart on page 1-27 to show "secondary bus" service to "employment areas" as a solid square (denoting best transit mode for a given land use type).

Freight Goals and Objectives:

1. Delete the second bullet under the third objective of Goal 1 (redundant; freight monitoring will occur as part of IMS).

2. Delete the fourth objective under Goal 3; this change is based on the general principle of not including financial priority statements within the modal sections of Chapter 1.

3. Replace the word "Ensure" with "Promote" in Goal 4 to create a more flexible goal statement.

4. Revise the fourth bullet under Goal 4 to read "truck infiltration ~~traffic~~ in neighborhoods" to more clearly state the intent of this objective.

5. Note: the discussion draft omits two CAC revisions to the freight goals and objectives. The first is introductory text intended for the opening paragraph that elaborates on the

multi-modal and multi-commodity nature of freight movement in the region. The second add the word "enhance" to Goal 3 as follows:

"Goal 3 - Protect and enhance the public and private investments in the freight network."

These additional revisions will be incorporated into the final CAC text revisions.

Bicycle Goals and Objectives:

1. Add the following wording to the second sentence of the introductory paragraph:

   "Metro's 1994 travel behavior survey found that places in the region with good street continuity, ease of street crossing and gentle topography experience more than a three percent bicycle mode share ,while lower density areas experience around one percent bicycle mode share."

2. Revise Goal 3 as follows:

   "Ensure that all transportation projects include appropriate bicycle facilities using established design standards ~~appropriate to~~ that reflect regional land use and street classifications."

3. Revise Objective 1, Goal 3 for consistency with the previous revision to the goal statement:

   "1. Objective: Ensure that ~~bikeway projects, and~~ all transportation projects include appropriate bikeways, that bicycle parking and other end-of-trip facilities are designed using established standards, and that bikeways are connected with other jurisdictions and the regional bikeway network."

4. Revise the third objective under Goal 4 on page 1-33 as follows:

   "Objective: Reduce the rate ~~number~~ of bicycle accidents in the region."

TDM Goals and Objectives:

1. Add a reference to the Central City on page 37 in the first objective of Goal 1 (for consistency with the land use revisions already drafted for Chapter 1).

2. Add a new objective 6 to Goal 5 - "Allow use of HOV lanes by motorcycles with single riders in order to further reduce congestion."

3. Delete first objective of Goal 6 relating to public involvement policies (not an appropriate location for this text; duplicates the public involvement policy documents already in place).

Parking Goals and Objectives:

1. Replace existing parking section in Chapter 1 of the RTP with the following new text. The introduction in the new text includes a discussion of the Transportation Planning Rule (TPR) requirement to reduce parking space per capita. Goal 1 and the objectives that follow this goal reflect the results of the Regional Parking Management study completed in December 1995. The study established the region's parking baseline for non-residential parking spaces per capita at 0.86 spaces. Goal 2 and Goal 3 reflect the Phase I Framework Plan interim parking measures for reducing parking minimum requirements and for establishing parking maximums. The proposed new text follows:

Parking Management

The State Transportation Planning Rule (TPR) requires that the Regional Transportation Plan (RTP) include methods to reduce non-residential parking spaces per capita by 10 percent over the next 20 years (by 2015). The requirement is one aspect of the rule's overall objective to reduce per-capita vehicle miles traveled (VMT), promote alternative modes and encourage pedestrian and bicycle friendly development.

The mode of travel is directly influenced by the convenience and cost of parking. As auto parking in densely developed areas becomes less convenient and more costly, alternative modes of travel (e.g., transit, bicycle, walk and telecommute) become relatively more attractive. In addition, as alternative modes of travel are used more for work and non-work trips, the demand for scarce parking decreases. The reduction in demand will allow the region to develop more compactly and provide the opportunity for redevelopment of existing parking into other important and higher end uses.

The regional parking management program is designed to be complementary to the Transportation Demand Management (TDM) element of the RTP, meet the 10 percent reduction in parking spaces per capita required by the Transportation Planning Rule (TPR), assist with implementation of the Department of Environmental Quality's voluntary parking ratio program contained in the region's Ozone Maintenance Plan, and support the implementation of the "Interim Parking" measures adopted in the Regional Framework Plan.

Regional Parking Goals and Objectives

Goal 1 - Reduce the demand for parking by increasing the use of alternative modes for accessing the central city, regional centers, town centers, mainstreets and employment areas.

1. Objective: Encourage the designation of preferential parking stalls for carpool, vanpool, motorcycle and moped parking at major retail centers, institutions and employment centers.

2. Objective: Consider the redesignation of existing parking as park-n-ride spaces.

3. Objective: Consider the use of timed parking zones.

Goal 2 - Reduce the number of off-street parking spaces per capita.

1. Objective: Promote the use and development of shared parking spaces for commercial and retail land uses.

2. Objective: Require no more parking in designated land uses than the minimum as shown in the Regional Parking Standards Table shown in Title 2 of the Urban Growth Management Functional Plan

3. Objective: Establish parking maximums at ratios no greater than those listed in the Urban Growth Management Functional Plan parking standards table under Zone A (Appendix 1)

   (note: Parking spaces are subject to the regional parking maximums. Parking spaces in structures may apply for limited increases in this ratio, not exceeding 20%. Parking for vehicles that are for sale, lease, or rent are exempt from the standard). The criteria for zone A is defined as:

   - within 1/4 mile of bus stops with 20 minute or less headways in the A.M. and P.M. peak hours with existing service or an adopted Tri-Met 5-year service plan; or
   - within 1/2 mile of light rail stations; or
   - within a 2040 Growth Concept design type (except neighborhoods).

   (Distances are calculated along public rights-of-way and discounted for steep slopes. It is recommended that cities or counties also include within Zone A non-residential areas with a good pedestrian environment within a 10-minute walk of residential areas with street and sidewalk designs and residential densities which can be shown to have significant non-auto mode choices. Zone B is the rest of the region)

5. Objective: Establish parking maximums (*see notation in Objective 2*) at ratios no greater than those listed in the Regional Parking Standards Table under Zone B for areas outside of Zone A.

Goal 3 - Provide regional support for implementation of the voluntary parking provisions of the Portland region's Ozone Maintenance Plan.

1. Objective: Allow property owners who elect to use the minimum parking ratios shown in the Regional Parking Standards Table as maximum ratios to be exempted from the Employee Commute Options (ECO) program.

2. Objective: Provide priority DEQ permit processing to land owners who elect to use the minimum parking ratios as maximum ratios.

Goal 4 - Manage and optimize the efficient use of public and commercial parking in the central city, regional centers, town centers and mainstreets to support the 2040 Growth Concept and related RTP goals and objectives.

1. Support local adoption of parking management plans within the central city, regional centers, town centers and mainstreets.

Glossary:

1. Add definitions for the terms "transit" and "public transportation" as follows:

   Public Transportation - includes both publicly and privately funded transportation serving the general public, including urban fixed route bus and rail service, inter-city passenger bus and rail service, dial-a-ride and demand responsible services, client transport services and commuter/rideshare programs. For the purposes of the RTP, school buses and taxi subsidy programs are not included in this definition.

   Transit - for the purposes of the RTP, this term refers to publicly-funded and managed transportation services and programs within the urban area, including light rail, regional rapid bus, frequent bus, primary bus, secondary bus, mini-bus, paratransit and park-and-ride.

EXHIBIT C

Public and Agency Comments on the CAC Draft of Chapter 1 and JPACT Responses & Amendments

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SUMMARY OF COMMENTS AND RECOMMENDATIONS

on public comments received March 22 - June 17, 1996 regarding the Citizen Advisory Committee Policy Revisions to the *Regional Transportation Plan*

The following are a summary of public comments received and recommendations made by TPAC. The document is divided into two sections:

- **Discussion Items** (Comments identified by TPAC as needing further discussion by MPAC and JPACT which was done prior to recommending approval)
- **Consent Items** (Comments identified by TPAC which was approved as a packet with no detailed discussion by MPAC and JPACT)

Within each section, the comments are organized by major policy topic or travel mode in the order in which it is found in Chapter 1 of the *Regional Transportation Plan.*

The comments and recommendations were also reviewed and approved by Metro Council Transportation Planning Committee.

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for

SUMMARY OF COMMENTS AND RECOMMENDATIONS

on public comments received March 22 - June 17, 1996 regarding the Citizen Advisory Committee Policy Revisions to the Regional Transportation Plan

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SUMMARY OF COMMENTS AND RECOMMENDATIONS
on public comments received March 22 - June 17, 1996 regarding the
Citizen Advisory Committee Policy Revisions to the *Regional Transportation Plan*

DISCUSSION ITEMS

General RTP Issues

1. Comment: There should be some discussion regarding what adoption of these policies by Metro means to the region and to local governments. Specifically, what parts of Chapter 1 are binding, advisory or explanatory? (Washington County, 5/17/96)

   TPAC Recommendation on Comment 1: It is premature to define what is binding until the RTP update is complete. This item will be addressed during the next phase of the RTP update. Chapter 1 will serve as a guide for Metro to develop the remaining chapters of the RTP. As such, Chapter 1 will be adopted by resolution and will, therefore, not be binding upon local governments until completion of the entire RTP update. At that time, the RTP as a whole will be evaluated to determine which elements are binding and which are advisory to local governments. In the interim, however, the Urban Growth Management Functional Plan will implement several RTP policies relating to Boulevard design, local street connectivity and traffic level-of-service standards.

2. Add a new section, "A. Context of the Regional Transportation Plan," on page 1-1 which generally clarifies the intent of the RTP and the roles of various travel modes in helping achieve the Region 2040 Growth Concept, as follows:

   A. Context of the Regional Transportation Plan

   This Regional Transportation Plan (RTP) is intended to implement the region's 2040 Growth Concept. Included in the Growth Concept are a variety of land use components recognizing the diversity of residential, commercial, industrial, and open space needs that exist within our region. The RTP lays out the policies, systems, and actions to serve those diverse needs.

   The RTP reflects the diversity of the 2040 Growth Concept by providing appropriate transportation options to best serve the variety of land use components. For any one land use component, multiple modes are necessary. Higher density regional and town centers need to accommodate a variety of auto, truck, bicycle, transit, and pedestrian users. Industrial areas need good auto, truck, and rail access for freight, while allowing employees and customers to commute by auto, transit, and, in some instances, bicycles. Main streets and station areas are focused on good transit, pedestrian, and bicycle access, but also need to allow for auto access.

The RTP provides a 20-year blue print for transportation decision making. While emphasizing a multi-modal system, the RTP recognizes that the automobile will likely continue to be the primary mode of personal travel over the life of the plan. As such, the RTP includes a number of strategic road investments that attempt to implement the Growth Concept, recognizes additional demand on the system for both people and goods, and reflects the continued use of the automobile for personal and commercial travel.

The RTP also recognizes that significant opportunities exist to reduce reliance on the automobile (particularly the single-occupant use of vehicles) for a number of trip types that will develop as the Growth Concept matures. The RTP, therefore, also emphasizes the need to provide good choices for certain trip types. Even on an occasional basis, the use of alternative modes will help the region maintain its air quality, conserve energy, and minimize pressure on the Urban Growth Boundary. Similarly, the RTP recognizes the need for a multi-modal freight system that includes a balanced system of truck, rail, air, and water routes to best meet the needs of area shippers.

In sum, the RTP provides a diverse set of transportation priorities necessary to implement the diverse and unique attributes embodied in the 2040 Growth Concept.

(Metro Council Transportation Planning Committee Discussion, 7/3/96)

JPACT Recommendation on Comment 2: Agree. Amend Chapter 1 as proposed.

Regional Street System & 2040 Implementation

3. Comment: Page 1-19, Regional Street System Implementation," first sentence: The mission of the RTP is not just the implementation of the 2040 Growth Concept. Therefore, Goal 1 and its three objectives should be deleted or restated so that the highest priority is not given to only the city center and regional centers. (City of Troutdale, 5/13/96)

4. Comment: On page 1-19, Goal 1, Objectives 1-3, The street system hierarchy and perhaps other modal hierarchies should be considered along with the land use hierarchy in establishing project and program priorities. Expressing priorities solely in terms of 2040 land use categories ignores some important variables. (Washington County, 5/17/96)

5. Comment: The implementation goals on pages 1-19 and 1-20 seem to imply conflicting priorities for transportation improvements. Use a matrix that considers all RTP goals in the selection of projects. (Washington County, 4/17/96)

TPAC Recommendation on Comments 3-5: Generally agree. The hierarchy of 2040 land use components within Goal 1 reflects the general hierarchy established within the land use section of Chapter 1, and reflects the need to focus regional transportation funds in those areas that are most critical to successful implementation of the 2040 Growth Concept. However, within this hierarchy, all urban components would continue to receive transportation investments. Other factors will also be included in establishing priorities, such as air quality, safety and freight access considerations or completing gaps in existing networks. In addition, improvements intended to serve the primary 2040 components will commonly benefit other areas, as well (e.g., network improvements that link neighborhoods to centers).

The primary components include the central city, regional centers and industrial areas/intermodal facilities. They are elevated above other land use components for a number of reasons. The central city and regional centers serve regional needs. They have the highest development densities, the most diverse mix of land uses, the greatest concentration of commerce, offices and cultural amenities and the greatest use of alternative modes in the region. While they have different transportation needs, industrial areas and intermodal facilities are essential to the economic base of the region and as such are of regional concern.

The secondary components include town centers, station communities, main streets and corridors. These areas have the second highest densities and use of alternative modes, and serve more localized needs. Other urban components include employment centers and neighborhoods. These areas have the lowest densities and the least use of alternative transportation modes.

While the street system implementation goals on page 1-19 include 2040 implementation, they also address safety improvement and maintenance and preservation of the system. These goals identify three key areas of importance in the overall selection of transportation programs and projects, and are not necessarily weighted according to the order in which they appear. As part of the next phase of the RTP update, a detailed system for project selection will be developed. These broad implementation goals will provide the general structure for the project criteria, but more detailed policies from throughout Chapter 1 will also be factored in.

6. Comment: Major topographical constraints should be the only reason not to build a street connection. (Klotz, 3/30/96)

TPAC Recommendation on Comment 6: Disagree. In addition to topographic limitations, street connections may also be precluded by development patterns, as stated in the last bullet on page 1-17. Based on the CAC's addendum to the April 19 Chapter 1 draft, and subsequent discussions of these issues by JPACT and MPAC, TPAC recommends clarifying this reference as follows:

> "Closed street systems and cul-de-sac designs should be limited to situations where topography, or existing development patterns prevent full street extensions, or where connections would compromise local street functions. Environmental impacts should also be considered in the development of local street systems."

Regional Vision and Guiding Principles

7. Comment: To achieve a balanced transportation system as outlined in Chapter 1, requires what may be perceived as "unbalanced" investments in non-auto projects. (Weaver, 4/12/96)

8. Comment: There needs to be a mechanism for achieving the "balanced" transportation system called for in the RTP. How will the region even the playing field? How will the goal of balance be reflected in funding decisions? (Bicycle Transportation Alliance, 5/17/96)

TPAC Recommendation on Comments 7 and 8: These issues will be addressed during the next phase of the RTP update, when implementation strategies will be developed in conjunction with a detailed system analysis. However, it is appropriate for JPACT/MPAC to begin discussion of these issues, as implementation of the 2040 Growth Concept calls for a departure from past funding practice. To implement 2040, a balanced transportation investment strategy must benefit all modes of travel (discussed on pages 1-19 to 1-20) and support the growth concept. The revised Chapter 1 includes three broad goals that focus on 2040 implementation, safety and system maintenance/preservation needs. These goals recognize the need to address deficiencies that affect all modes. As part of the next phase of the update, detailed project selection criteria will be developed that consider all Chapter 1 policy provisions to varying degrees (see related comments 3, 4 and 5).

Systemwide Goals and Objectives

9. Comment: The findings on mobility on page 1-3 recognize that the region's livability and economy is dependent upon the quality of surface transportation

connections to the nation and Northwest. However, this theme is not reflected in the proposed goals and objectives. Recommend adding the following objective to System Goal 1:

Objective 5: Provide for high levels of multi-modal travel and mobility on major statewide and interstate surface transportation corridors (e.g. I-5, I-84, National Highway System routes). (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 9: Agree, in part. Instead, recommend adding the following new goal and supporting objectives to the Systemwide section:

System Goal 6 - Provide for statewide, national and international connections to and from the region, consistent with the Oregon Transportation Plan.

1. **Objective:** Provide for the movement of people and goods with an interconnected motor vehicle system.

2. **Objective:** Provide for the movement of people and goods through an interconnected system of air and rail systems, including passenger and freight intermodal facilities and air and water terminals.

3. **Objective:** Mitigate the effect of improved regional access outside the urban area.

Regional Motor Vehicle System

10. Comment: Several comments about proposed revisions to the current level-of-service (LOS) standards were submitted as part of the review of Chapter 1 of the Regional Transportation Plan. (Items 163 through 165 specifically relate to LOS.)

TPAC Recommendation on Comment 10: The current congestion LOS standard is proposed for review for a number of reasons. First, as currently used, the LOS standard has resulted in a list of road and highway projects that may be financially unattainable, even under the most optimistic revenue assumptions. Second, current LOS standards will likely conflict with the goal of increased densities in certain locations as proposed in the 2040 Growth Concept. Increased densities would likely create additional traffic congestion on roadways adjacent to these areas such that jurisdictions will be unable to comply with current Transportation Planning Rule LOS requirements in some key 2040 locations. Third, current LOS standards do not adequately address the duration and severity of congestion beyond the afternoon peak hour.

In recognition of these issues, a number of alternative congestion measures and standards are proposed for consideration. The LOS standard will be evaluated in two steps. In the long-term, Metro will continue to evaluate alternative LOS standards as part of the continuing RTP update. Specifically, the RTP process will evaluate the consequences of different LOS standards in terms of the investment needed to maintain varying levels of service and the subsequent benefits and impacts.

In the interim, Title 1 of the Urban Growth Management Functional Plan proposes significant increases in planned land use densities in the city center, regional centers, town centers, main streets, station communities and corridors. The revised Functional Plan LOS standard will be limited to dense areas and will not involve adopting a broad-base change to existing RTP level-of-service standards.

11. Add the following objective to Goal 1 on page 1-21 of the Motor Vehicle System text:

    5. **Objective:** Develop improved measures of traffic generation and parking patterns for regional centers, town centers, station communities and main streets.

    (JPACT/MPAC Joint Discussion, 6/20/96)

    TPAC Recommendation on Comment 11: Agree. Revise as proposed. In addition, TPAC recommends adding the following objective to Goal 1 on page 1-21:

    6. **Objective:** Develop improved measures of freight movement as defined in the 2040 Growth Concept.

12. Request further examination of Goal 3 and Goal 3, Objective 1 under the Regional Bicycle System Goals and Objectives to consider issues related to the disagreement of TPAC with a CAC recommendation. As part of this discussion it is important to recognize that the CAC recommendation emphasizes where bicycle facilities are needed, while the TPAC recommendation assumes there will be bicycle facilities and focuses on how these facilities will be designed. Both issues are legitimate questions to be considered. Request that this issue and its implications on private development be re-examined as part of the system component of the RTP update. (Metro Council Transportation Planning Committee Discussion, 7/3/96)

    JPACT Recommendation on Comment 12: Agree. No change to Chapter 1 text recommended.

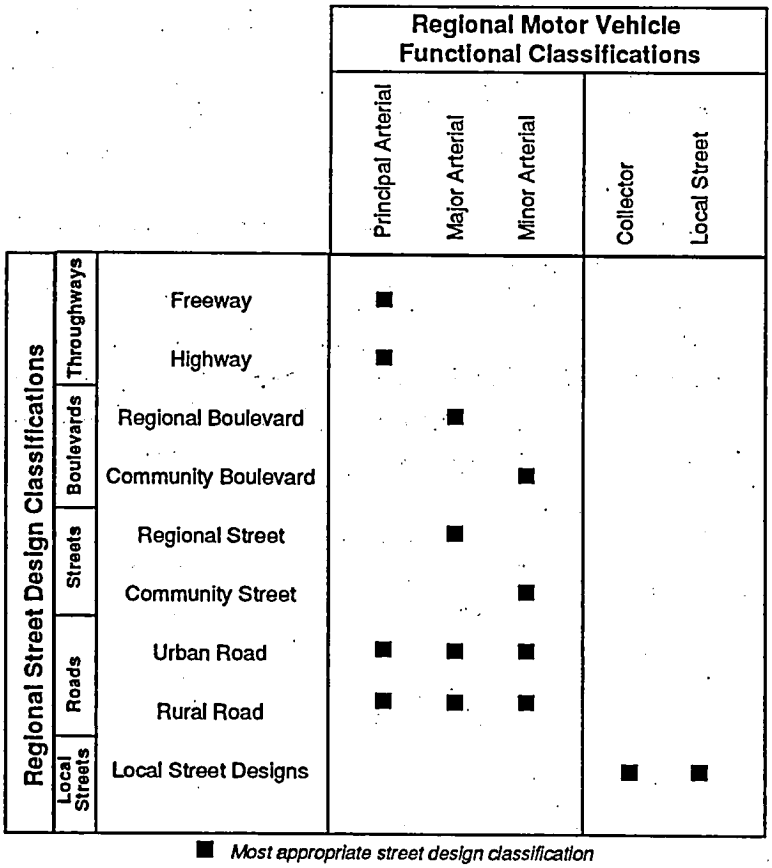
13. Request clarification of the relationship between the regional motor vehicle functional classifications (i.e., principal arterials, major arterials, minor arterials, etc.) and the regional street design classifications (i.e. freeway, highway, regional boulevard, urban road, etc.). In order to accomplish this, recommend inclusion of the following explanatory text to the motor vehicle classification system section of Chapter 1 on page 1-21:

(Metro Council Transportation Planning Committee Discussion, 7/3/96)

Figure 1.2 provides a chart of the regional motor vehicle functional classifications and their relationship to the regional street design classifications. The most appropriate street design classification for roadways that serve a given functional classification is indicated with a solid square(s). Following Figure 1.2 is a detailed description of the regional functional classification categories.

Figure 1.2

Relationship Between the Regional Street Design Classifications and the Regional Motor Vehicle Functional Classifications



JPACT Recommendation on Comment 13: Agree. Amend Chapter 1 as proposed.

14. Comment: On page 1-16, Rural Roads section: In recent years, several rural areas surrounding our region have been experiencing the problem of infiltrating urban through traffic. As volumes increase, this high speed traffic is causing significant problems for the safety and viability of agricultural operations, and is leading to additional pressure to develop lands outside of the UGB with non-rural development. For these reasons, recommend that the discussion of rural roads on page 1-16 include the following addition:

    "Because rural roads are intended to carry rural traffic, they should be designed to discourage through intra-urban traffic traveling from one part of the urban area to another."

    (1000 Friends, 5/23/96)

15. Comment: It is important that the RTP reflect that some rural roads serve as important routes to connect urban traffic to throughways (such as Germantown Road, Scholls Sherwood/Scholls Ferry Road, etc.). In addition, rural roads are subject to Oregon's Basic Rule for legal speed and are generally posted no less than 45 miles per hour. These speeds would appear to be high and should be noted as such. Finally, does this language intend to make a distinction between "additional lanes" and the center turn lanes referred to in the last sentence? Amend the first paragraph of Rural Roads section on page 1-16 to read:

    "Rural Roads are designed to carry rural traffic while accommodating limited transit, bicycle and pedestrian travel. In some cases rural roads serve to connect urban traffic to throughways. Rural roads ~~This facilities~~ serve urban reserves, rural reserves and green corridors, where development is widely scattered and usually located away from the road. These facilities are designed to allow ~~moderate~~ high motor vehicle speeds and usually consist of two to four motor vehicle lanes, with additional auxiliary lanes appropriate in some situations. Rural Roads have some street connections and few driveways. On-street parking occurs on an unimproved shoulder, and is usually discouraged. These facilities may include center turn lanes, where appropriate."

    (Washington County, 4/17/96)

16. Comment: On page 1-16, Rural Roads discussion, fourth sentence: "These facilities are designed to allow moderate motor vehicle speeds and usually consist of two to four motor vehicle lanes, with additional non-continuous auxiliary lanes appropriate in some situations." (Coalition for A Livable Future, 5/23/96)

17. Comment: On page 1-16, Rural Roads discussion, second sentence: "Rural Roads are designed to carry rural traffic while accommodating limited transit, bicycle and pedestrian travel. Urban-to-urban travel on rural roads is limited and discouraged, but ~~in some~~ a few cases existing rural roads already serve to connect urban traffic to throughways." (note: existing text includes changes Metro staff accepted from Washington County) (Coalition for A Livable Future, 5/23/96)

18. Comment: Rural Reserves discussion, second and third sentences on page 1-8:

> "Roadways in these areas are intended to serve rural industry and needs, and urban travel on these routes is accommodated with designs that are sensitive to their basic rural function. Rural reserves will be protected from urbanization for the foreseeable future through county zoning ordinances, intergovernmental agreements and by limiting rural access to urban through-routes and discouraging urban-urban travel on rural routes." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comments 14-18: Generally agree. The relatively small number of urban traffic routes that already exist on rural routes usually occur where no comparable urban route is possible, such as Glencoe Road (connecting the Hillsboro regional center to US 26), Stafford Road (connecting Lake Oswego to I-205) and Cornell Road (connecting Portland and Washington County through the West Hills). As pointed out in Comment 15, these routes generally provide access to throughways. As such, the rural road serves a freight function in the movement of farm products. Therefore, some capacity, design or safety-driven deficiencies must be addressed on rural roads. Most importantly, state highways that carry most urban traffic outside the urban area will be treated as green corridors, with specific land use protections and access controls enacted to limit the impacts of urban travel on the rural land use pattern.

Generally agree with text revisions proposed on Comment 15. However, the term "high speed" in context of street design refers to facilities posted at the maximum limit (55-65 mph), while "moderate" refers to somewhat lower speeds (35-45 mph). Therefore, recommend revisions as proposed in Comment 15, except for the replacement of the word "moderate" with "high", as follows:

> "Rural Roads are designed to carry rural traffic while accommodating limited transit, bicycle and pedestrian travel. In some cases rural roads serve to connect urban traffic to throughways. Rural roads ~~This facilities~~ serve urban reserves, rural reserves and green corridors, where development is widely scattered and usually located away from

the road. These facilities are designed to allow moderate motor vehicle speeds..."

Also, generally agree with adding the term "auxiliary" to this paragraph, but qualified to read "occasional" as follows:

"...from the road. These facilities are designed to allow moderate motor vehicle speeds and usually consist of two to four motor vehicle lanes, with ~~additional~~ occasional auxiliary lanes appropriate in some situations. Rural Roads have some street..."

In addition, recommend revisions as proposed in Comment 18 with revised wording as follows:

"Roadways in these areas are intended to serve rural industry and needs, and urban travel on these routes is accommodated with designs that are sensitive to their basic rural function. Rural reserves will be protected from urbanization for the foreseeable future through county zoning ordinances, intergovernmental agreements and by limiting rural access to urban through-routes. Urban-to-urban travel is generally discouraged on most rural routes, with exceptions identified in this plan."

Regional Public Transportation System

19. Comment: Include a detailed policy regarding passenger rail in Chapter 1 of the RTP, as required by both the Oregon Transportation Plan and the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. (Cook, 5/9/96)

20. Comment: Passenger rail and its inter-connection to regional, statewide and national destinations should be listed as a component of the Regional Public Transportation system on page 1-24 and page 1-27. (City of Gresham, 5/17/96)

TPAC Recommendation on Comments 19-20: Agree. The concept of passenger rail has not been researched enough to be included as a detailed policy in the RTP at this time. However, it is appropriate to include a description of passenger rail issues in the public transportation section of the RTP. Chapter 1 was expanded at the request of the Citizens Advisory Committee (CAC) and public comment to define passenger rail, commuter rail, inter-city bus and heavy rail as other transit options that should be considered according to their economic feasibility and their ability to achieve regional goals. However, TPAC recommends further elevating those services that link the metropolitan area to areas outside of the region.

Therefore, TPAC recommends creating two major subsections within Regional Public Transportation section in Chapter 1, page 1-24, titled "Urban Public Transportation" and "Interurban Public Transportation," replacing the "Other Transit Options" section as follows:

Other ~~Transit~~ Public Transportation Options

Other ~~transit~~ public transportation options may ~~become economically feasible for serving~~ serve certain destinations in the metropolitan areas. These services include commuter rail ~~along existing heavy rail lines,~~ and streetcars. ~~passenger rail connecting the region to other urban areas, and inter-city bus service that provide statewide access to the region's rail and air terminals.~~

Interurban Public Transportation

The federal ISTEA has identified interurban travel and passenger "intermodal" facilities (e.g., bus and train stations) as a new element of regional transportation planning. The following interurban components are important to the regional transportation system:

Passenger Rail

Inter-city high-speed rail is part of the state transportation system and will eventually extend from the Willamette Valley north to British Columbia. Amtrak already provides service south to California and east to the rest of the continental United States. These systems should be integrated with other public transportation services within the metropolitan region with connections to passenger intermodal facilities. High-speed rail needs to be complemented by urban transit systems within the region.

Inter-city Bus

Inter-city bus connects points within the region to nearby destinations, including neighboring cities, recreational activities and tourist destinations. Several private inter-city bus services are currently provided in the region.

Passenger Intermodal Facilities

Passenger intermodal facilities serve as the hub for various passenger modes and the transfer point between modes. These facilities are closely interconnected with urban public transportation service and highly accessible by all modes.

They include Portland International Airport, Union Station and inter-city bus stations.

21. Comment: The format and choice of language in the "Transit Goals and Objectives" section on pages 1-27 through 1-29 is repetitive such that it is difficult to visualize what is being proposed in the plan. Consider integrating the following objectives (AORTA, 5/17/96):

- Connect all regional centers with each other and the central business district via direct or one-transfer regional rapid transit service.
- Ensure that all regionally-oriented facilities (multi-modal passenger facilities, major educational and medical institutions, employment centers, etc.) have a station/stop on the regional Rapid Transit Network.
- Ensure convenient, direct local transit access between residential, commercial and employment areas and the nearest Regional Center.

TPAC Recommendation on Comment 21: Generally agree. Recommend incorporating the ideas proposed in these comments into the goals and objectives on page 1-28 of the Public Transportation System section as follows:

Goal 1 - Develop a public transportation system that provides regional access to ~~serves~~ 2040 Growth Concept primary land use components (central city, regional centers, industrial areas, intermodal facilities) and special regional destinations (such as major colleges or entertainment facilities) with an appropriate level, quality and range of public transportation ~~available~~.

new objective:

5. **Objective:** Ensure that existing regional destinations located outside of the primary land use areas are served with LRT, rapid bus, frequent bus or primary bus.

Goal 2 - Develop a public transportation system that provides community access to ~~serve~~ the 2040 Growth Concept secondary land use components (station communities, town centers, main streets, corridors) and special community destinations (such as local colleges or entertainment facilities) with high quality service.

new objective:

5. **Objective:** Ensure that existing community destinations located outside of the secondary land use areas are served with frequent bus or primary bus.

Goal 3 - Develop a reliable, convenient and accessible system of secondary public transportation that provides access to ~~serve~~ the 2040 Growth Concept "other urban components" (e.g., employment areas, outer neighborhoods and inner neighborhoods).

22. Suggest clarification as to how the Secondary Transit Network System will be implemented. Recommend amending page 1-26, under the Regional Public Transportation System Components section to include:

The following public transportation system components establishes a network that serves the needs of individual 2040 land use components. This system serves as the framework for consistency among plans of local jurisdictions and Tri-Met. Underlying this network of fast and frequent service is a secondary network of local bus, park-and-ride and demand responsive type serve that provide local public transportation. Specific elements of the secondary network will be developed by Tri-Met and local jurisdictions. Tri-Met is the primary public transportation provider for the metropolitan region and is committed to providing the appropriate level of service to achieve regional objectives and to implement the 2040 Growth Concept. However, the RTP recognizes providers other than Tri-Met to serve special transportation needs. While this is not required in the RTP, Metro is committed to helping coordinate agreements to address special needs as they arise. Such special needs may include private, public/private partnerships, or public actions, as appropriate.

(Metro Council Transportation Planning Committee Discussion, 7/3/96)

JPACT Recommendation on Comment 22: Agree. Amend Chapter 1 as proposed.

23. Add a new objective to Goal 3, page 1-28 of the Public Transportation section:
4. **Objective:** As appropriate, consider providing secondary bus or other public transportation alternatives to serve outlying regional destinations.

(Metro Council Transportation Planning Committee Discussion, 7/3/96)

JPACT Recommendation on Comment 23: Agree. Amend Chapter 1 as proposed.

Regional Bicycle System

24. Comment: The Bicycle System Goals and Objectives' emphasis on regional solutions and connectivity is wrong. The problem is that most trips are local trips. We should first ensure that the means exists for safe and convenient local bicycle use. What

rationale do we have that our population wants or will bike any distance in the typical 6 months of cold, wet weather? (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 24: The vision statement of the Regional Transportation Plan "seeks to enhance the region's livability through implementation of the 2040 growth concept." Implementing 2040 includes bicycle accessibility to and within regional and town centers, which includes both short, local bike trips and bike trips connecting to the regional bikeway network. Therefore, it is important to emphasize both regional and local access and connectivity. However, the bicycle system goals and objectives are general policy direction, with recognition that additional research is needed to determine (1) how bicycle travel can help implement the 2040 growth concept, and (2) which aspects of the bicycle system are of a regional nature. To clarify this need for additional research, the following revisions to the bicycle system introductory text on page 1-32 are recommended:

"The bicycle is an important component in the region's strategy to provide a multi-modal transportation system. The 2040 growth concept focuses growth in the central city and regional centers, station communities, town centers and main streets. One way to meet the region's travel needs is to provide greater opportunity to use bicycles for shorter trips.

"The regional bikeway system identifies a network of bikeways throughout the region that provide for bicyclist mobility between and accessibility to and within the central city, regional centers and town centers. A complementary system of on-street regional bikeway corridors, regional multi-use trails and local bikeways is proposed to provide a continuous network. In addition to major bikeway corridors that create a network of regional through routes, the system provides accessibility to and within regional and town centers.

~~The adoption of the Regional Bicycle Plan element of the RTP continues the region's recognition of bicycling as an important transportation alternative.~~ Metro's 1994 travel behavior survey found that places in the region with good street continuity, ease of street crossing and gentle topography experience more than a three percent bicycle mode share, while lower density areas experienced around one percent bicycle mode share. A greater understanding of bicycle travel is still needed, and development of a regional bicycle forecasting model is underway.

The implementation of the regional bicycle plan element of the RTP will provide for consistently designed, safe and convenient routes for bicyclists between jurisdictions and to major attractions throughout the region, will work toward increasing the modal share of bicycle trips, and will encourage bicyclists and motorists to share the road safely.

SUMMARY OF COMMENTS AND RECOMMENDATIONS

on public comments received March 22 - June 17, 1996 regarding the Citizen Advisory Committee Policy Revisions to the Regional Transportation Plan

CONSENT ITEMS

General RTP Issues

25. Comment: Reevaluate references to "Pedestrian System" and "Bicycle System" terminology in light of the terminology used in the Oregon Bicycle and Pedestrian Plan. Recommend replacing "~~Pedestrian~~ System" with "Walkway System" and "~~Bicycle~~ System" with "Bikeway System" in the forward section of the RTP. (City of Milwaukie, 4/19/96)

    TPAC Recommendation on Comment 25: Disagree. The terms "Bikeway" and "Walkway" do not reference the mode of travel, rather they refer to the facility. All other "systems" discussed in Chapter 1 of the RTP reference the mode of travel.

26. Comment: Revise Goal 1 on page 1-36 to read: "Enhance mobility and support the use of ~~alternative~~ non-automotive transportation modes...." (City of Milwaukie, 4/19/96)

27. Comment: Revise System Goal 4, Objective 3 on page 1-9 to read: "Promote ~~alternative~~ non-automotive modes of travel that help meet air quality standards." (City of Milwaukie, 4/19/96)

28. Revise Goal 2, Objective on page 1-36 to read: "Support efforts to provide maximum allowable tax benefits and subsidies to users of ~~alternative~~ non-automotive modes of transportation." (City of Milwaukie, 4/19/96)

29. Revise goal 5 on page 1-37 to read "Implement TDM support programs to make it more convenient for people to use ~~alternative~~ non-automotive modes for all trips throughout the region." (City of Milwaukie, 4/19/96)

    TPAC Recommendation on Comments 26-29: Disagree. "Alternative transportation mode" is an accepted term that includes any alternative to the single-occupancy vehicle. Using the term "non-automotive transportation mode" would not clarify the distinction between single-occupancy vehicles and shared vehicles (e.g. carpools, vanpools) and would preclude carpooling and vanpooling as "alternative transportation modes." However, a definition of "alternative

transportation modes" that makes this distinction should be included in the glossary of the RTP. TPAC recommends the following:

(insert into "Chapter 1 Glossary")

Alternative Transportation Mode -This term refers to all modes of travel except for single occupancy vehicle, including bicycling, walking, public transportation, carpooling and vanpooling.

30. Comment: There needs to be more consideration given to open spaces and green spaces, neighbors, current residences, and the natural environment when deciding about transportation projects. Most citizens feel that they have little influence or control over decisions being made. (Toutesberry, 5/23/96)

TPAC Recommendation on Comment 30: Generally agree. System Goals 3 and 4 on page 1-9 are intended to address this need, and include protecting and enhancing livability, protecting water and air quality and minimizing environmental impacts associated with transportation improvements and programs.

31. Comment: The RTP should acknowledge the cooperative effort underway with local jurisdictions. It should note that many local agencies are currently preparing a Transportation System Plan which will need to be consistent with the RTP. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 31: Agree. This relationship is described in the Introduction and Implementation chapters of the Federal RTP (the plan currently in place), and will be expanded during the next phase of the RTP update.

32. Comment: On page 1-37, Goal 4, add an objective that states local jurisdictions are encouraged to adopt applicable portions of the Transportation Planning Rule in the local general plans or ordinances. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 32: Disagree. The TPR already establishes local responsibilities and planning requirements.

33. Comment: On G-2 of the glossary, the reference for the ISTEA should be updated. As a result of the National Highway System bill, management systems are no longer mandated, except for congestion management system in Transportation Management Areas. In addition, the RTP could also note that one of the objectives of the ISTEA was to link the Clean Air Act Amendments with transportation planning, resulting in air quality conformity requirements. Air quality conformity could also be added to the glossary. Other important components of the ISTEA

include public involvement requirements and greater participation by transit operators in the metropolitan planning process. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 33: Agree. Glossary will be revised to: 1) eliminate reference to management systems as mandatory in the ISTEA definition and add public participation and transit operator participation requirements to the definition; 2) link ISTEA and the Clean Air Act within the ISTEA definition; 3) add the Clean Air Act Amendments of 1990 to the glossary; 4) add a definition of air quality conformity.

34. Comment: On G-3 of the glossary, the Oregon Bicycle and Pedestrian Plan could also be referenced. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 34: Agree. Revise as proposed.

Regional Vision and Guiding Principles

35. Comment: Accessibility to green spaces should be addressed in the Regional Transportation Plan. (Hocker, 4/4/96)

TPAC Recommendation on Comment 35: Agree. Access to (but not within) green spaces will be addressed in the system development phase of the RTP update.

36. Comment: Chapter 1, Section B, makes references to possible increases in congestion in high activity centers and suggests congestion may be bad. Consider that congestion itself may not be bad as much as it is an indicator of a condition. (Weaver, 4/12/96)

TPAC Recommendation on Comment 36: Agree. The second and third sentences of this section (page 1-1 of the Final Draft) already make this point.

37. Comment: When considering the cost-effectiveness of transportation improvements, include environmental costs, accessibility costs and the financial burden to individuals and families in the region. (Weaver, 4/12/96)

38. Comment: Strongly urge Metro to update its cost effectiveness "formula" as part of the RTP policies. (Coalition for A Livable Future, 5/23/96)

39. Comment: Challenge the definition of "cost-effectiveness" on page 1-3. The current definition is biased against communities with inadequate connectivity. Recommend that cost-effectiveness be defined in a more traditional manner, as in "How much improvement do we get for our dollar?" (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 37-39: Regional policy for cost-effectiveness is set forth in System Goal 2 on page 1-9 of the RTP. The "System Cost" section is neutral toward the current level of connectivity in a given community, and instead frames cost-effectiveness in terms of improving connectivity, and adequate levels of accessibility and mobility in any situation. Therefore, the question posed in Comment 34 could be best phrased as "how far does our dollar move us toward regional goals?" Specific cost effectiveness of transportation projects is examined through analysis of the Metro Transportation Improvement Program (MTIP). Metro is looking to update the cost effectiveness "formula" for the next MTIP. This issue will be addressed as part of the system component of the RTP and through the implementation and funding strategy related to the MTIP.

40. Comment: System Cost discussion, first sentence, last paragraph on page 1-3: "A cost-effective transportation system will provide adequate levels of accessibility and mobility while ~~minimizing the need for public investment~~ total cost, including full life cycle costs and costs to the community and the environment." (Coalition for A Livable Future, 5/23/96)

41. Comment: Recommend amending System Goal 2, Objective 3 on page 1-9 to read: "Consider a full range of costs and benefits in the allocation of transportation funds, including full life cycle costs and community and environmental impacts." (Willamette Pedestrian Coalition, Coalition for A Livable Future and STOP 5/23/96)

TPAC Recommendation on Comments 40 and 41: Disagree. The terminology reflects the current status of the discussion related to "full costs" versus "full benefits" of transportation systems and solutions. As part of the system development phase of the RTP, detailed project/need prioritization criteria will be developed that consider all Chapter 1 policy provisions to varying degrees, including both the quantitative and qualitative benefits of system improvements and system costs. As part of the Transportation Improvement Program (TIP), Metro is participating with ODOT on developing a cost/benefit methodology for selecting projects for funding. Again, defining and valuing costs and benefits is a difficult task as part of that effort. Any cost/benefit methodology will require adoption through the Oregon Transportation Commission, JPACT and the Metro Council.

42. Comment: Environmental, Economic and Social Impacts discussion, last paragraph on page 1-4: "The RTP measures economic and quality of life impacts of the proposed system by evaluating key indicators, such as job and retail service accessibility, economic benefits to the ~~business~~ community and transportation for the traditionally underserved, including low income and minority households and the disabled. Other key system indicators include reduction in VMT's, travel times,

travel speeds, ~~congestion~~, energy costs, protection of natural resources and air quality impacts. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 42: Agree with recommendation to delete the term "business." It is not necessary to make the point and could be interpreted as limiting. Agree that travel time should be included as an indicator. Travel speed and travel time are two main components in the proposed accessibility measure to better evaluate the transportation system's ability to serve land uses. Regarding VMT/capita (vehicle miles of travel per capita) suggest adding that vehicle miles of travel are an indicator. In general, this paragraph should not address goals, objectives, or standards regarding any indicator.

Disagree with recommendation to remove "congestion." Congestion as an indicator will always be a concern of the public. The key questions are related to 1) how much congestion is tolerable on the system; and 2) if "unacceptable" congestion exists, how should it be addressed or managed. These issues will be discussed as part of the system component of the RTP.

43. Comment: Reconsider guiding principle which states "timely public notice, full access to key decisions and support(s) broad based, early and continuing involvement of the public..." to ensure that notice is given early enough to encourage comment to the CAC. (Weaver, 4/12/96)

TPAC Recommendation on Comment 43: Agree. The principle (page 1-2) already supports public involvement at the CAC level; however, the details of the public involvement process are set forth in the Regional Public Involvement Plan. All CAC meetings are scheduled in advance and open to public comment.

44. Comment: On page 1-2, Principle 1: "Provide complete information, timely public notice...and continuing involvement of the public <u>in all aspects of transportation planning and development.</u>" This ensures the public is engaged as partners in defining needs and problems and in creating and implementing solutions - not just receiving information. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 44: Generally agree. However, recommend revising to read "... and continuing involvement of the public <u>in all aspects of the transportation planning process.</u>".

45. Comment: Balance mobility and accessibility objectives such that "quality of life" is not measured merely based on how fast one can drive from point A to point B. (Weaver, 4/12/96)

TPAC Recommendation on Comment 45: Agree. This balance is stated or implied in the five system goals that appear on page 1-9. In particular, System Goal 1 emphasizes "high levels" of access over "adequate" levels of mobility.

46. Comment: Recommend change on page 1-4, Timing and Prioritization of System Improvements, second paragraph, last sentence: "These areas provide the best opportunity for public policy to shape ~~new~~ development, and are, therefore..." (AORTA, 5/23/96)

TPAC Recommendation on Comment 46: Agree. Revise as proposed.

47. Comment: Insert new guiding principle on page 1-2: "Provide safe, convenient and affordable transportation choices that provide access throughout the region without dependence on the auto." Providing safe, convenient and affordable transportation choices is essential to achieving the balance called for in Transportation RUGGO 19.3. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 47: Disagree. The Systemwide Goals on page 1-9, particularly Goal 1, Objective 4 already addresses this issue.

48. Comment: Principles discussion, last full paragraph on page 1-2: "Important measures of livability include mobility and safe, convenient and affordable access to jobs, schools, services and recreation for all people, movement of goods, conservation of resources and the natural environment and clean air. The RTP must address these needs by improving transportation choices ~~for how~~ people have for traveling within the region without reliance on the auto, while seeking a balance ~~between~~ among accessibility, system cost, strategic timing and prioritization of improvements and environmental impacts." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 48: Generally agree, with the following modification to the proposed language:

"...clean air. The RTP must address these needs by improving transportation alternatives to the automobile and ~~choices for how people travel within the region, while~~ seeking a balance between, accessibility, system cost, strategic timing and prioritization of improvements and environmental impacts."

49. Comment: Accessibility and Mobility discussion, second paragraph on page 1-3: "Mobility improves when the transportation network is refined or expanded, when travel mode shifts to more efficient modes, or when travel demand is reduced, ~~to~~

~~improve capacity~~, thus allowing people and goods to move more quickly toward a particular destination." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 49: Disagree. However, recommend the following revisions to this text:

"Mobility improves when the transportation network is refined or expanded to improve capacity <u>of one or more modes</u>, thus allowing people and goods to move more quickly toward a particular destination."

50. Comment: Request for further clarification and explanation of statement on page 1-1 which says "Concentrating development in high-density centers envisioned in the 2040 Growth Concept may produce levels of congestion that exceed existing standards, yet signal positive urban development for those areas." How can congestion be considered positive? This should be further defined. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 50: When congestion is the result of public demand to frequent a particular commercial center or district, it is a measure of the success of these places. Current examples of congestion as a positive signal of economic activity include downtown Portland, main streets like NW 23rd and SE Hawthorne and regional shopping centers like Washington Square and Clackamas Town Center. In each of these areas, congestion is a trade-off for the concentration of services and activities that exists. Of these examples, downtown Portland best fits the 2040 vision of a multi-modal transportation system that provides good transit and pedestrian alternatives to the automobile.

51. Comment: Policies for the region should require a clear representation of current usage by mode, an historical analysis by mode, desired up or down percentage changes in mode split and realistic expectations for achieving the change within a specified time line. (Washington Square, 5/22/96 and TVEDC, 5/23/96)

52. Comment: We must realistically deal with current modal splits and the mode splits anticipated in the near future (i.e. the motor vehicle is the now the dominant mode choice). This should then be used as a guide to (1) set goals for an achievable shift in mode split, (2) identify projects that help achieve that shift and (3) allocate dollars to get there. (Washington Square, 5/22/96 and TVEDC, 5/23/96)

TPAC Recommendation on Comment 51 and 52: Agree. For each area, Metro will set targets for various mode shares, and compare these targets with current mode shares. Mode split "targets" will be based on this research, and will ultimately guide transportation project selection. During the next phase of the update, these issues will be addressed as part of system development and modeling. The

"horizon" year for the updated plan will be 2015, and system development will be based upon Metro's population and employment forecast for that year. Metro's transportation model is based on travel behavior surveys, and therefore provides that most "realistic" approach possible in testing transportation alternatives for the future. The final RTP will apply to each mode and reflect available financial resources.

53. Comment: Metro and local governments should elevate business/commercial transportation to a higher priority and the vision statement should acknowledge the importance of transportation to commerce. (Washington Square, 5/22/96 and TVEDC, 5/23/96)

~~**TPAC Recommendation on Comment 48:** Generally agree. The importance of transportation to commerce is covered more broadly in the vision statement by the emphasis on implementing the 2040 Growth Concept. The more detailed discussion of the transportation elements of 2040 is included in the "Urban Form and Land Use" section that begins on page 1-5 of the Chapter 1 draft. In this section, each 2040 land use component is discussed according to it specific transportation needs. The freight goal and objectives on pages 1-30 and 1-31 also address commercial travel.~~

JPACT Recommendation on Comment 53: Revise the first paragraph, second sentence on page 1-22 of the Regional Motor Vehicle System section to include:

<u>These goals and objectives recognize the need to accommodate a variety of trip types on the regional motor vehicle system that include personal errands, commuting to work or school, commerce, freight movement and public transportation. In general, this plan recognizes there would be a higher degree of mobility during the mid-day from the peak-hour.</u>

54. Comment: RTP policies should give a high priority to cross-UGB movement of people, goods and services and to accommodating the "growth industry" transportation system needs (i.e. tourism) that require efficient movement beyond the region's boundaries. (Washington Square, 5/22/96 and TVEDC, 5/23/96).

TPAC Recommendation on Comment 54: Agree. This comment has been addressed by TPAC's response to Comment 17 of the response document with proposed language that addresses statewide, national and international connections. Cross UGB travel in the region is addressed by System Goal 1 on page 1-9 of the Chapter 1 draft, which calls for major connections by multiple modes, including those crossing the UGB.

55. Comment: The RTP should contain an honest statement of current conditions and that the plan be revised annually to track changes in mode split over time. (Washington Square, 5/22/96 and TVEDC, 5/233/96)

TPAC Recommendation on Comment 55: Disagree. Chapter 3 of the updated RTP will provide a detailed analysis of the impacts of forecast growth on the transportation system. This analysis routinely involves modeling the existing system with current and forecast populations. This work will be completed during the next several months, as part of the next phase of the RTP update. In general, the RTP is updated every 3 years to reflect changing conditions.

56. Comment: The RTP needs to address the issues of congestion and capacity in relation to the region's transition to higher density urban form over the next 20 years. (Washington Square, 5/22/96 and TVEDC, 5/23/96)

TPAC Recommendation on Comment 56: Agree. This will occur during the next several months as part of the next phase of the RTP update.

57. Comment: The definitions of modes should go beyond motor vehicle, transit, bike and pedestrian to include: personal autos, light trucks for commercial, heavy trucks for commercial and autos for commercial. (TVEDC, 5/23/96)

58. Comment: Any policies related to commerce should differentiate between the types of commerce to which they refer (i.e. heavy trucks, light trucks, autos). Each type puts a different demand on the transportation system. (TVEDC, 5/23/96)

TPAC Recommendation on Comment 57 and 58: Disagree. The modal definitions relate the physical street needs, and the motor vehicle category appropriately groups motorcycles, autos, light trucks, heavy trucks and buses, since these vehicles share the same travel lanes. In contrast, the separate freight and transit sections in Chapter 1 address special travel needs that are not shared by other motor vehicles.

Urban Form and Land Use

59. Comment: Amend last sentence of Rural Reserve paragraph on page 1-8 to read (Washington County, 4/17/96):

"Rural reserves will be protected from urbanization for the foreseeable future through state statutes and administrative rules, county ~~zoning~~ land use ordinances, ~~intergovernmental agreements~~ and by limiting rural access to urban through-routes whenever possible."

TPAC Recommendation on Comment 59: Generally agree. However, the reference to intergovernmental agreements should not be deleted because it reflects green corridor provisions in the Draft Urban Growth Management Functional Plan and may be required for access management or other operational improvements.

60. Comment: Neighboring Cities and Green Corridors discussion, second to last sentence on page 1-8: "Growth of neighboring cities will ultimately affect through-travel ~~and could create a need for bypass routes.~~" The draft should not suggest bypasses are needed to provide through-travel. The plan should encourage and provide financial incentives for transit, high speed rail, and commuter rail; managing travel demand and improving the design of throughways. (Coalition for A Livable Future and STOP, 5/23/96)

TPAC Recommendation on Comment 60: Disagree. Currently, the state highway through-routes in many of the neighboring cities travel through downtown districts. As these communities grow, congestion in these core areas can significantly impact through travel, and alternate through routes may be needed to "bypass" these districts. The "bypass" may be in the form of a new limited-access facility, or could be an alternative route that follows existing streets.

System-Wide Goals and Objectives

61. Comment: Require all transportation system development to follow stringent guidelines to prevent and effectively mitigate unavoidable adverse impacts on the environment (e.g., soil erosion and sedimentation, flood plain and riparian and wetland system encroachment, storm water runoff, creation of impervious surfaces, landslides, and impacts on streams, open spaces, and wildlife habitat). (Coalition for a Livable Future, Weaver, 4/12/96)

TPAC Recommendation on Comment 61: Guidelines and procedures for transportation system development and construction activities, including environmental mitigation are covered by federal (NEPA), state and local laws, codes and practices. These protections are enforced in the local development review process.

62. Comment: In the introductory pages of Chapter 1, consider environmental impacts in any investment determinations or project designs. (Weaver, 4/12/96)

TPAC Recommendation on Comment 62: The need to consider environmental impacts in all stages of the transportation planning process is set forth in the fourth

guiding principle on page 1-2, and tied to projects and construction in System Goal 4 on page 1-9.

63. Comment: Maintain multi-modal streets as much as possible. (Uchiyama, 3/30/96)

TPAC Recommendation on Comment 63: Agree. All street designs (on pages 1-12 through 1-17), except Freeway designs, are fully multi-modal, serving motor vehicles, transit, pedestrians and bicycles.

64. Comment: Page 1-9, objectives under Goal 1 should be clarified to say that the access in each case may be qualitatively as well as quantitatively different. It is also unclear how these objectives will help resolve the conflict between access and mobility when they are competing values in the same location. (Washington County, 5/17/96)

TPAC Recommendation on Comment 64: Agree with the need to clarify different levels of access. In fact, the introductory paragraph to the section on the bottom of page 1-8 states that this section will define "adequate" accessibility and mobility (among others). The RTP work program originally anticipated that performance measures and standards would be adopted as part of the Policy Component. That work will now be done as part of the system component and Chapter 1 will be updated, as necessary. Recommend adding a footnote to that effect on the bottom of page 1-9.

65. Comment: Page 1-9, Goal 1, there is no reference to future capacity needs and the definitions of accessibility and mobility are inadequate to determine if these needs are adequately addressed. Recommend further clarification of definitions for accessibility and mobility in the Glossary. (Washington County, 5/17/96)

TPAC Recommendation on Comment 65: Agree. Accessibility and mobility definitions should be added to the glossary. However, adequate levels of accessibility and mobility will be addressed during the system component of the RTP. That discussion will also help define future capacity needs. Consequently, no reference to adequate capacity needs are recommended for the policy chapter.

66. Comment: Clarify of the definition of "appropriate level of mobility" on page 1-21, Goal 1. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 66: This will be addressed as part of the system component and will involve a discussion and comparison between level of service (and resulting mobility) and system cost. It will also be integrated with

discussions on "accessibility," and questions related to where and when various levels of mobility and accessibility are desirable and necessary.

67. Comment: On page 1-8, Goal 2, add an objective that states "Develop a transportation system necessary to implement planned land uses, consistent with the regional level of service standard." Additions to the existing system will be made as part of providing a cost-effective system (see page 1-17, Regional Street System Management section). As written, the objectives under Goal 2 only address the existing system. (Washington County, 5/17/96)

TPAC Recommendation on Comment 67: Agree, but would revise to read "consistent with the regional level of service standards." The plural reference reflects the need for multi-modal performance standards.

68. Comment: Agree that transportation projects and programs need to enhance livability, but livability should be defined to include the livability of areas surrounding transportation improvements. Thus, recommend Objectives 1 and 2 under System Goal 3 on page 1-9 be rewritten as follows:

1. Objective: ~~Enhance livability~~ wWith all regional transportation projects and programs, enhance the livability of the region and the areas that surround such projects and programs.
2. Objective: Give priority to transportation projects and programs that best enhance regional and local livability.

(1000 Friends of Oregon and Coalition for a Livable Future, 5/23/96)

TPAC Recommendation on Comment 68: Disagree. The goal is intended to be broad, addressing the greater regional interest in transportation projects that sometimes outweigh local interests. An example is the Westside LRT, which serves regional transportation and land use objectives, but raised local concerns over specific alignments and corresponding land use planning.

69. Comment: Recommend that new goal include the following: "Reduce reliance on the single occupant vehicle as the principal transportation mode." Merely calling for "access by multiple modes" does not indicate the intention to encourage one mode over another. (System Goal 1, Objectives 1-3). (Willamette Pedestrian Coalition, 5/23/96)

TPAC Recommendation on Comment 69: No change recommended. All goals and objectives in Chapter 1 are intended to diversify travel alternatives and reduce reliance on the automobile. This issue is already addressed on page 1-36.

70. Comment: On pages 1-8 through 1-10, Systemwide Goals and Objectives section: Add a goal relating to VMT reduction. (It is currently in the TDM section on page 1-36 and should be brought forward to this section.) (Willamette Pedestrian Coalition, 5/23/96)

TPAC Recommendation on Comment 70: Disagree. VMT per capita reduction strategies is appropriately addressed in the more detailed TDM section. The intent of the systemwide goals to set very broad direction that guides the more detailed sections that follow in Chapter 1.

71. Comment: Page 1-9 and 1-10, Systemwide Goals and Objectives, under Goal 1, add a new objective that speaks to regional transportation system connecting intra-regional travel. Recommended language:

5. Objective: Integrate the regional transportation system with transit services connecting the region to other areas in the state and beyond.

(AORTA and Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 71: Agree, in part. This comment is best addressed by the recommended "Inter-regional Public Transportation" revisions (proposed in response to Comments 19 and 20).

72. Comment: Add a new objective to System Goal 2 on page 1-9 that allows surface transportation funding to be more flexible and be available for all modes. Recommended language:

4. Objective: Make surface transportation funding more flexible and available to all surface transportation modes.

(Bicycle Transportation Alliance, 5/23/96)

TPAC Recommendation on Comment 72: Disagree. Funding flexibility cannot be changed with the RTP. Instead, recommend the following text revision to page 1-9 address this issue:

System Goal 2

4. Objective: Use funding flexibility to the degree necessary to implement the adopted Regional Transportation Plan.

73. Comment: Systemwide Goals and Objectives, under Goal 2 on page 1-9, add a new objective: 8. Objective: Make transportation funding flexible and available to all transportation modes. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 73: Disagree. Comment 72 already emphasizes the use of flexible funds to implement the adopted components of the RTP. Any further reference to funding flexibility requires extensive further discussion. As other studies address funding flexibility from a policy and need basis (e.g., RTP finance discussion, the Governor's Transportation Initiatives Program), the result may be an RTP policy revision.

74. Comment: Systemwide Goals and Objectives, under Goal 2 on page 1-9, add a new objective: 4. Objective: Develop a hierarchy of transportation management actions to be required before the capacity of regional facilities for auto travel is expanded. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 74: This strategy of requiring management actions prior to capacity expansion has been proposed by Metro staff in conjunction with discussions on congestion levels of service. The strategy is an element of the work on the system component of the RTP. Congestion management prior to new construction is also being developed through the ISTEA mandated Congestion Management System (CMS). As those actions are developed, the policy section will be revised accordingly.

75. Comment: Systemwide Goals and Objectives, under Goal 2 on page 1-9, add a new objective: 5. Objective: Establish a set of criteria for project selection based on the full range of policies in this plan and fund projects in accordance with those selection criteria. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 75: Agree. Revise as proposed.

76. Comment: Systemwide Goals and Objectives, under Goal 2 on page 1-9, add a new objective: 6. Objective: Link improvements in the regional transportation system with the development of supporting local transportation networks. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 76: Disagree. Instead, add the following objective to page 1-21, Goal 4:

"4. **Objective:** Provide an adequate system of local and collector streets that supports the regional system."

77. Comment: Systemwide Goals and Objectives, under Goal 2 on page 1-9, add a new objective: 7. Objective: Adopt transportation system performance measures that reflect the goals of this plan and use them to evaluate and improve transportation systems and projects. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 77: Agree. Revise as proposed.

78. Comment: Systemwide Goals and Objectives, under Goal 4 on page 1-9, add a new objective: 1. Objective: Evaluate land use, environmental, and public health impacts in all transportation projects and analyze alternative transportation investments and programs for major transportation projects. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 78: Disagree. These issues are already covered by other land use and environmental goals and objectives in this section.

79. Comment: Systemwide Goals and Objectives, under Goal 4 on page 1-9, Objective 2: "Prevent and effectively mitigate unavoidable adverse ~~Minimize the~~ environmental impacts associated with transportation project construction, operation and maintenance activities." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 79: Disagree. These issues are already covered by other land use and environmental goals and objectives in this section.

80. Comment: Systemwide Goals and Objectives, under Goal 4 on page 1-9, add new objective: 4: Objective: Promote and design transportation systems and facilities that use energy and other resources efficiently. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 80: Agree, in part. Revise as follows:

"4. **Objective:** Design transportation systems that promote efficient use of energy."

81. Comment: Systemwide Goals and Objectives, on page 1-9, add new goal: Goal 6 - Provide government leadership by example in promoting and using alternative modes, reducing travel demand and conserving resources and the environment. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 81: Agree in concept, but recommend adding the following language to Transportation Demand Management (TDM) Goal 6 (bottom of page 1-37):

3. Promote public sector involvement in employer based TDM programs and provide examples of successful programs.

82. Comment: Amend first sentence, on page 1-8, under Systemwide Goals and Objectives, to read "The overall goal of the RTP is to develop a safe, efficient and cost-effective transportation system that serves the region's current and future travel needs..." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 82: Agree. Revise as proposed.

83. Comment: Amend System Goal 1 on page 1-9 to read "Implement a transportation system that serves the region's current and future travel needs..." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 83: Agree. Revise as proposed.

84. Comment: Develop a methodology that weights the analysis for those factors that cannot be measured in a traditional cost/benefit analysis, but that does not overcompensate the system improvement decisions for these modes. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 84: Agree. TPAC's recommendation on Comment 75 created an objective under Goal 2 on page 1-9 of Chapter 1 which states:

5. Objective: Establish a set of criteria for project selection based on the full range of policies in this plan and fund projects in accordance with those selection criteria.

85. Comment: Add a definition of "intermodal" to the Chapter 1 Glossary. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 85: Agree. TPAC recommends the following be inserted into the Chapter 1 Glossary:

Freight Intermodal Facility- An intercity facility where freight is transferred between two or more modes (e.g., truck to rail, rail to ship, truck to air, etc.).

Passenger Intermodal Facility - The hub for various statewide, national and international passenger modes and transfer points between modes (e.g., airport, bus and train stations).

86. Comment: Re-examine the systemwide goals and objectives to measure future policy decisions impacts against the transportation needs of the agricultural industry. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 86: Disagree. The needs of the agricultural industry are already addressed in several sections of Chapter 1 as part of larger discussion of freight movement. More specifically, the Rural Road section on page 1-16 addresses farm-to-market travel. As part of the developing the system component of the RTP, some rural roads will be evaluated for their role in carrying urban-to-urban traffic, while urban travel will be discouraged on most rural routes.

87. Comment: Move System Goal 1, Objective 4 to the first position to assure that mobility remains the highest priority rather than access to specific areas. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 87: Disagree. The five system goals that appear on page 1-9 are intended to balance mobility and accessibility objectives. Adequate levels of mobility and accessibility will be addressed during the system component of the RTP update. It will also be integrated with discussions related to where and when various levels of mobility and accessibility are desirable and necessary.

88. Comment: Amend System Goal 1, Objectives 1-3 to replace "~~highest levels of access~~" with "best possible access to serve the mobility demand." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 88: Disagree. The intent of this goal is to define accessibility as it relates to the individual 2040 land use components and establish a priority between these land use components. The proposed revisions would eliminate this intent.

89. Comment: Amend System Goal 1, Objectives 1-3 to read "access by ~~multiple~~ cost-effective modes..." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 89: Disagree. The central theme of the state transportation planning rule (TPR) and federal ISTEA is to promote multi-modal transportation systems that provide many travel alternatives, and reduce the reliance on single modes of travel. The System Goal 1 and the objective that support the goal reflect this theme. Also, System Goal 2 specifically states "provide for a cost-effective" transportation system.

90. Comment: Add an objective to the System Goals that reads "Provide additional capacity to the transportation system in those areas of the region where quality of life is being negatively impacted by congestion." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 90: Disagree. The proposed language assumes that congestion is the result of insufficient capacity. The second objective under System Goal 3 already "give(s) priority to transportation projects and programs that best enhance livability," and therefore more broadly addresses the intent of this comment.

91. Comment: Amend System Goal 2, Objective 3 to read "Require a cost/benefit analysis ~~Consider a full range of costs and benefits~~ in the allocation of transportation funds." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 91: Disagree. Current cost/benefit analysis techniques are not adequate at this time to consider the range of goals and objectives that are included in the RTP in individual funding decisions, and rely too heavily on connecting goals to financial impacts. However, Metro is working with ODOT to develop improved cost/benefit techniques that can be used in future funding allocations.

92. Comment: Add a definition of "livability" that includes specific criteria that enables the region to measure decisions that achieve System Goal 3. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 92: To the extent possible, performance measures will be developed during the next phase of the update that will help define this term for the purposes of the RTP. However, the term "livable" is highly subjective, and, therefore, the intent of this goal is to provide broad direction in the development of the transportation system. The 2040 Growth Concept will define livability and the RTP will incorporate that definition as it relates to transportation.

93. Comment: Include the natural environment goal in System Goal 3 to emphasize the importance of the natural environment to the region's livability. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 93: Disagree. The natural environment is already discussed in System Goal 4.

94. Comment: Add a new System Goal to read "Protect the region's economy." Include objectives that address the need for a safe, cost-effective and efficient transportation system to assure living wage jobs in the region or incorporate the goal of protecting the economy in Goal 3 along with the natural environment goal. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 94: These themes are central to the 2040 Growth Concept, and therefore already are covered by System Goal 1. However, recommend including a discussion of the relationship between transportation and the economy be included in the Introduction chapter as part of the next phase of the RTP update.

95. Comment: Replace Objectives 1 and 3 under System Goal 4 with a new objective that reads "Promote transportation system improvement projects that help the region meet applicable air, water and noise quality standards." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 95: Disagree. The comment assumes that the system must be improved to meet environmental standards, while the objectives as written encompass both system improvements and better use of existing infrastructure.

96. Comment: Amend System Goal 4, Objective 2 to read "Balance ~~Minimize~~ the environmental impacts associated with transportation project construction, operations and maintenance activities." (TVEDC, 6/17/96)

TPAC Recommendation on Comment 96: Disagree. The term "balance" is less proactive than "minimize", and therefore does not support the goal statement, which is to "protect the region's natural environment." Due to time constraints, operations of the transportation system will be discussed as part of the system component of the RTP update.

97. Comment: Add a definition and set of criteria to guide the region in assessing the environmental impacts referenced in System Goal 4, Objective 2. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 97: Agree. As part of the next phase of the RTP update, performance criteria for most goals and objectives will be developed for this purpose.

98. Comment: Combine Objectives 1 and 2 under System Goal 5 and change the language to read "Promote safety in the design and operation of the transportation system by reducing conflicts between modes. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 98: Disagree. By separating design and operating safety from modal conflicts, the current language acknowledges that many safety issues are the result of design or operating deficiencies, and not conflict between modes.

99. Comment: Delete System Goal 5, Objective 3 which states "~~Develop and implement regional safety and education programs~~." This is best left to other agencies. (TVEDC, 6/17/96)

TPAC Recommendation on Comment 99: Disagree. The RTP is the region's transportation plan, not simply Metro's plan. Therefore agencies within the region, such as Tri-Met, must develop plans that are consistent with the RTP.

Regional Street System and 2040 Implementation

100. Comment: Reconsider rural access management provisions in Goal 1, Objective 2 on page 1-19 and 4th bullet under Principal Arterials section on page 1-22 and their potential impact on accepted farm/forest related uses (i.e., moving farm equipment across a road) (Washington County, 4/17/96).

TPAC Recommendation on Comment 100: Disagree. Access management objectives set forth in these sections refer to the regional through-routes that connect the urban area to points beyond the region (by definition, Green Corridors are located along state highways), and many of these facilities already have controlled or partially controlled access. This language would not affect the current use of local roads serving the rural area, except where they connect to state highways.

101. Comment: Revise Goal 1, Objective 2, second bullet on page 1-11 to read: "...be consistent with the regional motor vehicle, transit, freight, ~~bicycle~~ bikeway and ~~pedestrian~~ walkway system maps in Chapter 4 of this plan; and..." (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 101: Disagree. The modal definition (i.e. bicycle and pedestrian) is more all inclusive of the mode of travel. For example, the bicycle system includes bikeways, multi-purpose paths, shared bike lanes, bike racks and bike lockers. The pedestrian system includes sidewalks, multi-purpose paths, private walkways, pedestrian districts, and such amenities as special crossing features, street lighting, benches and wide planting strips as buffers.

102. Comment: In reference to page 1-13, Highways, last sentence: "Improved pedestrian crossings are located on overpasses and at same-grade intersections." Why is there not an option for grade level pedestrian crossings with the highway below-grade for separation? This option should be included. (City of Milwaukie, 4/19/96)

TPAC recommendation on Comment 102: Agree. Revise sentence to read: "...overpasses, underpasses and at same-grade intersections."

103. Comment: In reference to page 1-15, Urban Roads, second sentence: "Urban roads serve industrial areas, intermodal facilities and employment centers where buildings are rarely oriented toward the street." This statement should be reviewed and revised if necessary, based on the most recent changes to the TPR. For employment centers and industrial areas located along major transit stops, building orientation may be required by local jurisdictions. (City of Milwaukie, 4/19/96 and Willamette Pedestrian Coalition, 5/23/96)

TPAC recommendation on Comment 103: Disagree. The term "rarely" would allow such exceptions, while describing the predominate development pattern in these areas.

104. Comment: On page 1-15, Urban Roads discussion, second sentence: "Urban Roads serve industrial areas, intermodal facilities and employment centers ~~where buildings are rarely oriented toward the street~~." The deleted section adds little definition to urban roads and may be read as an assumption that current building orientation in these areas should and will continue into the future. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 104: Disagree. However, recommend the following revisions to clarify this section:

"Urban Roads serve <u>low density</u> industrial areas, intermodal facilities and employment centers where buildings are ~~rarely~~ <u>less</u> oriented toward the street."

105. In reference to pages 1-17 and 1-19, Regional Street System Management: TDM should be included in this section as it is a means to TSM. See Glossary in this draft for definition of the TSM term. It includes TDM techniques as an approach to managing existing transportation facilities rather than expanding existing or building new roadways. A new objective should be created that includes TDM techniques as an approach to implementing TSM. (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 105: Disagree. However, the comment exposes the need to revise the glossary to eliminate TDM measures from the TSM definition. TSM is to improve efficiency through relatively low-cost system revisions. TDM is related to managing demand on a system. Recommend deleting references to "programs that encourage transit, carpooling, telecommuting, alternative work hours, bicycling, and walking" from the TSM definition.

106. Revise second to last sentence in Minor Arterials section on page 1-22 to read: Minor arterials <u>can</u> serve as freight route, providing both access and mobility."

Recommend not assuming freight routes on all minor arterials streets, especially when minor arterials are located in residential areas. (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 106: Agree, but recommend using the word "may" instead of "can".

107. Comment: Revise second to last sentence in Collectors paragraph on page 1-23 to read: "Some ~~C~~collectors are appropriate to ~~should~~ serve as freight access routes, providing local connections to the arterial network." (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 107: Agree to some extent. Recommend changing proposed language to read "Collectors may ~~should~~ serve as freight access routes,..."

108. Comment: Page 1-15, "Community Streets" and page 1-16, "Local Street Design": Because these streets are normally not part of the RTP, standards for such streets should not be included in the RTP. (City of Troutdale, 5/13/96)

109. Comment: Page 1-23, "Local Street System Design Criteria": This section exceeds the scope of the RTP and should be deleted. Local street design criteria should be set by local jurisdictions. (City of Troutdale, 5/13/96)

TPAC Recommendation on Comments 108 and 109: Disagree. Local streets are included in the RTP with the recognition that local street design -- especially lack of local street connections -- can significantly impact the regional system.

110. Comment: It is not appropriate to require the installation of center medians on all Regional and Community Boulevards and Streets. Left turns may be warranted at locations other than intersections to provide adequate access. If access management plans are to be consistent with regional street design concepts (TSM Objective 2 on page 1-19), it is important that the design concept description not imply that center medians are required between intersections on all Regional Streets, Community Streets, Urban Roads and Regional Boulevards. (City of Gresham, 5/17/96)

Recommend adding "Where appropriate" after all references to center medians in the descriptions of design types on pages 1-12 through 1-16. (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 110: Disagree. This issue will be addressed in the Regional Street Design Study.

111. Comment: On-street loading facilities are not appropriate on Regional Boulevards where typically no parking lane is provided - they would conflict with bike lanes.

Recommend deleting "...~~and often include loading facilities within the street design~~..." from Regional Boulevards description on page 1-13 or change "often" to "may." (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 111: Agree. Recommend replacing the word "often" with "may" on page 1-13.

112. Comment: The range of vehicle design speeds and volumes appropriate for each design type should be stated numerically in miles per hour and average daily traffic. There is no common understanding of what constitutes low, moderate and high speed. Recommend adding average daily traffic ranges to descriptions of design types on pages 1-12 through 1-16. Also recommend replacing reference to high, moderate and low motor vehicle speeds with design speeds range in miles per hour. (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 112: Agree. The relative terms of "low", "moderate" and "high" will be further defined as part of the system phase of the RTP update, and will be refined as part of the Regional Street Design Study.

113. Comment: Modify Goal 2, Objective 4 on page 1-11 to read: "Consider <u>safety,</u> right-of-way, environmental and topographic constraints, while satisfying the general intent of the regional design concepts." Safety should be a primary consideration in developing street design concepts. (City of Gresham, 5/17/96))

TPAC Recommendation on Comment 113: Agree. Recommend adding "safety" to Goal 2, Objective 4 on page 1-11, and to the last bullet of the local street design section on page 1-17.

114. Comment: The descriptions of Regional and Community Streets and Boulevards may raise the expectation that transit and pedestrian amenities, freight loading facilities, bicycle lanes, travel and turn lanes, on-street parking and landscaped medians can all be accommodated within the 80 to 100 foot rights-of-way commonly available for arterial streets. (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 114: Disagree. The upcoming system element of the RTP update will include Regional Street Design Study recommendations for accommodating these needs within limited rights-of-way.

115. Comment: Regional Street Design Concepts on pages 1-10 through 1-20 should: build on or reference the Functional Classification Model developed by the Joint Regional Accessway Classification Project; establish priorities between modes for each classification; identify clear and objective distinguishing characteristics for each

classification; include a better description of how conflicts between modes will be resolved. (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 115: Agree, in part. The model referenced here was a staff and work team reference in the development of the design concepts, but is more oriented toward traffic function than design. The design concepts will be further developed as part of the Regional Street Design Study, with specific design options and modal priorities proposed.

116. Comment: Increase permeable street surface and better control of surface run-off and potential soil erosion along the street. (Uchiyama, 3/30/96)

TPAC Recommendation on Comment 116: Agree. While the regional interest in this level of street design detail is not defined, Metro is actively involved in storm water issues. TPAC recommends adding "storm water management" to objective 4 of Goal 2 of the regional street design section on page 1-11. The role of the RTP in this area will be further defined in the system component of the RTP update.

117. Comment: Intersections should be as small as possible. (Klotz, 3/30/96)

TPAC Recommendation on Comment 117: The Metro Regional Street Design Study will provide recommendations for local plans, particularly in densely developed areas where street designs must integrate various travel modes. Some street design recommendations may be included later in the RTP as standards where a regional interest exists.

118. Comment: Double turn lanes (left or right) should not be permitted. (Klotz, 3/30/96 and 5/23/96)

TPAC Recommendation on Comment 118: The Regional Street Design Study will provide recommendations on the appropriateness of such designs as they relate to surrounding land uses.

119. Comment: Trees should always be in the planting strip between the sidewalk and the curb. (Klotz, 3/30/96)

TPAC Recommendation on Comment 119: Agree in most situations. The street design text on pages 1-10 through 1-17 includes varying degrees of pedestrian buffering in most of the design types, but the method of buffering is not limited to street trees. The Regional Street Design Study will provide recommendations on the best pedestrian buffering methods for specific urban settings.

120. Comment: A fifteen foot wide center median in the "streets" drawing is a waste of space. Left turn lanes are also not needed. (Klotz, 3/30/96)

121. Comment: "Streets" do not always need to have center medians and they do not need left turn lanes. (Klotz, 3/30/96)

122. Comment: "Boulevards" should not have continuous two-way left turn lanes. (Klotz, 3/30/96)

TPAC Recommendation on Comments 120-122: Disagree. There are many situations where local jurisdictions have used alternating landscaped medians/left turn lanes in appropriate and effective street designs. In several instances, for example, local designs have used left turn lanes on formerly four-lane streets to reduce the number of vehicle travel lanes and allow bicycle lanes or parking in the remaining space. The Regional Street Design Study will provide recommendations on the best use of medians and turn lanes in specific urban settings.

123. Comment: "Roads" should have sidewalks, whether "urban" or "rural" as long as they are inside of the urban growth boundary. (Klotz, 3/30/96)

TPAC Recommendation on Comment 123: Agree. Regional Urban Road designs are described on page 1-15 as having sidewalks. Rural Road designs do not apply to facilities within the urban growth boundary.

124. Comment: Curb radii on local streets should be 10 feet or 12 feet. (Klotz, 3/30/96)

TPAC Recommendation on Comment 124: This is generally a local issue. However, the Regional Street Design Study will provide recommendations for local plans, particularly in densely developed areas where street designs must integrate various travel modes.

125. Comment: Wheelchair ramps should be built on each corner, with their center lines parallel to the crosswalks they serve. (Klotz, 3/30/96)

TPAC Recommendation on Comment 125: This is a local issue, and is best addressed in local transportation system plans. Metro supports Americans with Disabilities Act (ADA) requirements with good design to meet the spirit of the law.

126. Comment: "Highways" should not have continuous left turn lanes. While the lane may be perceived as a pedestrian refuge by some drivers, it is in fact a dangerous place to stand. (Klotz, 3/30/96 and 5/23/96)

TPAC Recommendation on Comment 126: Agree. Under the proposed RTP street design concepts, highways are generally divided by a non-auto median (e.g., landscaped) and have left turn lanes where at-grade intersections exist.

127. Comment: Why do roads need to be different from streets? (Klotz, 3/30/96)

TPAC Recommendation on Comment 127: Road designs serve traffic-oriented areas where little pedestrian activity occurs (such as industrial areas), and therefore warrant less pedestrian infrastructure than street designs where walking is encouraged (such as transit corridors and urban neighborhoods).

128. Comment: Address street safety issues such as blind corners and excess speed. (Frimoth, 4/6/96)

TPAC Recommendation on Comment 128: These are generally local issues, and best addressed in local transportation system plans.

129. Comment: Page 1-15, "Community Streets," fourth line: Should "Regional Street..." be "Community Street..."? (City of Troutdale, 5/13/96)

TPAC Recommendation on Comment 129: Agree. Revise as noted.

130. Comment: On page 1-11, the RTP should recognize that regional streets may have different characteristics in individual jurisdictions. For example, if Highway 43 is thought of as a "regional street," it has a different function within the West Linn and Lake Oswego city limits than it does in the Portland city limits and also serves a different function between Portland and Lake Oswego. (City of West Linn, 5/17/96)

131. Comment: In reference to the Regional Street Design Goals and Objectives described on page 1-11: It should not be Metro's role to impose a "one-size-fits-all" design upon the region. Local governments should have the flexibility to achieve the intent of 2040 while still accommodating that which makes every community unique. (City of Beaverton, 5/17/96)

132. Comment: On page 1-13, the RTP identifies community boulevards as "usually including four lanes." At the May 8 MPAC meeting, MPAC member Peggy Lynch noted that some communities, especially those identified as town centers, may want the option of having fewer than four lanes. The city of West Linn, as a proposed town center, has identified a policy in its vision document of keeping Willamette Drive (Highway 43) to no more than three lanes. RTP language should give local jurisdictions flexibility to accommodate facilities consistent with standards identified in their current policies. (City of West Linn, 5/17/96)

TPAC Recommendation on Comments 130-132: Agree. The definition of "regional" and "community" reflects the traffic function of a street or boulevard as a "major" or "minor" arterial, respectively. The appropriateness of more or less than the "usual" four lanes will be based on system analysis as individual projects are developed. The classification of arterials as "major" and "minor", including Highway 43 in West Linn, will be reviewed as part of developing the motor vehicle network during the next phase of the RTP update.

133. Comment: On page 1-11, Goal 1, Objective 2, bullet 3, the term "parcel specific" may be too finite at this point. Recommend changing wording to "geographically specific" to allow some freedom later to determine the right unit of geography. (Washington County, 5/17/96)

TPAC Recommendation on Comment 133: Agree. Revise as proposed.

134. Comment: On page 1-11, Goal 1, Objective 3, will they be "...standards for appropriate transition..." or "...guidelines for appropriate transition..." (Washington County, 5/17/96)

TPAC Recommendation on Comment 134: Agree. Replace the word "standards" with "guidelines."

135. Comment: On page 1-11, Goal 2 calls for street performance standards while the objectives all call for street designs, design guidelines and design standards. Street designs, design guidelines and design standards provide one type of means to an end and performance standards another. How does achieving the objectives necessarily achieve the goal in this case? (Washington County, 5/17/96)

TPAC Recommendation on Comment 135: Agree. Recommend revising goal to read "Support local ~~Develop street performance standards for~~ implementation of regional street design..."

136. Comment: On page 1-11, Goal 3, Objective 1, request for clarification. What are "efficient travel speeds"? Recommend changing this to "high travel speeds." (Washington County, 5/17/96)

TPAC Recommendation on Comment 136: Disagree, but revise to read:

> "**1. Objective:** Provide for through travel on major routes that connect major regional destinations ~~and emphasize efficient travel speeds~~."

137. Comment: On page 1-11, Goal 3, Objective 2, recommend changing "...~~adjacent regional or community-scale~~..." to "...nearby regional or community-scale..." (Washington County, 5/17/96)

TPAC Recommendation on Comment 137: Agree. Revise as proposed.

138. Comment: On pages 1-14 and 1-15, Design Concept for Streets: the introduction to the design concept for Streets states that they are "designed with amenities that promote pedestrian and transit travel." The first sentences under both the Regional Streets and Community Streets sections, however, state that they are designed to carry (significant) vehicle traffic "...while providing for transit, bicycle and pedestrian travel." "Providing for" is different from "promoting." The objective should promote alternative modes. Thus, recommend the first sentences under Regional Streets and Community Streets be amended as follows:

1. "Regional Streets are designed to carry significant vehicle traffic while also ~~providing for~~ promoting transit, bicycle and pedestrian travel."
2. "Community Streets are designed to carry vehicle traffic while also ~~providing for~~ promoting transit, bicycle and pedestrian travel."

(Coalition for a Livable Future and 1000 Friends of Oregon, 5/23/96)

TPAC Recommendation on Comment 138: Disagree. The intent of the Street section is to provide a graduated level of pedestrian and transit amenities that is tied to land use and development density. Therefore, pedestrian and transit improvements in Street designs are intended to be less substantial than in Boulevard designs, while still providing for these travel alternatives.

139. Comment: Street widths are a concern as is the willingness to continue adding vehicle travel and turning lanes to the street cross-sections. Pedestrians are treated well, but a street with more than four lanes, with "additional lanes in some situations" are likely to be an unfriendly place for pedestrians. It causes you to lose the scale. Recommend the addition of more specific limits on the number of lanes in many of the street sections and descriptions. (Willamette Pedestrian Coalition, 5/23/96)

TPAC Recommendation on Comment 139: Disagree. Regional facilities, by definition, are major traffic routes. Most are currently designed with four motor vehicle travel lanes, with both smaller and larger exceptions tailored to special situations. However, the traffic function of different routes will be re-evaluated as part of updating the motor vehicle network in the next phase of the RTP update.

140. Comment: Reconsider that sidewalk buffering for "Highways" and "Urban Roads" is optional. These are often crucial links between pedestrian destinations, thus some form of buffering should be required on these streets. (Willamette Pedestrian Coalition, 5/23/96)

141. Comment: Reconsider streets descriptions as they relate to industrial areas and employment areas. For example, the "Urban Roads" description should acknowledge that job bases in these areas should be better served by transit, bicycling and walking facilities. Buffering should be included along sidewalks, and protected pedestrian street crossing, with medians, should be provided at all bus stops and entrances to larger employment generators. (Willamette Pedestrian Coalition, 5/23/96)

TPAC Recommendation on Comments 140 and 141: Disagree. These routes are not "critical links", but instead serve low-density, industrial or intermodal areas. As such, Urban Road designs include basic sidewalks and bikeways, but do have not the pedestrian emphasis of Street and Boulevard designs, which serve higher density, more transit-oriented mixed-use neighborhoods.

142. Comment: Street design standards and guidelines should be included in the RTP as they are necessary to ensure the street design concepts are implemented. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 142: The Regional Street Design Study will assist local governments in implementing the RTP street design requirements.

143. Comment: The local street design connectivity principles on pages 1-16 and 1-17 should be incorporated into the street design standards and guidelines. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 143: Agree. Improved guidelines for connectivity will be developed as part of the Regional Street Design Study during the next phase of the RTP update.

144. Comment: The street design standards and guidelines should address land and resource conservation and environmental protection along with function. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 144: These issues may be incorporated into the next phase of the RTP update, when more detailed implementation strategies are developed.

145. Comment: On page 1-17, Local Street Design section: There is significant public interest in reducing street widths for safety, land use efficiency and water quality purposes, and Metro should insist on it. Also, where cul-de-sacs are allowable, direct through pedestrian and bicycle connections should be required. Recommend the following amendments on page 1-17:

1. "Where appropriate, local design codes should ~~allow~~ require narrow street designs to conserve land, calm traffic or promote connectivity; and

2. Closed street systems and cul-de-sac designs should be limited to situations where topography or development patterns prevent full street extensions, and in all cases should provide for direct through routes for pedestrians and bicycles.

(1000 Friends, 5/23/96)

146. Comment: On page 1-17, Local Street Design section, fifth and sixth bullets:

- ~~Where appropriate,~~ lLocal design codes should ~~allow~~ require narrow street designs to conserve land, calm traffic or promote connectivity, with limited exceptions; and

- Closed street systems and cul-de-sac designs should be limited to situations where topography or development patterns prevent full street extensions, and in all case should provide for direct through routes for pedestrian and bicycles.

(Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 145 and 146: Disagree. The first issue regarding narrow street designs is appropriately described in Chapter 1 as an option, with application of the concept tailored to local needs through local design codes. The second issue regarding connectivity is already addressed in the fourth bullet of this section (on page 1-17).

147. Comment: Clarify bullet 5 on page 1-16 under local street design to acknowledge the necessity of adequate surrounding regional connects in order to prevent local street system and neighborhoods from being overwhelmed by cut-through traffic. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 147: Generally agree. Specific standards for local street connectivity will be studied during the next phase of the RTP update as part of the Regional Street Design Study. The "minimum" standard for connections will assume and adequate traffic network of arterials and collectors, but will be

based on a series of case studies throughout the region. The adequacy of the arterial and collector network will be evaluated during the next phase of the update, as well.

148. Comment: On page 1-18, under ATMS strategies, Intelligent Transportation System (ITS) technology could be identified as another potential strategy, particularly for regional routes. Highway 43 is one facility that could utilize this technology. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 148: Agree. Section and glossary will be revised to note that ATMS is a subset of ITS and must be addressed as one of the 16 ISTEA planning factors.

149. Comment: On page 1-19, Goal 1, Objective 3, recommend changing objective to read "Integrate traffic calming elements into new street designs as appropriate, consistent with..." (Washington County, 5/17/96)

TPAC Recommendation on Comment 149: Agree. Revise as proposed.

150. Comment: On page 1-19, Arterial Signal Coordination section: As part of the first objective under TSM, the draft plan states that signal coordination on arterials should be set to minimize stop-and-go travel. Consider that signal timing to minimize traffic stops could work against pedestrians and bicyclists who are trying to cross the street. For this reason, recommend the language be amended to read:

"Arterial Signal Coordination (Such as comprehensive adjustments of signal timing to minimize stop-and-go travel, consistent with adjacent land use and the needs of non-automobile modes, and which coordinates with freeway and interchange operations."

(1000 Friends of Oregon and Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 150: Agree in concept, but recommend the following: "consistent with adjacent land use, street design type and function, etc."

151. Comment: On page 1-18, Regional Street System Management section, traffic calming discussion, second sentence: "These "retrofit" techniques ... and ~~are rarely appropriate for use~~ have not been typically used on larger regional facilities. (Coalition for a Livable Future, 5/23/96)

TPAC Recommendation on Comment 151: Agree. Revise as proposed.

152. Comment: Amend page 1-19, Regional Street System Implementation section, opening paragraph: "~~While~~ tThe primary mission of the RTP is implementation of

the 2040 Growth Concept, including reinvestment in existing communities and their infrastructure~~, the plan must also address other important transportation issues that may not directly assist in implementing the growth concept~~. The plan must also protect the region's existing investments by placing a high priority on projects or programs that maintain or preserve existing infrastructure. The following goals and objectives reflect this priority ~~need to integrate 2040 Growth Concept objectives with other important transportation needs or deficiencies~~ in the development of the preferred, financially constrained and strategic RTP systems...". Reinvesting in existing communities is a key underpinning of the 2040 Growth Concept. This includes reinvestment in existing infrastructure. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 152: Disagree. The purpose of this section is to balance 2040 implementation with equally important needs for maintenance and preservation of the system and to make safety improvements. The proposed revisions would therefore be inconsistent with these broader goals (that follow the referenced introductory text).

153. Comment: Amend pages 1-19 and 1-20, Regional Street System Implementation section, Goal 1, Objectives 1-3:
    1. Objective: Place the highest ~~priority~~ weight on projects and programs that best serve the transportation needs of the central city, regional centers, intermodal facilities and industrial areas.

    2. Objective: Place a high ~~priority~~ weight on projects and programs that best serve the transportation needs of station communities, town centers, main streets and corridors.

    3. Objective: Place less ~~priority~~ weight on transportation projects and programs that serve the remaining components of the 2040 Growth Concept.

    (Coalition for A Livable Future, 5/23/96)

154. Comment: On page 1-20, Regional Street System Implementation section, Goal 3, Objectives 1-2:

    1. Objective: Place a ~~the~~ highest ~~priority~~ weight on projects and programs that address safety-related deficiencies in the region's transportation infrastructure.
    2. Objective: Place less ~~priority~~ weight on projects and programs that address other deficiencies in the region's transportation infrastructure.

    (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comments 153 and 154: Disagree. The proposed revisions do not enhance the basic intent of these objectives, which is to provide broad decision-making policy for the development of regional transportation projects and programs.

155. Comment: On page 1-20, Goal 1, add new objective:
   4. Objective: Emphasize projects that provide or help promote a wider range of transportation choices.

   (Coalition for A Livable Future, 5/23/96)

   TPAC Recommendation on Comment 155: Agree, but with the following modification:

   4. Objective: Emphasize projects and programs that provide or help promote a wider range of transportation choices.

156. Comment: What is Multi-Modal Traveler Information Services on page 1-19. This should be further defined. (City of Beaverton, 5/17/96)

   TPAC Recommendation on Comment 156: Agree. Recommend adding the following explanation:

   Multi-Modal Traveler Information Services (such as broadcast radio and television; highway advisory radio; variable message signs; on-line road reports; and on-board vehicle navigation aids).

157. Comment: Amend page 1-20, Goal 2: "Emphasize the maintenance, ~~and~~ preservation and effective use of transportation infrastructure in the selection of the RTP projects and programs." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 157: Agree. Revise as proposed.

158. Comment: Adopt language creating a mechanism whereby regional investment in a corridor is tied to the development of local street networks and connections. Inter-governmental agreements are needed to require that local jurisdictions complete local street networks before improvements are made to a regional facility. Too many regional facilities are failing in their primary function because they are full of local traffic. (Bicycle Transportation Alliance, 5/17/96 and 5/23/96)

   TPAC Recommendation on Comment 158: Disagree. Regional funds can already be used to leverage the development of local street networks and connections.

However, the proposed policy would discriminate against already developed areas where few opportunities exist to change local street connectivity.

159. Comment: Adopt a policy for recovering the full cost of transportation projects through user charges. There is a tremendous imbalance in the distribution of costs and benefits such that motor vehicles derive tremendous economic and personal benefit from decades of regional investment in roadways, yet do not pay for the tremendous costs imposed on society through air pollution, congestion, loss of productive land to roadways and parking, etc. (Bicycle Transportation Alliance, 5/17/96 and 5/23/96)

TPAC Recommendation on Comment 159: Disagree. The intent of the RTP is to promote alternative modes of travel. However, there are practical limits to collecting user fees as proposed (i.e., pedestrian travel).

Regional Motor Vehicle System

160. Comment: On page 1-21, Goal 1, Objective 3: Recommend modifying objective to state that the off-peak level of mobility will be higher than the peak-hour level. (Washington County, 5/17/96)

TPAC Recommendation on Comment 160: Disagree. The level of service discussions occurring as part of the RTP system component will identify the appropriate "level of mobility" for both off-peak and peak hours.

161. Comment: On page 1-21, Motor Vehicle System Goals and Objectives section: Objectives under Goal 1 emphasize the need to maintain appropriate levels of mobility on principal arterials and other parts of the system during both peak and non-peak periods. However, increasing mobility is not the only objective for the region. Recommend the following changes:

1. Objective: Maintain a system of principal arterials for long distance, high speed, interstate, inter-region and intra-region travel, <u>consistent with alternative mode objectives of surrounding land use types.</u>
2. Objective: Maintain an appropriate level of mobility on the motor vehicle system during periods of peak demand, <u>consistent with alternative mode objectives of surrounding land use types.</u>
3. Objective: Maintain an appropriate level of mobility on the motor vehicle system during off-peak period demand, <u>consistent with alternative mode objectives of surrounding land use types.</u>

(1000 Friends of Oregon and Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 161: Disagree. Alternative mode and land use consistency are clearly stated elsewhere in the policy section.

162. Comment: Amend Goal 1, Objective 2 on page 1-21 to read: "Maintain an appropriate level of mobility on the motor vehicle system during periods of peak demand, taking into account the levels of mobility required for other modes, including public transit, freight, bicycles and pedestrians. Need to think about mobility for all modes, not just cars. (Willamette Pedestrian Coalition, 5/23/96)

TPAC Recommendation on Comment 162: Disagree. Mobility required for other modes is discussed adequately in the public transit, freight, bicycle and pedestrian mode goals and objectives. Agree philosophically that mobility needs of all modes must be considered.

Level of Service Standards

163. Comment: On page 1-20, potential changes to level of service standards are of concern to West Linn staff and staffs of small cities. If LOS standards are relaxed region-wide, smaller jurisdictions such as West Linn with RTP projects may find that those projects are no longer of the same relative priority. It would be helpful if all existing projects were grandfathered in and thus, could not be affected by LOS standards changes, or if new LOS standards were not applied in areas where the facility is not a regional street. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 163: Disagree. The purpose of the level of service standard is to better measure the need for capacity improvements or other strategies in lieu of capacity. Therefore, the intent of the standard is to govern all improvements made to the regional system regardless of location. Furthermore, the interim federal RTP was adopted as an interim step in the development of an updated RTP. It was the full intent upon adoption that projects from previous plans would not be "grandfathered."

164. Comment: The proposed congestion measures of performance should not be incorporated into the RTP until further technical analysis has been completed and reviewed by local jurisdictions. (EMCTC, 5/14/96)

TPAC Recommendation on Comment 164: Agree. The level of service standard is currently proposed as part of the Urban Growth Management Functional Plan and will be refined over the next several months.

165. Comment: Revised level of service standards should be included in the RTP. The standards should be revised so that motor vehicle mobility is not the primary determinant of how well transportation system is functioning and does not limit flexibility in designing streets and land uses that support the goals of 2040. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 165: Agree. The next phase of the RTP update will focus on developing performance measures. A regional discussion on revising level of service standards is currently underway.

Regional Public Transportation System

166. Revise Goal 4, Objective 2 on page 1-28 to read: "Continue to work with local jurisdictions to make public transportation stops and walkway approaches within one-quarter mile of stops accessible." (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 166: Agree, except for distance distinction. Revise sentence to read "...to make public transportation stops and walkway approaches accessible." The distance distinction will be addressed in the system component of the RTP update.

167. On page 1-29, add a Goal 7 with objectives that address encouraging use of public transportation. (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 167: Agree. See TPAC recommendation on Comments 182 and 183 of this exhibit.

168. Comment: In terms of growth management, high speed rail in the Willamette Valley should be considered a vital concern of this region. Recommend adding a Goal 7 to the Regional Public Transportation System Goals and Objectives on page 1-29:

Goal 7: Support regional and state efforts to maintain and expand commuter and passenger rail and bus terminals and service, especially in the I-5 and I-84 corridors. (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 168: Agree somewhat. See TPAC recommendation on Comments 19 and 20 of this exhibit.

169. Comment: We need bus shelters on "highways," "roads," "boulevards" and "streets. (Klotz, 3/30/96)

TPAC Recommendation on Comment 169: Agree. Additional bus shelters are included as a Transportation Demand Management strategy in Chapter 1 of the RTP. The recommendation is to include covered bus shelters in high volume transit corridors and at major stops in regional centers, town centers and main streets.

170. Comment: South/North light rail should run along existing railroad right-of-way in southeast, through the Brooklyn yards. (Mros, undated)

TPAC Recommendation on Comment 170: Specific alignments are being considered as part of the South/North LRT Study.

171. Comment: The city could create a feeder line out of the existing trolley line to downtown Portland. (Mros, undated)

TPAC recommendation on Comment 171: The South/North Study will consider this and other connections to the planned LRT line.

172. Comment: South/North light rail should stay on east side of the river. One transfer to cross river on west side line is not unreasonable. (Whitcomb, 3/30/96)

TPAC recommendation on Comment 172: Specific alignment issues are being considered as part of the South/North LRT Study.

173. Comment: Locating the S/N light rail on the transit mall would destroy much of the mall's benefit to the city. (Wentzien, 3/30/96)

TPAC recommendation on Comment 173: The proposed alignment for the S/N corridor transit study in downtown Portland is on SW 5th and SW 6th Avenues. While other streets were considered during earlier portions of the corridor study, it was determined by the city and downtown coordinating committee that the proposed corridor would support the land use plan for the downtown (which has been in effect for twenty years) and be consistent with development decisions that have been made. The mall recommendation has been endorsed by the South/North Steering Group, JPACT, the Metro Council and the Portland City Council.

174. Comment: Increase MAX speed to downtown Portland to make MAX more competitive with the automobile. (Slichter, 4/1/96)

TPAC Recommendation on Comment 174: Agree. Tri-Met continues efforts to increase the operating speed of MAX both outside of and within downtown through schedule adjustment and the addition of service. The Primary Transit Network (PTN) calls for higher operating speeds on LRT to downtown and to regional

centers. Policy frequencies will be established relative to the type of transit service and the land use served.

175. Comment: Increase frequency of bus service. (Ramette, 3/30/96)

176. Comment: Address personal safety issues of bus system. (Ramette, 3/30/96)

TPAC Recommendation on Comments 175 and 176: The first issue is addressed in the primary and secondary transit networks, which would require higher levels of bus frequencies to serve 2040 growth concept land uses. However, transit funding to meet that service will be a key element of the system component of the RTP. The second issue is already covered in transit goals that address transit safety.

177. Comment: All bus line headways should be more frequent and service should be expanded into late night hours. (Hull, 3/30/96)

TPAC Recommendation on Comment 177: Agree. The RTP calls for more frequent and expanded service throughout the region. The goal is to provide public transportation service to everyone within the urban area. High speed and frequent service is provided as part of the Primary Transit Network. Transit funding to meet that service will be a key element of the system component of the RTP.

178. Comment: What specific plans are there for increasing bus service? (Hull, 3/30/96)

TPAC Recommendation on Comment 178: The RTP defines the hierarchy of transit service to serve the 2040 growth concept land uses. Specific transit frequencies, span of service and operating speeds will be defined during system development. New concepts of rapid bus and frequent bus will be implemented. This type of bus service emulates LRT service in speed, reliability and comfort.

179. Comment: Ensure that real transit options are provided to residents other than those traveling to downtown Portland. For example, consider the inclusion of "transit hoppers," small buses which ferry riders between transit centers or major transfer points, to enhance transit options between such destinations as Lake Oswego, Tigard, Tualatin and Oregon City. (Weaver, 4/12/96)

TPAC Recommendation on Comment 179: Agree. The transit goals and objectives promote transit connections to locations in the region other than downtown. Regional centers, town centers, main streets, neighborhoods, employment centers and industrial areas are included in the transit hierarchy.

180. Comment: Coordinate transit routes, schedules, and operating intervals to ease transfers and decrease waiting time. (Coalition for a Livable Future)

TPAC Recommendation on Comments 180: These issues relate to design of the transit systems and will be discussed as part of the system component of the RTP Update. Detailed scheduling will follow through Tri-Met's Transit Development Plan and annual service plan processes.

181. Comment: Provide a variety of transportation modes and services (e.g., light rail, commuter rail, street car, buses, vans, taxis, water taxis, jitneys, fixed route, on-demand route). (Coalition for a Livable Future)

TPAC Recommendation on Comment 181: The CAC recently adopted a recommendation to revise the transit system goals and objectives to add other transit options, such as commuter rail and inter-city bus service. Development of new transit services, such as water taxis and jitneys, is encouraged as public/private partnerships (See TDM Program Goals and Objectives, Goal 5, Objective 1).

182. Comment: The primary focus of transit goals and objectives should be on increasing ridership and share of regional trips. (AORTA, 3/30/96)

183. Comment: Design transit, bicycle and pedestrian facilities to safely and conveniently accommodate all people, including the very young, elderly, people with disabilities, and people without cars (e.g., wheelchair, stroller, grocery cart space; baggage areas; lighting; security). (Coalition for a Livable Future)

TPAC Recommendation on Comments 182 and 183: The primary focus of the transit goals and objectives is to help the region implement the 2040 growth concept and to meet regional mobility, accessibility, VMT and air quality goals. The goals and objectives provide specific direction on how to serve the 2040 growth concept land uses to achieve these broad goals. Increased transit ridership is the result of providing people an efficient alternative to the auto. Preliminary analysis of the 2040 Growth Concept showed it to be the most efficient alternative to maximize regional transportation and land use objectives. However, a system-wide objective that better frames the importance of increasing the use of alternative modes and serving special access needs is appropriate. TPAC recommends the following revision:

(insert after Objective 3 of System Goal 1, on page 1-9)

4. Objective: Provide more and better transportation choices to destinations throughout the region and serve special access needs for all people, including youth, elderly and disabled.

~~4.~~ 5. Objective: Provide adequate..."

184. Comment: On pages 1-27 and 1-29, Regional Public Transportation System Goals and Objectives section: There is no goal focused on the desire to increase transit patronage over current levels. Recommend the following change:

1. Develop a public transportation system that serves 2040 Growth Concept primary land use components (central city, regional centers, industrial areas, intermodal facilities) with an ~~appropriate~~ level, quality and range of public transportation necessary to substantially increase transit ridership ~~available~~.

(1000 Friends of Oregon and Coalition for A Livable Future, 5/23/96)

185. Comment: Amend page 1-28, Regional Public Transportation System Goals and Objectives section, Goal 2: "Develop a public transportation system to serve the 2040 Growth Concept secondary land use components (station communities, town centers, main streets, corridors) with high quality service necessary to significantly increase transit ridership." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comments 184 and 185: Disagree. Ridership levels are important indicators of system performance and will be developed as part of system design in Chapter 4. The goals and policies in Chapter 1 are designed to serve the 2040 land uses and may focus more on accessibility and mobility rather than boarding rides per hour.

186. Comment: Consider the need to continue making transit less polluting to the regional airshed and to surrounding noise levels. To realize regional transit ridership expectations, it is necessary to replace those images with more friendly ones. Recommend the following changes on page 1-29:

Goal 5 - Continue efforts to maintain public transportation as the safest and most environmentally friendly forms of motorized transportation in the region.

4. Objective: Reduce the amount of air pollutants and noise generated by public transportation vehicles.

(1000 Friends of Oregon and Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 186: Disagree. Goal 5 should remain as written in Chapter 1 with a focus on safety. TPAC does recommend that a new Goal 7 be added to address the environmental issue. The new text should read:

"**Goal 7: Continue efforts to make public transportation an environmentally friendly form of motorized transportation.**"

"1. **Objective:** Continue to reduce the amount of air pollutants and noise generated by public transportation vehicles."

187. Comment: Use innovative transit technologies to provide schedules, routes, efficient transfers, and other service information to improve access to transit, particularly among underserved groups. (Coalition for a Livable Future)

TPAC Recommendation on Comment 187: Agree. Recommend the addition of the following objective to Goal 6 of the transit section on page 1-29:

3. Objective: Explore new technologies to improve the availability of schedule, route, transfer and other service information.

188. Comment: Why is mobility not an important factor as it related to regional public transportation. The frequency and schedule of public transportation to regional activities is important if public transportation is to be encouraged and better utilized to these destinations. (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 188: Mobility is an important factor as it relates the regional transportation system. In reference to the regional public transportation system, the Primary Transit Network (PTN) identified in Chapter 1 of the RTP is defined as a "fast and frequent service," i.e. mobile.

189. Comment: On page 1-27, Regional Public Transportation Goals and Objectives: Does linkage of core service-type to 2040 land use districts alone provide adequate flexibility for service implementation? While the core service may generally be the most appropriate for the specified land uses, other variables should also guide service implementation. Therefore, the identified core service may not be appropriate in all cases. (Washington County, 5/17/96)

TPAC Recommendation on Comment 189: Core service as defined in Chapter 1 represents the policy level of service that someone could expect to see serving a given land use. It represents the most efficient level of service to serve a given land use and to implement the growth concept. This is so people will not have false expectations about the type of transit service that will be available in the future. It

does represent a very broad policy base and reflects a preferred hierarchy of transit service. The system component will identify those instances when the policy network will not work or is not feasible because of other considerations. It is recognized that these other considerations can include funding, alignments, ridership levels, etc.

190. Comment: On page 1-29, Goal 5, recommend changing statement to read "...public transportation safety ~~as the safest forms of motorized transportation in the region.~~" It seems more appropriate to address public transportation safety as an absolute rather than relative to other forms of transportation. (Washington County, 5/17/96)

TPAC Recommendation on Comment 190: Disagree. The goal is to keep public transportation as the safest form of motorized travel in the region, not public transportation safety.

191. Comment: On page 1-29, recommend adding a goal or goals to address system implementation and cost-effectiveness in order to further the proposed Systemwide Goals and Objectives. To some degree, implementation priorities are addressed in the hierarchy matrix laid out in Figure 1.1 on page 1-27. Perhaps this hierarchy and a description of its priorities could be laid out in a system implementation goal objectives statements. (Washington County, 5/17/96)

TPAC Recommendation on Comment 191: Disagree. Chapter 1 provides broad policy goals and objectives. Actual implementation and cost considerations will be developed as part of the system component in Chapter 4. The hierarchy matrix on page 1-27 lays out the policy levels of service based on the primary, secondary and other land use components of the 2040 Growth Concept. As such, it does establish funding priorities that will be used in the design of the preferred, strategic and constrained transit networks.

192. Comment: Transit needs to focus on cross town travel rather than just downtown. If you don't work downtown, the bus is not an option. It takes too long to travel from suburb to suburb. (Parker, 5/23/96)

TPAC Recommendation on Comment 192: Agree somewhat. Cross town travel by transit is important and their is good evidence of a growing demand for this type of travel. However, cross town travel is not the main focus of transit, but rather is seen as an important and necessary supplement to existing and future service in order to fully implement the growth concept. This type of service will focus on travel between regional centers, town centers, employment areas intermodal facilities and neighborhoods.

193. Comment: Recommend change on page 1-24, Primary Transit Network, first paragraph, as follows: "The Primary Transit Network (PTN) is a long range...in the 2040 Growth Concept and ensures competitive travel time between all parts of the region via transit. The PTN consists of ~~four~~ major transit modes (e.g., Light Rail Transit (LRT), commuter rail, Regional Rapid Bus,...etc.) (AORTA, 5/23/96)

TPAC Recommendation on Comment 193: Disagree. This section defines the Primary Transit Network and its relationship to the 2040 growth concept land use components. It is not intended to include specific performance measures such as ridership and travel times. Frequency of service and operating speeds will be included as performance measures to implement the objectives in Chapter 1 for each transit mode. This work is currently under development and will be completed along with the system design element.

194. Comment: Recommend change on page 1-26, Secondary Transit Network, first paragraph, as follows: "The secondary transit network ensures convenient, direct local transit access between residential, commercial and employment areas and the nearest Regional Center. It includes streetcar transit~~, is comprised of~~ secondary bus,...and park-and-ride service." It is important focus first on what we want the secondary network to accomplish and then describe some of the tools, technologies or vehicles that are available to meet these needs. (AORTA, 5/23/96)

TPAC Recommendation on Comment 194: Disagree. A regional center is not necessarily a destination for the secondary transit components. As stated under the definition on page 1-26, secondary bus service generally is designed to serve travel with one-trip end occurring within a 2040 secondary land use component such as employment center, town center, main street or corridor.

195. Comment: Recommend change on page 1-26, Other Transit Options, first paragraph, as follows: "Other transit options ~~may become economically feasible~~ should be utilized for ~~serving certain destinations in the metropolitan areas~~ connecting the region to other urban centers outside of the region. These ~~include commuter rail along existing heavy rail lines,~~ passenger rail connecting the region to other urban areas, and inter-city bus service that provide statewide access to the region's rail and air terminals." (AORTA, 5/23/96)

TPAC Recommendation on Comment 195: Reference to commuter and passenger rail has been included under "Other Transit Options" in Chapter 1 of the RTP. As addressed in other comments, a lot of questions need to be researched and answered before the use of commuter rail can be made a regional policy. The RTP promotes further investigation and use of commuter rail where it is shown to be economically feasible.

196. Comment: Commuter rail should be included in the PTN. Metro policy already supports continued improvements in the Cascadia Rail Passenger Corridor and its success and those of inter-city bus improvements will make important contributions to the success of the region's growth and transportation concepts. (AORTA, 5/23/96)

TPAC Recommendation on Comment 196: Commuter rail has been included under "Other Transit Options" in Chapter 1 of the RTP. A lot of questions need to be researched and answered before the use of commuter rail can be made a regional policy. The RTP promotes further investigation and use of commuter rail where it is shown to be economically feasible.

197. Comment: Request a more complete definition of "high-level" passenger amenities as described on page 1-25 under light rail transit. Wouldn't rest facilities, shelters and street vendors be more in line with the notion of "high-level"? (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 197: Agree. Change third sentence to read: "A high level of passenger amenities are provided at transit stations and station communities including schedule information, ticket machines, lighting, benches, shelters, bicycle parking and commercial services.

198. Comment: Define existing or proposed "high-frequency" Regional Rapid Bus on page 1-25. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 198: This service would be designed to operate with 10 - 15 minute service peak and off-peak. This information will be included in Chapter 4 as part of the system design component.

199. Comment: Define and give examples of "high frequency local service" and "transit preferential treatments" under Frequent Bus section on page 1-25. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 199: These parameters are being developed and will be included in Chapter 4 as part of the system design component. Examples of "transit preferential treatments" are described on page 1-25 in the paragraph dealing with Frequent Bus.

200. Comment: Clearly define the differences between transit modes and establish goals for each mode (i.e. LRT is a different travel mode from buses). (TVEDC, 5/23/96)

TPAC Recommendation on Comment 200: Transit mode refers to the hierarchy of transit service types including Light Rail Transit (LRT), Regional Rapid Bus, Frequent Bus, Primary Bus, Secondary Bus, Mini-bus, etc. Each mode will serve various 2040 growth concept land use components and will operate with different frequencies and operating speeds. The operational aspects of each mode will be designed as part of the system development component and will be geared to achieve specific transit goals in Chapter 1.

Regional Freight System

201. Comment: Consider revising Goal 1, Objective 1, Regional Freight System Goals and Objectives on page 1-30 to read: "Include the movement of freight when conducting multimodal transportation studies, when appropriate." Multimodal transportation studies may occur in residential areas, for example, the City's current Lake Road Area Multimodal Connections Plan, where freight routes do not exist. Therefore, freight movements may not be appropriate to be included in all multimodal studies. (City of Milwaukie, 4/19/96)

    TPAC Recommendation on Comment 201: Agree. However, recommend the following wording "Consider the movement of freight when conducting multimodal transportation studies, as identified in the RTP or local TSPs." The objective would only apply when a system-level study includes designated freight, mainlines, connectors or terminals or impacts a freight generation area. Those components will be updated during the system component of the RTP update and should be considered in local TSPs.

202. Comment: Define what "high quality access" means in Goal 2, Objective 1 on page 1-30: "Provide high-quality access between freight transportation corridors and the region's intermodal facilities and industrial sanctuaries." (City of Milwaukie, 4/19/96)

    TPAC Recommendation on Comment 202: Disagree. The principle of promoting "high quality" access is appropriate. This statement is simply a guide to development of the freight system. The IMS, when complete, will define "high quality" access based on identified performance measures and standards.

203. Comment: Define what "flexible public funding" means in Goal 3, Objective 3 on page 1-31: "Encourage efforts to provide flexible public funding for freight mobility investments." (City of Milwaukie, 4/19/96)

    TPAC Recommendation on Comment 203: "Flexible public funding" attempts to recognize that the best public investment in the freight system may not always

result in traditional road projects. For example, separated rail crossings may benefit both truck and rail. However, funding flexibility cannot be changed with the RTP. A full discussion as to the benefits of such flexible funding will occur during the system component of the RTP update.

204. Comment: There appear to be multiple unrelated objectives in Goal 1, Objective 4 on page 1-30. Implementation of TSM improvements to enhance efficiency of the existing infrastructure is redundant with Regional Street System Management Goal 1 on pages 1-18 and 1-19. The remainder of this objective implies that freight mobility should be given priority over all other transportation modes and land use policies. Recommend deleting Goal 1, Objective 4 on page 1-30. Replace, if desired, with an objective encouraging land use policies that promote the preservation of industrial lands. (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 204: Regarding the redundancy of TSM, agree, and recommend striking the first piece of Objective 4, "Implement TSM improvements that enhance the efficiency of the existing infrastructure." However, recommend adding a bullet to Goal 1, Objective 1 on page 1-19 that states:

- Freight Operation (such as weigh-in-motion, automated truck counts, enhanced signal timing on freight connectors)

Regarding the "priority" aspect, recommend retaining first bullet. The intent is that as density increases, public policies should be pro-active in anticipating conflicts. However, TPAC recommends changing second bullet in Goal 1, Objective 4 in Regional Freight System Goals and Objectives to read: "transportation and/or land us policies that reduce accessibility to terminal facilities or reduces the efficiency of the freight system ~~result in lower speeds or less service on the freight network~~." Note: Both terminal accessibility and system efficiency will be defined in the system component of the RTP update by using new IMS freight measures and standards.

205. Comment: On page 1-31, Goal 4, it could be added that one objective of the freight movement system would be to encourage through traffic to utilize interstate highways when possible. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 205: Disagree. Though use of interstate routes by freight traffic may reduce safety conflicts on connector or local routes, freight movement safety issues would remain on the interstate system. Policies proposed in Goal 4 address safety issues on the interstate system.

206. Comment: Reconsider Goal 3, Regional Freight System Goals and Objectives on page 1-31. Consider policy that dedicates some investments to the exclusive use of

freight or provide preferential treatment to freight a particular congestion "choke points" that would allow freight to move more freely through intersections that are frequently clogged with automobile traffic. Recommend addition of another bullet under Goal 3, Objective 4:

- Where appropriate, consider improvements that are dedicated to freight travel only.

(1000 Friends of Oregon and Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 206: Agree, however recommend including this new policy regarding improvements dedicated to freight travel only in Goal 1 as another technique to provide efficient, cost-effective and safe movement of freight.

207. Comment: On page 1-31, Regional Freight section, Goal 3, delete Objective 3: "3. ~~Objective: Encourage efforts to provide flexible public funding for freight mobility investments.~~" See recommendation for new Objective 6, Systemwide Goal 2 calling for flexible funding for all modes. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 207: Disagree. As currently written, the objective is intended to encourage flexibility in funding through public and private partnerships in addition to flexible funding between modes.

Regional Bicycle System

208. Comment: Revise title on page 1-32 to read: "Regional ~~Bicycle~~ Bikeways System." (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 208: Disagree. See TPAC recommendation for Comment 25 of this exhibit.

209. Comment: Revise Goal 4, Objective 4 on page 1-33 to read: "Identify and improve high-frequency...accident locations, as appropriate. (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 209: Disagree. All high frequency accident locations should identified and improved. Recommend further elaboration of this language in Chapter 4 of the RTP during the system component update.

Add a reference to bikes in the following sections:

210. Comment: Page 1-12, second bullet, "*Boulevards* that serve major...and emphasize transit, bicycle and pedestrian travel..." (Bicycle Transportation Alliance, 4/29/96)

211. Comment: Page 1-12, third bullet, "*Streets* that serve transit corridors...and provide easy pedestrian, bicycle and transit travel." (Bicycle Transportation Alliance, 4/29/96)

212. Page 1-13, "Boulevards are designed with special amenities that promote pedestrian, bicycle and transit travel..." (Bicycle Transportation Alliance, 4/29/96)

213. Comment: Page 1-13, "As such, these facilities may benefit from access management, traffic calming...that reinforce pedestrian, bicycle and transit travel." (Bicycle Transportation Alliance, 4/29/96)

214. Comment: Page 1-14, first sentence under Streets section, "Streets are designed with amenities that promote pedestrian, bicycle and transit travel..." (Bicycle Transportation Alliance, 4/29/96)

TPAC Recommendation on Comments 210-214: Agree. Make revisions as requested. The bicycle is an important component in the region's strategy to provide a multi-modal transportation system. One way the region's quality of life can be maintained is by increased reliance on the bicycle for shorter distance trips.

215. Comment: Page 1-13, under Regional Boulevards, strike language - "These facilities have striped ~~or shared~~ bikeways." (Bicycle Transportation Alliance, 4/29/96)

Shared bikeways are not appropriate on moderate speed, high volume facilities. ODOT design guidelines call for striped bike lanes when ADTs are above 3,000 vehicles per day. Sharing is a possible strategy when facilities are designed for or operated at low speeds (<20 mph). Therefore, strike the reference to shared bikeways unless there are clear guidelines in the RTP as to their proper use.

216. Comment: Page 1-15, under Regional Streets section, strike reference to shared bikeways for reasons stated in Comment 215, above. "These facilities have striped ~~or shared~~ bikeways." (Bicycle Transportation Alliance, 4/29/96)

217. Comment: Page 1-15, under Community Streets section, strike reference to shared bikeways for reasons stated in Comment 215, above. "These facilities have striped ~~or shared~~ bikeways." (Bicycle Transportation Alliance, 4/29/96)

TPAC Recommendation on Comments 215-217: Agree that bikeway design guidelines in the RTP should be more clear. Bikeway design, along with regional

street design, will be discussed in more specific detail in Chapter 4 in the RTP. On moderate speed, high volume facilities, bike lanes are preferred, but wide outside lanes may be the appropriate design treatment under certain conditions on some retrofit projects. Appropriate design guidelines from both the Oregon Bicycle and Pedestrian Plan and the City of Portland Bicycle Master Plan that may be incorporated into Chapter 4 of the RTP are described below.

Oregon Bicycle and Pedestrian Plan planning principles (pages 52 and 53) state that bike lanes are the appropriate urban bikeway design for arterials and major collectors. The Plan further states that on retrofit projects, where it is not physically possible to provide bike lanes due to constraints such as existing buildings or environmentally sensitive areas, a wide outside lane may be substituted.

The City of Portland Bicycle Master Plan (page A2) states that wide outside lanes may be provided on neighborhood collector and higher classifications where it is not possible to eliminate motor vehicle lanes or reduce lane widths, where topographical constraints exist, or where parking is essential to serve adjacent land uses or to improve the character of the pedestrian environment. Also, construction of a parallel bikeway within one-quarter mile is an acceptable alternative where the above constraints exist, as long as the parallel bikeway provides an equally convenient route to local destinations.

Recommend changing the wording on pages 1-13, under Regional Boulevards, and 1-15, under Regional Streets and Community Streets, to read:

> "These facilities have ~~striped~~ bike lanes, or wide outside lanes where bike lanes are not physically possible, or are shared roadways ~~bikeways~~ where motor vehicle speeds are low.

218. Comment: Add more bike lanes on bridges. (Stern, 3/30/96)

TPAC Recommendation on Comment 218: Agree. River crossings without appropriate bicycle facilities are a barrier to bicyclists. This issue relates to design of the bicycle systems and will be discussed as part of the system component of the RTP Update.

219. Comment: Mixing motorized and non-motorized vehicles will not work. Consider designating bike zones in areas where this mode would work and seems to be prevalent. Also consider dedicated bike streets, dedicated bike hours and enforcement of traffic rules. (Moss, 3/21/96)

~~TPAC~~ MPAC and JPACT **Recommendation on Comment 219:** Disagree. Bicycles are legally classified as vehicles and are ridden on most public roads in Oregon, with the exception of some freeways in the Portland metropolitan area. A key purpose of the RTP is to provide a larger range of multi-modal choices. Also, because not all bicyclists are alike, it is important that the regional bikeway network be flexible to user preference and experience. ~~To better separate modes,~~ tThe regional bikeway network includes a number of design treatments, including striped bike lanes, bicycle boulevards ~~and wide outside lanes. S~~separate bicycle/pedestrian paths (multi-use paths) that provide varying degrees of separation from motor vehicles. A bike lane is a portion of the roadway designated for preferential or exclusive use by bicyclists. Bicycle boulevards function to an extent as a bike zone by using traffic calming measures to create a through street for bicyclists while maintaining local access for automobiles. Multi-use paths constitute a layer of the regional bikeway network that is physically separated from motor vehicles and dedicated to bicycle and other non-motorized uses. However, ~~they~~ multi-use paths are rarely completely separate because of the need to cross intersections and driveways. ~~Dedicated bicycle streets and bicycle hours would limit accessibility.~~

In response to the idea of dedicated bike hours, the recent Bridge Pedal event allowed dedicated bike hours on many of the Willamette River bridges. The event was very successful for recreational bicycling. Dedicated bike hours or dedicated lanes on streets or bridges for utilitarian bike trip purposes is an interesting concept that could be further studied in the RTP system component update. Also, preserving older bridges, such as the Sellwood Bridge, for potential exclusive bike/pedestrian use, could be further studied in conjunction with other crossing improvements.

Agree that traffic rules should be enforced, both for motorized and non-motorized modes.

220. Comment: An increase in bike trips should not be promoted because: there is no incentive for bicyclists to obey the law, bicyclists do not have fiscal liability when they cause accidents, bicyclists do not pay for their use and upkeep of bikeways, roads or streets, bicycles are not useful when shopping, many disabilities and infirmities cannot be accommodated on a bicycle, bicycles are dangerous in rainy weather or at night, bicycles do not accommodate taking friends out or wearing certain apparel and bicycles cause congestion because they cannot keep up with the speed of traffic. (Tamura, 3/21/96)

TPAC Recommendation on Comment 220: Disagree. Bicycles have been shown to be a viable alternative the automobile and can capture a significant number of trips in certain areas or corridors. Bicycles are legally classified as vehicles and bicyclists

have a responsibility to obey traffic rules. Traffic rules should be enforced for bicyclists, pedestrians and motorists. Many bicyclists own cars, and pay the same fees and gas taxes of other motorists. Bicycles can be and are used for some shopping trips. There are existing examples of bicycles designed to accommodate people with disabilities. Implementation of bicycle safety, enforcement and encouragement goals and objectives in RTP Chapter 1 will provide information on bicycling in the rain and at night. The regional bikeway network includes design treatments such as bike lanes and multi-use paths which do not require the bicyclist to keep up with the speed of traffic.

221. Comment: Encouraging bicyclists and motorists to share the road safely may be hazardous to bicyclists' health as well as joggers and walkers because of the noise and air pollution created by motor vehicles. (Saunders, 4/8/96)

TPAC Recommendation on Comment 221: From a technical standpoint, general traffic noise does not pose a health hazard for bicyclists, pedestrians or joggers. Traffic noise is below federal standards and localized carbon monoxide violations have been eliminated in the Metro region. The latter is due to cleaner cars and the fact that people are choosing to bike, walk, carpool and use public transportation.

222. Comment: Complete well-developed networks of bicycle ways connecting all parts of communities and the region. (Coalition for a Livable Future)

TPAC Recommendation on Comment 222: Agree. The RTP system component will focus on bicycle and pedestrian connections of regional interest. Local TSPs will include the regional systems as well as bicycle and pedestrian connections to local destinations, such as grade schools and parks.

223. Comment: Provide bicycle access to all schools. (Coalition for a Livable Future)

TPAC Recommendation on Comment 223: The RTP focuses on bicycle and pedestrian connections of regional interest. Local TSPs will include the regional systems as well as bicycle and pedestrian connections to local destinations, such as grade schools and parks.

224. Comment: Safety should be considered above all else as increased bicycle trips are encouraged, even if it means installing low barriers similar to (but higher than) those installed along the south side of Farmington Road in Aloha. Bikes and autos should be separated for safety. (Kinzle, 3/24/96)

TPAC Recommendation on Comment 224: Agree that safety is important, along with encouraging more bicycle trips and providing a continuous bikeway network.

Disagree that bikes and autos should be separated, because complete separation is not feasible. The regional bikeway network includes a mix of shared roadways on streets with low speeds or low traffic volumes, bike lanes that designate a portion of the roadway for preferential use by bicyclists, and multi-use paths that are separated from motor vehicle traffic by an open space or barrier. Multi-use paths are also used by pedestrians, joggers and skaters. Multi-use paths are only completely separate for short distances because of the need to cross intersections and driveways.

The example of low barriers (also known as extruded curbs) along the south side of Farmington Road in the Aloha area has proven to be a poor design practice, because either the motor vehicle or the bicycle may hit the curb and lose control, with the motor vehicle crossing onto the bikeway or the cyclist falling onto the roadway. Rumble strips to alert motorists when they are wandering off the travel lane are an alternative to extruded curbs. Another design concept is raised bike lanes, which incorporate the convenience of riding on the street with the psychological separation of a barrier.

225. Comment: On page 1-32, Goal 1, one objective could be added that would provide for connectivity between major activity centers. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 225: Disagree. Goal 2, Objective 1 addresses connectivity between activity centers as identified in the 2040 Growth Concept.

226. Comment: On page 1-32, Goal 2, one objective could be to encourage and facilitate the use of bicycles as a viable and practical commute mode. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 226: Disagree. Goal 2, Objective 2, "Promote increased bicycle use for all travel purposes," addresses this comment.

227. Comment: On page 1-33, Goal 4, add an objective that all bicycle lanes and bicycle routes be appropriately signed and marked so as to give the bicyclist a sense of comfort when using these facilities. (City of West Linn, 5/17/96)

TPAC Recommendation on Comment 227: Disagree. Goal 3, Objective 2, "Ensure that jurisdictions implement bikeways in accordance with established design standards," addresses this comment.

228. Comment: On page 1-32, Goal 4, Objective 3, recommend an absolute reduction of accidents should not be the desired outcome. The number of accidents might be normalized (e.g., accidents per mile, per trip, etc.) to achieve relative improvement. (Washington County, 5/17/96)

TPAC Recommendation on Comment 228: Agree. At the May 7th CAC meeting, this objective was edited to read: "Reduce the rate ~~number~~ of bicycle accidents in the region.

229. Comment: There should be bicycle taxes for bicycle uses, bicyclists should be required to be licensed and insured and there should be enforcement of bicyclists who do not follow traffic rules. (Parker, 5/23/96)

TPAC Recommendation on Comment 229: Disagree. Chapter 1 of the RTP is not the appropriate forum for assessing fees. This issue may be included as part of the next phase of the RTP update, when system finance is addressed.

230. Comment: Bike routes should be placed on parallel streets not arterials. (Parker, 5/23/96)

TPAC Recommendation on Comment 230: Disagree. Bicycles are legally classified as vehicles and are ridden on most public roads in Oregon, with the exception of some freeways in the Portland metropolitan area. Routing bicyclists away from arterial streets will be addressed in the regional street design study.

231. Comment: Recommend further consideration of the potential conflict between requiring bike lanes and diminishing the pedestrian environment. Required bike lanes either necessitate street widening or the elimination of on-street parking, which are inconsistent in many locations with the need to preserve on-street parking or maintain narrow streets to foster a safe, convenient and pleasant pedestrian environment. (Whitlow, 5/23/96)

TPAC Recommendation on Comment 231: Agree. Further consideration of bikeway design, along with regional street design, will be discussed in more specific detail in Chapter 4. Balancing bicycle mode needs with pedestrian and on-street parking needs will be a challenging task.

232. Comment: Add an Objective 5 to Goal 2 of the Regional Bicycle System on page 1-32:
5. Objective: Encourage mass transit authority to ensure adequate bicycle carrying capacity on all bus and LRT routes and during all hours of operation.

(City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 232: Disagree. This change is not necessary, because work is currently in progress at Tri-Met to expand bike-on-transit carrying

capacity. The addition of Westside MAX will add more light rail vehicles to the system. As peak-hour over-crowding diminishes, the peak direction restriction on carrying bikes may be reduced. Current carrying capacity on all buses is two bikes during all hours of operation. With new low-floor buses it may be possible to allow bikes inside the bus. Also, Tri-Met is upgrading to a "sports work" bike rack on buses that is simpler to use.

Regional Pedestrian Program

233. Comment: In reference to the title, "Regional Pedestrian Program," on page 1-33: Request clarification on why is this a program and not a plan or a system? (City of Milwaukie, 4/19/96)

234. Comment: Recommend changing "Pedestrian ~~Program~~" to "Pedestrian System." The pedestrian network is a system, not just a program to be applied in selected places. (Willamette Pedestrian Coalition, 5/23/96)

    TPAC Recommendation on Comments 233 and 234: Agree. Revise to read "Pedestrian ~~Program~~ System".

235. Comment: Replace ~~pedestrian~~ with walkway in first sentence of first paragraph and last sentence of second paragraph on Page 1-33. See adopted Oregon Bicycle and Pedestrian Plan for terminology. (City of Milwaukie, 4/19/96)

    TPAC Recommendation on Comment 235: Disagree. The pedestrian system is comprised of more than just walkways. The pedestrian system also includes such amenities as street lighting, curb extensions, benches, landscaping and street crossings.

236. Comment: Revise Goal 1, Objective 2 on page 1-34 to read: "Improve ~~pedestrian~~ walkway networks serving those transit centers, stations and stops with high frequency transit service." (City of Milwaukie, 4/19/96)

    TPAC Recommendation on Comment 236: Agree. Make revisions as requested.

237. Comment: On page 1-34, Pedestrian Program section, Goal 1, Objective 2: "Improve pedestrian networks serving ~~those~~ transit centers, stations and stops ~~with high frequency transit service~~." (Coalition for A Livable Future, 5/23/96)

238. Comment: Amend page 1-34, Regional Pedestrian Program section, Goal 2, Objective 1: "Complete pedestrian facilities ... and to the region's ~~primary~~ transit network." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comments 237 and 238: Agree. Make revisions as requested.

239. Comment: Build new pedestrian and bicycle bridge north of Broadway Bridge. (Lent, 3/30/96)

TPAC Recommendation on Comment 239: A county-sponsored bridge study recommended improving existing bridges. The system component phase of the RTP update will evaluate other system gaps.

240. Comment: Beeping pedestrian signals are needed at intersections to allow the blind to cross the street safely. (Edwards, 3/21/96)

TPAC Recommendation on Comment 240: This sort of specialized crossing equipment is best implemented at the local level as they usually apply to special local situations. This comment will be forwarded to the local jurisdictions.

241. Comment: Curbs need to be fixed so people in wheelchairs can get around. (Edwards, 3/21/96)

TPAC Recommendation on Comment 241: Agree. The need for installation of curb ramps is identified in Goal 2, Objective 1 of the Pedestrian element. Also, Goal 4 of the transit policies addresses accessibility for the disabled. Curb ramps are appropriate in every sidewalk design and a significant region-wide need exists to retrofit existing sidewalks to this basic standard. For this reason, curb ramps have been identified as a regional issue.

242. Comment: Pedestrians improvements are needed, particularly crosswalks to allow people to access bus stops safely. (Enroth, 3/25/96)

TPAC Recommendation on Comment 242: Agree. Goal 1 of the Pedestrian element identifies this need as well as several sections of the street design concepts.

243. Comment: Complete well-developed networks of pedestrian ways connecting all parts of communities and the region. (Coalition for a Livable Future)

244. Comment: Provide pedestrian access to all schools. (Coalition for a Livable Future)

TPAC Recommendation on Comments 243-244: The RTP focuses on bicycle and pedestrian connections of regional interest. Local TSPs will include the regional

systems as well as bicycle and pedestrian connections to local destinations, such as grade schools and parks.

245. Comment: Recommend moving Goal 4, Regional Pedestrian Program, on page 1-34 to the Motor Vehicle system Goals and Objectives. It should not be incumbent upon the pedestrian program to "encourage motorists, bicyclists and pedestrians to share the road safely." It will be the education of motorists that will have the greatest impact, not only on pedestrian fatalities and injuries, but on making pedestrians feel they can safely step out to cross the road. (Willamette Pedestrian Coalition, 5/23/96)

TPAC Recommendation on Comment 245: Disagree. The concept of "sharing the road" is repeated in most of the modal sections in Chapter 1.

246. Comment: What is the purpose of landscaping and wide planting strips that create a buffer for pedestrians between the curb and the sidewalk? The most pedestrian friendly environment in the region (downtown Portland) does not have these improvements. Why add these costs throughout the region when experience indicates that they are not necessary for creating pedestrian friendly environments? (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 246: The existence of a planting or landscaping strip between the curb and sidewalk greatly enhances the pedestrian environment. For example, the planting strip helps buffer pedestrians from moving traffic, provides space for street trees and other landscaping (to make the street space more aesthetically pleasing), and provides a place to put sign posts, utility and signal poles, etc., where they will not interfere with pedestrian movement. A planting strip also allows sidewalks crossing a driveway to be kept at a constant side slope, making it easier for those in wheelchairs to move down the sidewalk. In built-up commercial areas oriented to the street, such as downtown Portland, the extra width of the sidewalk performs these same functions while allowing for unobstructed pedestrian movement. Transit stops and station platforms and commercial streets with on-street parking also need hard surfaced areas at the curb where people will be entering and exiting transit vehicles and automobiles. ODOT's *1995 Bicycle and Pedestrian Plan* encourages the use of planting strips in street design and contains more information on their benefits and suggested design.

247. Comment: Assumptions that underlie the demand for bicycle and pedestrian infrastructure should be clarified. For example, is there data to support the assumption that if the region builds infrastructure, usage will increase significantly. (TVEDC, 5/23/96)

TPAC Recommendation on Comment 247: Agree. TPAC has recommended new language which clarifies the assumptions underlying the demand and need for bicycle infrastructure on a regional basis. The new language includes a recognition that additional research is needed to determine (1) how bicycle travel can help implement the 2040 growth concept and (2) which aspects of the bicycle system are regional in nature. (See TPAC recommendation on Comment 24.)

248. Comment: How do we get from bike/pedestrian mode levels of today to what is envisioned? (TVEDC, 5/23/96)

TPAC Recommendation on Comment 248: The regional bicycle and pedestrian systems are an important component in the region's strategy to provide a multi-modal transportation system. The implementation of the regional bicycle and pedestrian plan elements of the RTP will provide for consistently designed, safe and convenient routes for bicycle and pedestrian travel throughout the region, and will encourage motorists, pedestrians and bicyclists to share the road safely. However, while Chapter 1 sets a vision for how the bicycle system will function, it does not set specific "targets" for mode shares. These targets will be developed as part of the system component of the RTP.

Transportation Demand Management (TDM) Program

249. Revise Goal 1, Objective 2 on page 1-36 to read: "Develop and encourage local access to Tri-Met's regional carpool matching database." (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 249: Agree. Make revision as requested.

250. Revise Goal 4, Objective 2 on page 1-37 to read: "Provide TDM materials that outline available regional programs and services to the public and to all local jurisdictions in the region." (City of Milwaukie, 4/19/96)

TPAC Recommendation on Comment 250: Agree. Make revision as requested, except eliminate the word "all." Some local jurisdictions will be the providers of this information, not just Metro and Tri-Met.

251. Comment: If ATMS involves congestion pricing, carefully study the impact of such a program on low-income individuals and families who may be severely impacted. (Weaver, 4/12/96)

TPAC Recommendation on Comment 251: ATMS does not involve congestion pricing. However, over the next two years, Metro will conduct a two-phase pre-

project congestion pricing study, which may include strategies, including a demonstration project, for adoption in the RTP. The overall goals of the pre-project study are to: (1) develop a process for gaining public and political understanding of congestion pricing; (2) provide for a comprehensive evaluation of congestion pricing alternatives to determine costs and benefits; and (3) design appropriate measures to mitigate any unintended socioeconomic and/or environmental impacts that arise, including negative impacts on neighborhoods and businesses, and economic impacts on lower income drivers.

252. Comment: Congestion pricing should be implemented. (Klotz, 3/30/96)

TPAC Recommendation on Comment 252: Although congestion pricing has been recommended by transportation economists for many years, it has not been used extensively enough on public roads anywhere in the world to answer questions as to its technical and political feasibility for reducing congestion. As noted, Metro will conduct a two-year pre-project congestion pricing study to help answer these important questions.

253. Comment: Toll roads and other user fees should go toward all impact costs, current and future, of operating a motor vehicle. (Duell, 3/21/96)

254. Comment: The only place that should be able to charge a toll would be downtown. The charge should be based on the number tires on a vehicle. (Parker, 5/23/96)

TPAC Recommendation on Comment 253 and 254: The concept of charging drivers their true cost of driving will be studied in conjunction with Metro's two-year pre-project study of congestion pricing. This study will identify how and where charges should be used if it is determined they are feasible in the Portland region. (See Comments 186 and 187.)

255. Comment: Increase tax on gasoline to discourage driving and encourage use of public transportation. (Uchiyama, 3/30/96)

TPAC Recommendation on Comment 255: Past Metro analyses of price elasticity of gasoline have estimated that the gas tax would have to be raised by approximately $4 to significantly discourage driving (a reduction of approximately 12%). The region is more inclined to first examine congestion pricing together with improvements to and incentives for use of alternative modes.

256. Comment: The Regional Transportation Plan includes nothing about economics and who should pay for changes. System development and permit charges for buildings

should cover the net costs of their construction and future use, including traffic and pollution generated and the need for more schools. (Duell, 3/21/96)

TPAC Recommendation on Comment 256: All reference to financial impacts and cost of the transportation system will be included in Chapter 7 of the RTP as part of the system component of the RTP update. Metro's intent is to have that discussion with the public and decision-makers.

257. Comment: Discourage subsidies that favor auto over other forms of transportation (e.g., parking allowances without equivalent subsidies for transit, walking, bicycling). (Coalition for a Livable Future)

TPAC Recommendation on Comment 257: The CAC discussed the issue of automobile subsidies and recommended the following language in Goal 2, Objective 2 of the TDM Program Goals and Objectives: "Support efforts to provide maximum allowable tax benefits and subsidies to users of alternative modes of transportation."

258. Comment: Provide incentives for development and use of innovative materials - and energy efficient transportation systems (e.g., alternative fuels and electric buses and fleets, energy efficient and light weight vehicles). (Coalition for a Livable Future)

TPAC Recommendation on Comment 258: Agree. During the system component of the RTP Update process, the TDM Program will identify options and strategies for increased use of alternative fuel and energy efficient vehicles.

259. Comment: On page 1-36, Goal 3: Providing incentives to help achieve 2040 goals is a good idea. However, it seems appropriate to focus mostly on transportation-related incentives in the RTP. Things like density bonuses and design guidelines might be better placed in the RFP. (Washington County, 5/17/96)

TPAC Recommendation on Comment 259: Disagree. This particular goal and three objectives were discussed at lengths by the TDM subcommittee. The subcommittee agreed that it is important to include incentives that will help change travel behavior and that help implement the 2040 growth concept and comply with specific elements of the Transportation Planning Rule. The TDM element of Chapter 1 seemed to be an appropriate place to include some design incentives to promote more compact development, reduce trip lengths and promote alternative modes.

260. Comment: On page 1-37, Goal 3, Objective 2: Replace "...reduce the average..." with "...provide lower than average..." (Washington County, 5/17/96)

TPAC Recommendation on Comment 260: Agree. Make revisions as requested.

261. Comment: Reminder that LCD will later this year re-evaluate the continued utilization of VMTs as a standard in achieving reduced reliance on the automobile and the TPR requirements for a reduction in the number of parking spaces per capita. Related Chapter 1 policy should be weighed accordingly. (Whitlow, 5/23/96)

TPAC Recommendation on Comment 261: Agree. Polices have been written in a broad sense to be flexible if changes like this occur.

262. Comment: Amend page 1-35, Demand Management Program section, last paragraph, first sentence: "The following describes the region's TDM program goals, and ~~objectives and performance measures~~." (This draft did not include the performance measures.) (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 262: Agree. Delete "and performance measures" from page 1-35. Performance measures will be developed in conjunction with the system design component.

263. Comment: Amend page 1-36, TDM Goals and Objectives, first paragraph: "The function of TDM support programs are to...non-SOV modes, and (4) reduce the need and demand to travel. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 263: Agree. Eliminate the word ~~and~~ just prior to (3) and add a fourth reason to read: and (4) reduce travel demand.

264. Comment: Amend page 1-36, Goal 2, Objective 2: "Support efforts to provide maximum...alternative modes of transportation and to reduce subsidies for auto use. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 264: Disagree. Objective 2 is intended to provide benefits and subsidies as incentives to use alternative modes. Reducing auto subsidies is covered under objective 1 and objective 3.

265. Comment: Amend page 1-36, Goal 2, Objective 3: "Conduct further study of market-based strategies...increase alternative mode shares ~~and to~~ reduce VMT, and encourage more efficient use of resources. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 265: Agree. Change Objective 3 to read: "Conduct further study of market-based strategies such as parking pricing, congestion pricing and parking-cash out as measures to promote more compact land

use development, increase alternative modes shares, reduce VMT and encourage more efficient use of resources.

266. Comment: Amend page 1-36, Goal 2, Objective 4: "Investigate the use of HOV lanes and other traffic management measures to reduce roadway congestion, and to reduce impacts of congestion on transit operations. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 266: Disagree. The objective as written encompasses the same idea. Any time congestion is reduced on roadways, transit benefits because buses use the same roads.

267. Comment: On page 1-36, Goal 2, add new objective 5: 5. Objective: Ensure measures adopted are equitable and incorporate adjustments to ensure all residents can meet their basic transportation needs. (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 267: Disagree. Goal 2 is designed to meet the TPR requirements for VMT and parking per capita reduction goals, not ensure basic transportation needs are met.

268. Comment: Amend page 1-37, Goal 5: "Implement TDM support programs to reduce the need and the demand to travel and to make it more convenient for people to use alternative modes for all trips throughout the region." (Coalition for A Livable Future, 5/23/96)

TPAC Recommendation on Comment 268: Agree. Change Goal 5 to read: "Implement TDM support programs to reduce the need to travel, and to make it more convenient for people to use alternative modes for all trips throughout the region.".

269. Comment: Define the term "parking cash-out" as used in TDM Goal 2, Objective 3 on page 1-36 and explain how the measures described in that objective promote "compact land use." (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 269: "Parking cash-out" refers to a strategy where the market value of a parking space is offered to an employee by the employer. The employee can either spend the money for the parking space, or pocket it and then use an alternative mode to travel to work. Measures such as parking-cash out, congestion pricing and parking pricing provide disincentives for commuting by single-occupant auto and instead, promote travel by alternative modes. In some cases, people may move closer to work to reduce commuting costs,

thus reducing trip length, increasing densities and improving the jobs-housing balance.

270. Comment: Define "HOV" as used in TDM Goal 2, Objective 4, on page 1-36. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 270: The term "HOV" is an acronym for "high occupancy vehicle." It refers to vehicles that are carrying two or more persons. In practice, only vehicles with two or three or more persons would be able to use a designated "HOV" lane to travel.

271. Comment: Explain "density bonus" as used on page 1-37, TDM Goal 3, Objective 1. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 271: As used in Goal 3, Objective 1, "density bonus" refers to allowing developers to build at higher densities than stated in the local zoning code. This more compact development would be promoted in key 2040 land use components such as central city, regional centers, town centers and station communities.

272. Comment: Consider changing the word "telecommute" to "telecommuting" in TDM Goal 5, Objective 5 on page 1-37. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 272: Agree. Make revision as requested.

273. Comment: Amend TDM Goal 6, Objective 1 on page 1-37 to read "Encourage ~~Expand~~ Tri-Met~~'s~~ to expand their public outreach and education program." Metro does not have the jurisdiction to expand Tri-Met's programs. (City of Beaverton, 5/17/96)

TPAC Recommendation on Comment 273: The CAC recommended deleting this objective in their May 23, 1996 CAC Addendum to Chapter 1 revisions because the objective duplicates the public involvement policies already in place. TPAC agrees with their recommendation.

Parking Management Program

274. Comment: A draft Goal section was discussed at April 25 TPAC, with agreement to add an additional goal. Add a goal to the Parking Management section on page 1-38:

Goal 1: Manage and optimize the efficient use of public and commercial parking in the central city, regional centers, town centers and main streets to support 2040/Framework Plan goals and the related goals of this section.
1. Objective: Support local adoption of public parking management plans within the central city, regional centers, town centers and main streets. (City of Gresham, 5/17/96)

TPAC Recommendation on Comment 274: Agree if the word "employment centers" is included in the goal and objective after the word "main streets."

275. Comment: On-street parking should be provided for all collectors and arterials, roads, boulevards and streets. (Klotz, 3/30/96)

TPAC Recommendation on Comment 275: Disagree. While regional parking policies included in Phase I of the Regional Framework Plan support on-street parking in areas planned for increased densities (e.g., regional centers, town centers and main streets), some right-of-way limitations exist where on-street parking cannot be provided. Further, some designs, such as roads are not appropriate for on-street parking. The regional street design map, to be developed as part of the RTP system component, will identify streets most appropriate for on-street parking.

276. Comment: Where do churches fit in with respect to the parking policies currently being developed by Metro? (Funk, 3/22/96)

TPAC Recommendation on Comment 276: Regional parking policies currently being considered in Phase 2 of Metro's Regional Framework Plan will require local governments to meet the following minimum standards with regard to churches in the region:

- require no more than 0.5 parking spaces per spaces/seats in the church;
- establish a parking maximum at ratios no greater than 0.6 parking spaces per spaces/seat in the church located in Zone A and 0.8 parking spaces per spaces/ seat in churches in the rest of the region.

Zone A refers to areas with good pedestrian access to commercial or employment areas (within 1/3 mile walk) from adjacent residential areas. For all areas outside of Zone A, Zone B parking ratios apply.

277. Comment: Parking standards should be designed to provide adequate parking for 80% of the shoppers, rather than 80% of the time. This could be addressed using parking garages. (Linn, 3/30/96)

TPAC Recommendations on Comment 277: Parking standards for retail are currently designed to accommodate 85 percent of the shoppers plus an additional 5 to 10 percent. The draft framework plan's parking ratios are designed to eliminate the peak period parking demand excess. Regional parking policies included in Phase I of the draft framework plan support the idea of parking garages/structures where economically feasible. Less land is consumed for a given amount of parking. Parking policies that promote more compact development such as shared parking and preferential parking are being promoted in the RTP.

278. Comment: Less parking is needed in areas served by Tri-met. (Edwards, 3/21/96)

TPAC Recommendation on Comment 278: Agree. The regional parking policy included in Phase I of the Regional Framework Plan states, "In areas where transit is provided or other non-auto modes (walking, biking) are convenient, less parking can be provided and still allow accessibility and mobility for all modes, including autos."

279. Comment: Recommend an inverse price structure for parking in Fareless Square. (Parker, 5/23/96)

TPAC Recommendation on Comment 279: Disagree. The current price structure for downtown has been a positive force in shaping travel demand to the downtown and for increasing the use of alternative modes and transit. Reduced parking fees would tend to lessen transit ridership and just promote more auto travel. This is not what we want.

Land Use Issues

280. Comment: Require commercial/retail/office buildings, etc. to have lush landscaping. (Clark, 4/3/96).

TPAC Recommendation on Comment 280: Landscape requirements are addressed in local zoning codes.

281. Comment: Do not restrict superstores in industrial areas, rather put them in the most efficient location. (Linn, 3/30/96)

TPAC Recommendation on Comment 281: The issue of retail superstores will be addressed in local comprehensive plans and zoning maps, which will be updated over the next few years to meet consistency requirements with Metro's framework plan when adopted. The draft Urban Growth Management Functional Plan

prohibits "big box" retail in industrial areas and allows local jurisdictions to identify employment areas that are not appropriate for this type of retail. These policies reflect the need to (1) preserve industrial land for industrial uses, (2) direct commercial activity to regional and town centers, and (3) reduce vehicle miles traveled by locating shopping opportunities closer to where people live.

Local Issues

282. Comment: Unimproved side streets in SE Portland need attention. (Frimoth, 4/6/96)

TPAC Recommendation on Comment 282: This issue is within the jurisdiction of the City of Portland, and will be referred to them for their consideration.

283. Comment: Schools should be located near green space areas so they can share parking facilities. (Hocker, 4/4/96)

TPAC Recommendation on Comment 283: This issue is within the jurisdiction of the City of Tigard, and will be referred to them for their consideration.

Other Issues To Be Address in the System Component of RTP Update

284. Comment: No Sunrise Corridor. (Lent, 3/30/96)

TPAC Recommendation on Comment 284: Proposed projects will be addressed during the System Component phase of the Regional Transportation Plan update.

285. Comment: Consider plans for improving the location of rural roads in the Tualatin Valley. (Hostetter, 4/4/96)

TPAC Recommendation on Comment 285: The regional policy in rural reserves is to protect rural activities by mitigating the impacts of adjacent urban activities, including discouraging urban traffic on rural roads. This comment will be addressed during the System Component phase of the Regional Transportation Plan update.

286. Comment: Consider planning for the location of a future four or six-lane highway connecting Tigard and Sherwood to Hillsboro and the Sunset Highway. (Hostetter, 4/4/96)

TPAC Recommendation on Comment 286: The Western Bypass Study concluded that a four-lane express type facility is warranted between Tualatin and Sherwood, along with other arterial improvements in south-central Washington County. The study also recognized the need for an additional lane in each direction on Highway 217. A new road from Sherwood to Hillsboro was not recommended.

287. Comment: Without major freeway improvements to Highway 217, I-5/217 Interchange and the western bypass, well connected roads and a funded transit system, Washington County cannot accommodate the population growth projected by Metro. (Johnson, 4/4/96)

TPAC Recommendation on Comment 287: This comment will be addressed during the System Component phase of the Regional Transportation Plan update.

288. Comment: Never widen roads or build new freeways. New capacity must only be offered through public transit. New development needs to minimize paved auto access routes. (Cole, 3/30/96)

TPAC Recommendation on Comment 288: This comment will be addressed during the System Component phase of the Regional Transportation Plan update.

289. Comment: Close the Sellwood and Hawthorne Bridges to vehicles (just for pedestrians and bicycles) and build new vehicle bridges. (Lent, 3/30/96)

TPAC Recommendation on Comment 289: This comment will be addressed during the System Component phase of the Regional Transportation Plan update.

290. Comment: Alternate (parallel) route on Wiegnot instead of Sandy from 99th to 115th in the Parkrose district. (Paproke, 4/1/96)

TPAC Recommendation on Comment 290: This comment will be addressed during the System Component phase of the Regional Transportation Plan update.

291. Comment: Use public transportation investments to leverage private sector investments that support the Region 2040 urban growth concept. (Coalition for a Livable Future)

292. Comment: Encourage cooperative partnerships among transportation agencies, community organizations, and businesses to take advantage of the economic development potential in transportation investments. (Coalition for a Livable Future)

TPAC Recommendation on Comments 291 and 292: The vision statement on page 1-2 states this intent. Implementation of this intent will be addressed during the system component of the RTP Update process.

293. Comment: Make transportation funding flexible and available to all transportation modes. (Coalition for a Livable Future)

TPAC Recommendation on Comment 293: State funding issues are being addressed in conjunction with the Governor's Transportation Initiative. Other funding issues will be addressed during the system component of the RTP Update process.

294. Comment: Evaluate all transportation investments based on full life cycle costs and benefits, including lifetime maintenance, repairs, and operations; and social, cultural, community health, and environmental impacts. (Coalition for a Livable Future)

295. Comment: Develop project selection criteria to ensure that the transportation projects which are funded answer transportation needs, are cost-effective based on full costs, use resources efficiently and advance the well-being of the communities affected. (Coalition for a Livable Future)

296. Comment: Adopt transportation system performance measures that reflect the full range of transportation goals, and use them to evaluate and improve transportation systems and projects. (Coalition for a Livable Future)

TPAC Recommendation on Comment 294-296: Disagree. Attempting to measure broad policy goals in terms of cost and benefits is beyond the current state-of-the-art. However, the 2040 Growth Concept is an attempt to balance land use and transportation benefits, and serves as the primary policy guide for the RTP. Metro is also working with ODOT on improved cost-benefit calculations and a congestion pricing analysis that will attempt to define the true cost of driving.

297. Comment: Finance road systems with user fees that reflect actual costs, with adjustments to ensure all residents can meet their basic transportation needs. (Coalition for a Livable Future)

TPAC Recommendation on Comment 297: Funding issues will be addressed during the system component of the RTP Update process.

298. Comment: Freight on I-5 should be routed around Portland. It was a mistake to build the interstate through the city, causing interurban traffic to compete with local. (Patterson, 4/11/96)

TPAC Recommendation on Comment 298: Through freight truck traffic is encouraged to use I-205. Discussions with trucking firms indicates that almost all drivers avoid I-5 if they can during rush hours and most try to avoid it at all times of the day. However, I-5 serves as a direct access to much of the region's industrial land and to most marine, rail and intermodal terminals. As a result, it will always carry significant freight volumes.

299. Comment: Recommend light rail either along Barbur Boulevard from Portland or from Lake Oswego, through Tigard along Route 217 to connect with the west-side light rail in Beaverton (or both). (Patterson, 4/11/96)

TPAC Recommendation on Comment 299: A light rail extension connecting downtown Portland with Tigard via Barbur Boulevard or Highway 217 is one of four "potential" long-term extensions under consideration in the current RTP. The phasing of proposed extensions will be addressed in Chapter 4 during the system component phase of the RTP update.

300. Comment: Include motorcycles and mopeds in projects that are more likely to receive funding due to their efficiency (i.e., park-and-ride facilities, parking structures, regional and town centers, corridors and central city plans). (Rayburn-Hieronimus, 5/13/96)

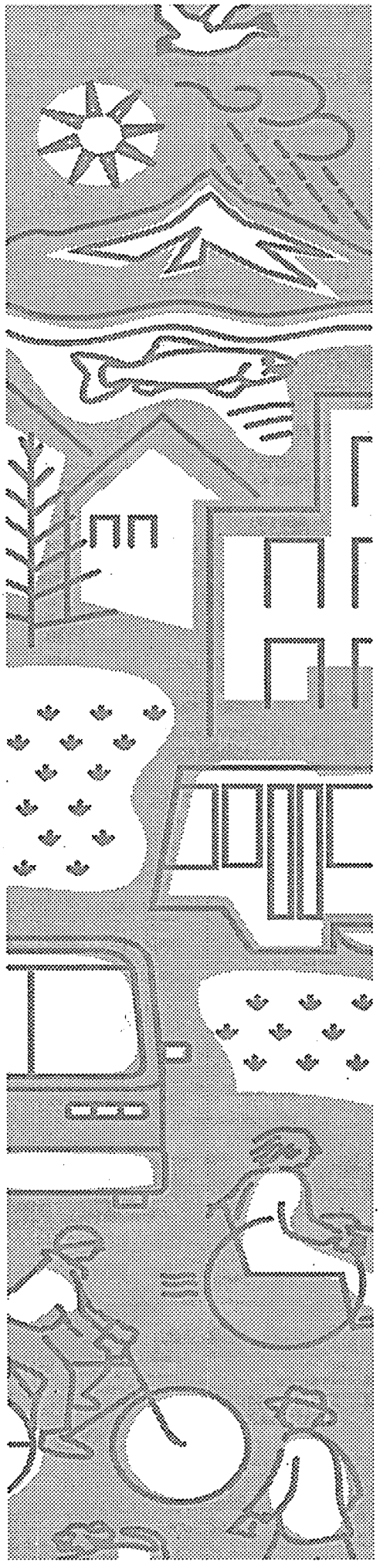
TPAC Recommendation on Comment 300: Funding issues will be addressed during the system component of the RTP update process.

301. Comment: Some bike lane retrofits are too narrow. (Reynolds, 4/1/96)

TPAC Recommendation on Comment 301: As identified in the Oregon Bicycle and Pedestrian Plan, preferred bike lane widths are 5 to 6 feet. Minimum bike lane widths are: 5 feet against a curb or adjacent to a parking lane or 4 feet on uncurbed shoulders or when physical constraints exist. The appropriateness of these standards will be considered as part of the system component of the RTP update.

EXHIBIT D

Engrossed Version of Chapter 1 with Revisions Recommended by Metro Council Transportation Committee



Metro Council Transportation Planning Committee Recommendations:
Engrossed Version
of Chapter 1

Regional Transportation Plan Update

July 16, 1996

(includes amendments recommended by TPAC, MPAC, JPACT and the Metro Council Transportation Planning Committee)

METRO

METRO

Chapter 1 Acronyms

ADA	Americans with Disabilities Act
ATMS	Advanced Traffic Management System
CBD	Central Business District
FHWA	Federal Highway Administration
FTA	Federal Transit Administration (formerly UMTA)
FY	Fiscal Year
HCT	High Capacity Transit
HOV	High-Occupancy Vehicle
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991 (Federal)
JPACT	Joint Policy Advisory Committee on Transportation (Regional)
LCDC	Land Conservation and Development Commission (State)
LRT	Light Rail Transit (MAX)
MCCI	Metro Council for Citizen Involvement
MPAC	Metro Policy Advisory Committee
MPO	Metropolitan Planning Organization (Metro)
MTIP	Metropolitian Transportation Improvement Program
NHS	National Highway System
OAR	Oregon Administrative Rules
ODOT	Oregon Department of Transportation (State)
ORS	Oregon Revised Statutes
R.O.W.	Right of Way
RTP	Regional Transportation Plan (Metro)
RUGGO	Regional Urban Growth Goals and Objectives
SOV	Single-Occupancy Vehicle
TPAC	Transportation Policy Alternatives Committee (Regional)
TPR	Transportation Planning Rule (State)
Tri-Met	Tri-County Metropolitan Transportation District
TSM	Transportation System Management
UGB	Urban Growth Boundary
USDOT	U.S. Department of Transportation
VMT	Vehicle Miles Traveled

METRO

Chapter 1
Regional Transportation Policy
for the Portland Metropolitan Region

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CHAPTER 1

Regional Transportation Policy

A. Context of the Regional Transportation Plan

This Regional Transportation Plan (RTP) is intended to implement the region's 2040 Growth Concept. Included in the Growth Concept are a variety of land use components recognizing the diversity of residential, commercial, industrial, and open space needs that exist within our region. The RTP lays out the policies, systems, and actions to serve those diverse needs.

The RTP reflects the diversity of the 2040 Growth Concept by providing appropriate transportation options to best serve the variety of land use components. For any one land use component, multiple modes are necessary. Higher density regional and town centers need to accommodate a variety of auto, truck, bicycle, transit, and pedestrian users. Industrial areas need good auto, truck, and rail access for freight, while allowing employees and customers to commute by auto, transit, and, in some instances, bicycles. Main streets and station areas are focused on good transit, pedestrian, and bicycle access, but also need to allow for auto access.

The RTP provides a 20-year blue print for transportation decision making. While emphasizing a multi-modal system, the RTP recognizes that the automobile will likely continue to be the primary mode of personal travel over the life of the plan. As such, the RTP includes a number of strategic road investments that attempt to implement the Growth Concept, recognizes additional demand on the system for both people and goods, and reflects the continued use of the automobile for personal and commercial travel.

The RTP also recognizes that significant opportunities exist to reduce reliance on the automobile (particularly the single-occupant use of vehicles) for a number of trip types that will develop as the Growth Concept matures. The RTP, therefore, also emphasizes the need to provide good choices for certain trip types. Even on an occasional basis, the use of alternative modes will help the region maintain its air quality, conserve energy, and minimize pressure on the Urban Growth Boundary. Similarly, the RTP recognizes the need for a multi-modal freight system that includes a balanced system of truck, rail, air, and water routes to best meet the needs of area shippers.

In sum, the RTP provides a diverse set of transportation priorities necessary to implement the diverse and unique attributes embodied in the 2040 Growth Concept.

~~A~~B. Introduction

This chapter presents the overall policy framework for the specific transportation goals, objectives and actions contained in the Regional Transportation Plan (RTP). It also sets a direction for future planning and decision-making by the Metro Council and the implementing agencies, counties and cities. The chapter is organized as follows:

- Transportation Vision Statement and Guiding Principles: This section establishes the basic mission of the plan as a means for implementing the Metro 2040 Growth Concept.

- Urban Form and Land Use: This section describes the individual transportation needs of the 2040 Growth Concept land use components and the relative importance of these components to the region.

- RTP Goals and Objectives: This section describes the policy direction of the plan and establishes in measurable terms how the plan implements the 2040 Growth Concept and what level of accessibility the transportation system is expected to provide.

- Transportation System Design: This section provides objectives regarding the performance and function of each modal element of the transportation system.

Upon completion of the RTP update, the RTP will be evaluated to determine which elements are binding and which are advisory to local governments. Additional language will be added to the RTP to describe these provisions. In the interim, however, the Urban Growth Management Functional Plan (UGMFP) will implement several RTP policies relating to boulevard design, local street connectivity and traffic level of service standards.

~~C~~BC. Regional Vision and Guiding Principles

Implementation of the 2040 Growth Concept requires a departure from traditional transportation planning such that the region must identify key measures of transportation effectiveness which include all modes of transportation. Developing a full array of these measures will require additional analysis. Focusing~~Concentrating~~ development in the ~~high-density~~ most concentrated activity centers, as envisioned in the 2040 Growth Concept, ~~may produce~~ requires the use of alternative modes in order to avoid unacceptable levels of congestion ~~that exceed existing standards, yet signal positive urban development for these areas~~ and to insure that accessibility by alternative modes is attractive. ~~Conversely,~~ tThe continued economic vitality of important industrial areas and intermodal facilities largely depends on preserving or improving access to these areas and maintaining reasonable levels of mobility on the region's main throughways. The unifying theme of the 2040 Growth Concept is to preserve the region's livability while accommodating expected growth -- a principle which calls for transportation planning that is finely tailored to the specific needs of each 2040 Growth Concept land use components.

Transportation Vision Statement

The Regional Transportation Plan seeks to enhance the region's livability through implementation of the 2040 Growth Concept with a transportation system that:

- anticipates the region's future travel needs;

- promotes an appropriate mix of travel modes; and

- supports key elements of the growth concept with strategic system improvements.

Guiding Principles

The Regional Transportation Plan vision has four guiding principles:

1. Provide complete information, timely public notice, full public access to key decisions and support broad-based, early and continuing involvement of the public in all aspects of the transportation planning process;

2. Facilitate development of the 2040 Growth Concept land use components with specific strategies that address mobility and accessibility needs and use transportation investments to leverage desired land use patterns;

3. Ensure that the allocation of fiscal resources is driven by both land use and transportation benefits; and

4. Place a priority on protecting the region's natural environment and livability in all aspects of transportation planning process.

The transportation system plays a critical role in the continued economic health and livability of the region. The regional forecast for the year 2015 predicts nearly 615,000 new residents and more than 500,000 new jobs above 1995 levels for the metro area (excluding Clark County). Substantial investment in transportation improvements is needed to accommodate this growth in a manner that supports the 2040 Growth Concept and preserves the region's livability.

Important measures of livability include mobility and access to jobs, schools, services and recreation, movement of goods and clean air. The RTP must address these needs by improving transportation alternatives to the automobile and ~~choices for how people travel within the region, while~~ seeking a balance between accessibility, system cost, strategic timing and prioritization of improvements and environmental impacts.

Public Involvement

Metro's public involvement policy for regional transportation planning and funding activities is intended to support and encourage broad-based public participation in the development and review of Metro's transportation plans, programs and projects. The policy was developed in response to citizen interest, recent changes in state and federal transportation planning, and in an effort to reach traditionally underserved portions of the population. The public involvement policy was adopted in July 1995.

The public involvement program for the RTP update is tied to the Regional Framework Plan public involvement process, and includes a widely distributed newsletter, fact sheets, periodic workshops, open houses and public meetings, statistical research using focus groups and surveys.

The 21-member RTP Citizen Advisory Committee (CAC) was appointed by the Metro Council ~~to a two-year term in April~~ May 1995 to provide citizen perspectives on transportation issues during

~~provide an ongoing, in-depth public dialogue on all aspects of~~ the RTP update ~~process~~. The committee members live and work throughout the region and bring a broad range of experiences and views to the process. Members of the CAC were selected as delegates for specific constituencies, to ~~representing~~ various citizen, demographic, business and special interest perspectives.

Accessibility and Mobility

Accessibility is the ability to reach a given destination, and is measured in terms of travel costs in both time and money to a given destination. The more places that can be reached for a given cost, the greater the accessibility. Of equal importance is the quality of travel choices to a given destination. Therefore, the relative level of accessibility within the region is governed by both land use patterns and the number of travel alternatives provided in the regional transportation system.

In contrast, mobility is defined as the ability to move people and goods. Mobility improves when the transportation network is refined or expanded to improve capacity of one or more modes, thus allowing people and goods to move more quickly toward a particular destination.

Accessibility to services and markets throughout the urban metropolitan area and maintaining adequate levels of mobility on key components of the regional system are principal objectives of the transportation plan and central to implementation of the 2040 Growth Concept. Residents of the region must have reasonable access to jobs, shopping, personal services and recreation. Commerce in the region depends on both access to statewide, interstate and international travel networks, and general mobility on the regional transportation system. The region's quality of life and economy would suffer without these accessibility and mobility objectives.

System Cost

A cost-effective transportation system will provide adequate levels of accessibility and mobility while minimizing the need for public investment. The RTP emphasizes preservation and efficient use of existing facilities as the best approach in providing an adequate transportation system. Therefore, the cost-effectiveness of the transportation system as a whole is dependent on solutions that provide adequate capacity and connectivity at the lowest total cost.

Timing and Prioritization of System Improvements

The 2040 Growth Concept has established a broad regional vision that will guide all future comprehensive planning at the local and regional levels, including development of the Regional Transportation Plan. The growth concept contains a series of land use building blocks that establish basic design types for the region. Of these, the central city, regional center and industrial area/intermodal facility components are most critical in terms of regional significance and role in implementing the other components of the growth concept.

Because the 2040 Growth Concept is a 50-year plan, many areas envisioned as important centers of urban activity, including several regional centers, station communities and main streets, are currently underdeveloped. Substantial public and private investment will be needed in these

areas over the long-term to realize the 2040 Growth Concept vision. These areas provide the best opportunity for public policy to shape new development, and are, therefore, the best candidates for more immediate transportation system improvements.

During the past several years, the region has experienced unprecedented growth -- a trend that is predicted to continue in the 2015 regional forecast. Subsequently, a significant amount of urbanization is likely to occur while local jurisdictions are in the process of adopting local ordinances that implement the 2040 Growth Concept. Therefore, the phasing of RTP projects and programs will reflect this period of transition, with project identification and selection increasingly tied to implementation of the growth concept.

The RTP includes three implementation scenarios based on varying financial assumptions. The "preferred" system (Chapter 5) includes an optimal package of regional transportation projects and programs that best addresses the region's needs over the 20-year plan period. The "constrained" system (Chapter 7) is limited to those improvements to the regional transportation system that can be made by projecting existing revenue sources for the plan period, and does not adequately meet the region's 20-year needs. The "strategic" system (Chapter 8) includes a mix of regional projects and programs from both the preferred and financially constrained systems. The strategic system represents the minimum set of actions needed to adequately serve the region's 20-year transportation needs, and thus establishes a target for additional funding.

Environmental, Economic & Social Impacts

Transportation systems have a significant effect on the physical and socioeconomic characteristics of the areas they serve. As such, transportation planning must consider larger regional and community goals and values, such as protection of the environment, the regional economy and the quality of life that area residents presently enjoy.

The RTP measures economic and quality of life impacts of the proposed system by evaluating key indicators, such as job and retail service accessibility, economic benefits to the ~~business~~ community and transportation for the traditionally underserved, including low income and minority households and the disabled. Other key system indicators include reduction in VMT's, travel times, travel speeds, congestion, energy costs, protection of natural resources and air quality impacts. RTP objectives are sometimes in conflict, so each transportation project or program must be evaluated in terms of relative tradeoffs, and how it best achieves an overall balance between those conflicting goals.

~~D~~C~~D~~. Urban Form And Land Use

Regional Urban Growth Goals and Objectives

The Regional Urban Growth Goals and Objectives (RUGGOs) were adopted in 1991 in response to direction by the Oregon Legislature to develop regional land use goals and objectives that would replace those adopted by the Columbia Region Association of Governments. The RUGGOs establish a process for coordinating planning in the metropolitan area in an effort to preserve regional livability. The RUGGOs also provide a policy framework for guiding Metro's regional

planning program, including development of functional plans and management of the region's urban growth boundary.

In 1992, the region's voters approved a charter for Metro that formally gave responsibility for regional land use planning to the agency, and requires adoption of a Regional Framework Plan that integrates land use, transportation and other regional planning mandates. In late 1995, the Metro Council adopted the 2040 Growth Concept, a document that serves as the first step in developing the framework plan. Like the RUGGOs, the growth concept is not a final plan for the region, but rather, is a starting point for developing the Regional Framework Plan, which will be a more focused vision for the future growth and development of this region. The growth concept includes a series of regional measures intended to accelerate both development of the framework plan elements and local implementation of growth concept principles. The 1996 Regional Transportation Plan serves as a functional plan and will be the transportation element of the Regional Framework Plan.

While the 2040 Growth Concept is primarily a land use framework, the success of the concept, in large part, hinges on regional transportation policy. The following are the 2040 Growth Concept land use components and a description of their associated transportation elements. The land use components are grouped according to their relative significance in the region:

Primary Components

The central city, regional centers, industrial areas and intermodal facilities are centerpieces of the 2040 Growth Concept, and form the geographic framework for more locally oriented components of the plan. Thus, implementation of the overall growth concept is largely dependent on the success of these primary components. For this reason, these components are the focus of 2040 Growth Concept implementation policies and infrastructure investments.

- **Central City and Regional Centers**
  Portland's central city already forms the hub of the regional economy. Regional centers in suburban locales such as Gresham, Beaverton and Hillsboro are envisioned in the 2040 Growth Concept as complementary centers of regional economic activity. These areas have the region's highest development densities, the most diverse mix of land uses and the greatest concentration of commerce, offices and cultural amenities. They are the most accessible areas in the region by both auto and public transportation, and have very pedestrian-oriented streets.

  In the 2040 Growth Concept, the central city is highly accessible by a high-quality public transportation system, multi-modal street network and a regional freeway system of through-routes. Light rail lines radiate from the central city, connecting to each regional center. The street system within the central city is designed to encourage public transportation, bicycle and pedestrian travel, but also accommodate auto and freight movement. Of special importance are the bridges that connect the east and west sides of the central city, and serve as critical links in the regional system.

  Regional centers also feature a high-quality radial transit system serving their individual trade areas and connecting to other centers, as well as light rail connections to the central city.

In addition, a fully improved network of multi-modal streets tie regional centers to surrounding neighborhoods and nearby town centers, while regional through-routes will be designed to connect regional centers with one another and points outside the region. The street design within regional centers encourages public transportation, bicycle and pedestrian travel while also accommodating automobile and freight movement.

- **Industrial Areas and Intermodal Facilities**
  Industrial areas serve as "sanctuaries" for long-term industrial activity. These areas are primarily served by a network of major street connections to both the regional freeway system and intermodal facilities. Many industrial areas are also served by freight rail, and have good access to intermodal facilities. Freight intermodal facilities, including air and marine terminals, freight rail yards and common carrier truck terminals are an area of regional concern. Access to these areas is centered on rail, the regional freeway system, public transportation, bikeways and key roadway connections. While industrial activities often benefit from roadway improvements largely aimed at auto travel, there are roadway needs unique to freight movement that are critical to the continued vitality of industrial areas and intermodal facilities.

Secondary Components

While more locally oriented than the primary components of the 2040 Growth Concept, town centers, station communities, main streets and corridors are significant centers of urban activity. Because of their density and pedestrian-oriented design, they play a key role in promoting public transportation, bicycling and walking as viable travel alternatives to the automobile, as well as conveniently close services for surrounding neighborhoods. As such, these secondary components are an important part of the region's strategy for achieving state goals for reducing per-capita automobile travel.

- **Station Communities**
  Station communities are located along light rail corridors and feature a high-quality pedestrian and bicycle environment. These communities are designed around the transportation system to best benefit from the public infrastructure. While they include some local services and employment, they are mostly residential developments that are oriented toward the central city, regional centers and other areas that can be accessed by rail for most services and employment.

- **Town Centers and Main Streets**
  Town Centers function as local activity areas that provide close access to a full range of local retail and service offerings within a few miles of most residents. While town centers will not compete with regional centers in scale or economic diversity, they will offer some specialty attractions of regional interest. Though the character of these centers varies greatly, each will function as strong business and civic communities with excellent multi-modal arterial street access and high quality public transportation with strong connections to regional centers and other major destinations. Main streets feature mixed-use, storefront style development that serve the same urban function as town centers, but are located in a linear pattern along a limited number of bus corridors. Main streets feature street designs that emphasize pedestrian, public transportation and bicycle travel.

- **Corridors**
  Corridors will not be as intensively planned as station communities, but similarly emphasize a high-quality bicycle and pedestrian environment and convenient access to public transportation. Transportation improvements in corridors will focus on nodes of activity -- often at major street intersections -- where transit and pedestrian improvements are especially important. Corridors can include auto-oriented land uses between nodes of activity, but such uses are carefully planned to preserve the pedestrian orientation and scale of the overall corridor design.

Other Urban Components

Some components of the 2040 Growth Concept are primarily of local significance, including employment centers and neighborhoods. Urban activities in these areas often impact the regional transportation system, but are best addressed through the local planning process.

- **Employment Centers**
  Employment centers allow mixed commercial and industrial uses, including some residential development. These areas are primarily served by a network of arterial connections to both the regional freeway system and intermodal facilities. Some employment centers are also served by freight rail. Employment centers are often located near industrial areas, and thus may benefit from freight improvements primarily directed toward industrial areas and intermodal facilities.

- **Neighborhoods**
  In recent decades, the newest neighborhoods have become the most congested largely due to a lack of street connections. A lack of street connections discourages walking and bicycling for local trips in these areas, and forces local auto trips onto the regional multi-modal arterial network. The 2040 Growth Concept envisions master street plans in all areas to increase the number of local street connections to the regional roadway network. However, new connections must be designed to discourage through-travel on local neighborhood streets.

Exurban Components

- **Urban Reserves**
  These reserves, which are currently locatedoutside the UGB, are relatively undeveloped, with limited transportation facilities. Urban reserves are intended to accommodate future growth and will eventually require multi-modal access to the rest of the region. Because they may be added to the urban area during the 20-year RTP planning period, they are included in the RTP functional classification scheme (Chapter 4). General street and public transportation planning is completed prior to urbanization as part of the RTP process, and based on specific 2040 Growth Concept land use policies for these areas. Once urban reserves are brought within the UGB, more detailed transportation system planning at the regional and local level occurs in conjunction with detailed land use planning.

- **Rural Reserves**
  These largely undeveloped reserves are also located outside the UGB, and have very limited transportation facilities. Roadways in these areas are intended to serve rural industry and needs, and urban travel on these routes is accommodated with designs that are sensitive to their basic rural function. Rural reserves will be protected from urbanization for the foreseeable future through state statutes and administrative rules, county ~~zoning~~ land use ordinances, intergovernmental agreements and by limiting rural access to urban through-routes whenever possible. Urban-to-urban travel is generally discouraged on most rural routes, with exceptions identified in this plan.

- **Neighboring Cities and Green Corridors**
  Neighboring cities are separated from the main urban area by rural reserves, but are connected to regional centers within the metropolitan area by limited-access green corridor transportation routes. Green corridor routes will include bicycle and public transportation service to neighboring cities. Neighboring cities will be encouraged, through intergovernmental agreements, to balance jobs and households in order to limit travel demand on these connectors. The region also has an interest in maintaining reasonable levels of through-travel on major routes that pass through neighbor cities and function as freight corridors. Growth of neighboring cities will ultimately affect through-travel and could create a need for bypass routes. Such impacts will also be addressed through coordination with county and state agencies, as well as individual neighboring cities.

~~E~~DE. Transportation System Design

Systemwide Goals and Objectives

The overall goal of the RTP is to develop a safe, efficient and cost-effective transportation system that serves the region's current and future travel needs and implements the 2040 Growth Concept while also recognizing the financial constraints and environmental impacts associated with that system. The remainder of this section: (1) presents the systemwide goals and objectives of this Plan; (2) defines adequate accessibility, mobility and safety and the types of fiscal and environmental constraints that must be addressed; and (3) details the criteria against which the performance of the system will be measured.

System Goal 1: Implement a transportation system that serves the region's current and future travel needs and implements the 2040 Growth Concept.

1. **Objective:** Provide the highest levels of access by multiple modes to, between and within the central city, regional centers, intermodal facilities and industrial areas.*

2. **Objective:** Provide high levels of access by multiple modes to, between and within station communities, town centers, main streets and corridors.

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* Metro will develop performance measures and standards related to levels of access as part of the RTP system development phase and Chapter 1 will be updated as necessary.

3. **Objective:** Provide access by multiple modes to, between and within areas in the region not identified above.

4. **Objective:** Provide more and better transportation choices to destinations throughout the region and serve special access needs for all people, including youth, elderly and disabled.

4 5. **Objective:** Provide adequate levels of mobility for people and goods within the region.

System Goal 2: Provide a cost-effective transportation system.

1. **Objective:** Maintain and preserve the existing transportation infrastructure.

2. **Objective:** Improve the efficiency of the existing transportation system.

3. **Objective:** Consider a full range of costs and benefits in the allocation of transportation funds.

4. **Objective:** Use funding flexibility to the degree necessary to implement the adopted Regional Transportation Plan.

5. **Objective:** Establish a set of criteria for project selection based on the full range of policies in this plan and fund projects in accordance with those selection criteria.

6. **Objective:** Adopt transportation system performance measures that reflect the goals of this plan and use them to evaluate and improve transportation systems and projects.

7. **Objective:** Develop a transportation system necessary to implement planned land uses, consistent with the regional level of service standards.

System Goal 3: Protect the region's livability.

1. **Objective:** Enhance livability with all regional transportation projects and programs.

2. **Objective:** Give priority to transportation projects and programs that best enhance livability.

System Goal 4: Protect the region's natural environment.

1. **Objective:** Meet applicable standards for clean air and water.

2. **Objective:** Minimize the environmental impacts associated with transportation project construction and maintenance activities.

3. **Objective:** Promote alternative modes that help to meet air quality standards.

4. **Objective:** Design transportation systems that promote efficient use of energy.

System Goal 5: Improve the safety of the transportation system.

1. **Objective:** Promote safety in the design and operation of the transportation system.

2. **Objective:** Minimize conflicts between modes, particularly between motor vehicles, pedestrians and bicycles.

3. **Objective:** Develop and implement regional safety and education programs.

System Goal 6: Provide for statewide, national and international connections to and from the region, consistent with the Oregon Transportation Plan.

1. Objective: Provide for the movement of people and goods with an interconnected motor vehicle system.

2. Objective: Provide for the movement of people and goods through an interconnected system of air and rail systems, including passenger and freight intermodal facilities and air and water terminals.

3. Objective: Mitigate the effect of improved regional access outside the urban area.

Regional Street System Goals and Objectives

In 1991, sweeping changes at the federal, state and regional levels changed the scope of transportation planning. While additional public investments in the regional street system are needed to provide the region with an adequate level of mobility and accessibility, the federal ISTEA has dramatically altered the funding priorities for projects that include federal support. Meanwhile, the state transportation planning rule (TPR) emphasizes the need to promote travel alternatives to the automobile, and sets aggressive goals for reducing per capita automobile travel. At the regional level, the Metro charter directs the agency to complete the Regional Framework Plan, a broad comprehensive plan that will set regional land use and transportation policy.

The federal ISTEA specifies a planning process that discourages projects that primarily benefit single occupancy vehicle (SOV) travel, and calls for consideration of alternative modes in all transportation planning decisions. In particular, funding for projects that primarily benefit SOV auto travel on the roadway system may be limited, while projects that benefit bicycle, pedestrian, public transportation and freight travel are more likely to be funded.

The TPR focuses on the link between land use and transportation, and requires the region to consider land use policies when developing transportation plans. At the local level, cities and counties are required to revise development standards to promote public transportation, pedestrian and bicycle travel, orient new buildings toward major transit stops and local street designs that require less right-of-way width and improve pedestrian circulation. Under the TPR,

local transportation plans must also include policies that promote completion of local street networks.

The Regional Framework Plan will echo many of these issues, and provide a land use and transportation context for local comprehensive plans. The policies and key system elements of the RTP will serve as the transportation component of the Regional Framework Plan. The regional urban growth goals and objectives (RUGGOs), adopted by the region in 1991, will guide development of the framework plan.

Together, these requirements have elevated the importance of street designs in regional planning. This section addresses these mandates with street design concepts intended to mix land use and transportation planning in a manner that supports individual 2040 Growth Concept land use components. These design concepts reflect the fact that streets perform many, often conflicting functions, and the need to reconcile conflicts among travel modes. The design classifications will work in tandem with the modal system maps shown in Chapter 4 of this plan.

Regional Street Design Goals and Objectives

Goal 1: Provide regional street design concepts to guide local implementation of the 2040 Growth Concept.

1. **Objective:** Develop a system of regional street design concepts that fully integrate automobile, public transportation, pedestrian, bicycle and freight needs as they relate to 2040 Growth Concept land use components.

2. **Objective:** Develop and maintain a regional street design map in Chapter 4 of this plan that identifies appropriate street design classifications for facilities of regional significance. This map shall:

   - respond to regional land use needs presented by the 2040 Growth Concept;
   - be consistent with the regional motor vehicle, public transportation, freight, bicycle and pedestrian system maps in Chapter 4 of this plan; and
   - be developed with ~~parcel~~geographically-specific design designations.

3. **Objective:** Develop guidelines ~~standards~~ for appropriate transition areas between street design types.

Goal 2: ~~Develop street performance standards for~~ Support local implementation of regional street design concepts in local transportation system plans (TSPs).

1. **Objective:** Provide model street designs as a resource for local TSP development.

2. **Objective:** Develop RTP street design guidelines to support local TSP development.

3. **Objective:** Develop RTP street design standards where regional design interests warrant consistency among local design standards.

4. **Objective:** Consider safety, right-of-way, environmental, storm water management and topographic constraints, while satisfying the general intent of the regional street design concepts.

Goal 3: Manage the regional street system to achieve the access and mobility needs of the 2040 land use components.

1. **Objective:** Provide for through travel on major routes that connect major regional destinations ~~and emphasize efficient travel speeds~~.

2. **Objective:** Provide access from local areas to ~~adjacent~~nearby regional or community-scale activity centers.

Regional Street Design Concepts

The regional street design concepts are intended to serve multiple modes of travel in a manner that supports the specific needs of the 2040 land use components. The street design concepts fall into five broad classifications:

- *Throughways* that emphasize motor vehicle travel and connect major activity centers;

- *Boulevards* that serve major centers of urban activity and emphasize public transportation, bicycle and pedestrian travel while balancing the many travel demands of intensely developed areas;

- *Streets* that serve transit corridors, main streets and neighborhoods with designs that integrate many modes of travel and provide easy pedestrian, bicycle and ~~transit~~ public transportation travel;

- *Roads* that are traffic oriented; with designs that integrate all modes but primarily serve motor vehicles; and

- *Local streets* that complement the regional system by serving neighborhoods and carrying local traffic.

These design concepts apply to the regional system as it relates to specific 2040 Growth Concept land use components. Figure 1.1 provides a chart of regional street design classifications for roadways that serve a given 2040 land use. The most appropriate street design classification for roadways that serve a given land use is indicated with a solid square(s). ~~The~~ fFollowing Figure 1.1 is a detailed description of the purpose and design emphasis of each design types.

Figure 1.1

Regional Street Design Classifications and the 2040 Growth Concept

Regional Street Design Classifications			Primary Components			Secondary Components				Other Urban Components			
			Central City	Regional Centers	Industrial Areas	Station Communities	Town Centers	Main Streets	Corridors	Employment Areas	Inner Neighborhood	Outer Neighborhood	Exurban Areas
Throughways		Freeway	■	■	■	■	■	■	■	■	■	■	■
		Highway	■	■	■	■	■	■	■	■	■	■	■
Boulevards		Regional Boulevard	■	■	□	■	■	■**	□	□	□	□	
		Community Boulevard	■	■	□	■	■	■**	□	□	□	□	
Streets		Regional Street	□	□	□	□	□	■	■	□	■	■	
		Community Street	□	□	□	□	□	■	■	□	■	■	
Roads		Urban Road			■					■			
		Rural Road											■

■ *Most appropriate street design classification*

□ *Appropriate street design classification in transition areas*

** *Main Streets feature Boulevard designs along key segments and at major intersections*

Throughways

The purpose of these facilities is to connect major activity centers within the region, including the central city, regional centers, industrial areas and intermodal facilities to one another and to points outside the region. Throughways are divided into limited access Freeway designs where all intersections have separated grades, and Highways that include a mix of separate and at-grade intersections.

Both Freeways and Highways are designed to provide high speed travel for longer motor vehicle trips throughout the region, are primary freight routes and serve all 2040 Growth Concept land use components. In addition to facility designs that promote mobility, Throughways may also benefit from access management and Advanced Traffic Management System (ATMS) techniques. These facilities may carry transit through-service, with supporting amenities limited to transit stations. These facilities may also incorporate transit-priority design treatment where appropriate, and may incorporate light rail or other high-capacity transit.

Freeways

Freeways usually consist of four to six vehicle travel lanes, with additional lanes in some situations. They are completely divided, with no left turn lanes. Freeway designs have few street connections, and they always occur at separated grades with access controlled by ramps. There is no driveway access to Freeways or buildings oriented toward these facilities, and only emergency parking is allowed. Freeway designs do not include pedestrian amenities, with the exception of improved crossings on overpasses and access ramps. Bikeways designed in conjunction with Freeway improvements usually follow parallel routes.

Highways

Highways usually consist of four to six vehicle travel lanes, with additional lanes in some situations. Highway designs have few street connections, and they may occur at same-grade or on separate grades. Highways are usually divided with a median, but also have left turn lanes where at-grade intersections exist. There are few driveways on Highways, and buildings are not oriented toward these facilities. On-street parking is usually prohibited in Highway designs, but may exist in some locations. Highway designs include striped bikeways and sidewalks with optional buffering. Improved pedestrian crossings are located on overpasses, underpasses and at same-grade intersections.

Boulevards

Boulevards are designed with special amenities that promote pedestrian, bicycle and public transportation travel in the districts they serve. Boulevards serve the multi-modal needs of the region's most intensely developed activity centers, including the central city, regional centers, station communities, town centers and some main streets. As such, these facilities may benefit from access management, traffic calming and ATMS techniques that reinforce pedestrian, bicycle and public transportation travel. Boulevards are divided into regional and community scale designs.

Regional Boulevards

Regional Boulevards mix a significant amount of motor vehicle traffic with public transportation, bicycle and pedestrian travel where dense development is oriented toward the street. These designs feature low to moderate vehicle speeds and usually include four vehicle lanes. Additional lanes or one-way couplets may be included in some situations. Regional Boulevards have many street connections and some driveways, although combined driveways are preferable. These facilities may include on-street parking when possible. The center median serves as a pedestrian refuge and allows for left turn movements at intersections.

Regional Boulevards are designed to be transit-oriented, with high-quality service and substantial transit amenities at stops and station areas. Pedestrian improvements are substantial on boulevards, including broad sidewalks, pedestrian buffering, special street lighting and crossings at all intersections with special crossing amenities at major

intersections. These facilities have bike lanes or wide outside lanes where bike lanes are not physically possible, or are shared roadways where motor vehicle speeds are low. ~~striped or shared bikeways~~. They also serve as primary freight routes, and ~~often~~ may include loading facilities within the street design.

Community Boulevards

Community Boulevards mix motor vehicle traffic with public transportation, bicycle and pedestrian travel where dense development is oriented toward the street. These facilities are designed for low motor vehicle speeds and usually include four vehicle lanes and on-street parking. Fewer vehicle lanes may be appropriate in some situations, particularly when necessary to provide on-street parking. Community Boulevards have many street connections and some driveways, although combined driveways are preferable. Where appropriate, center medians offer a pedestrian refuge and allow for left turn movements at intersections.

Community Boulevards are designed to be transit-oriented, with high quality service that is supported by substantial transit amenities at stops and station areas. Pedestrian improvements are also substantial, including broad sidewalks, pedestrian buffering, special street lighting and crossings at all intersections with special crossing amenities at major intersections. Community Boulevards have striped or shared bikeways and some on-street parking. These facilities also serve as secondary freight routes, and may include loading facilities within the street design.

Streets

Streets are designed with amenities that promote pedestrian, bicycle and public transportation travel in the districts they serve, particularly where development densities warrant special transit and pedestrian design consideration. Streets serve the multi-modal needs of the region's corridors, neighborhoods and some main streets. As such, these facilities may benefit from access management, traffic calming and ATMS techniques that enhance pedestrian, bicycle and public transportation travel, while providing appropriate vehicle mobility. Streets are divided into regional and community scale designs.

Regional Streets

Regional Streets are designed to carry significant vehicle traffic while also providing for public transportation, bicycle and pedestrian travel. These facilities serve a development pattern that ranges from low density residential neighborhoods to more densely developed corridors and main streets, where buildings are often oriented toward the street at major intersections and transit stops. Regional Street designs accommodate moderate motor vehicle speeds and usually include four vehicle lanes. Additional motor vehicle lanes may be appropriate in some situations. These facilities have some to many street connections, depending on the district they are serving. Regional Streets have few driveways that are combined whenever possible. On-street parking may be included, and a center median serves as a pedestrian refuge and allows for left turn movements at intersections.

These facilities are designed to be transit-oriented, with high-quality service and substantial transit amenities at stops and station areas. Although less substantial than in Boulevard designs, pedestrian improvements are important along Regional Streets, including sidewalks that are buffered from motor vehicle travel, crossings at all intersections and special crossing amenities at major intersections. Regional Streets have bike lanes or wide outside lanes where bike lanes are not physically possible, or are shared roadways where motor vehicle speeds are low. ~~striped or shared bikeways~~. They also serve as primary freight routes, and may include loading facilities within the street design, where appropriate.

Community Streets

Community Streets are designed to carry vehicle traffic while providing for public transportation, bicycle and pedestrian travel. These facilities serve low density residential neighborhoods as well as more densely developed corridors and main streets, where buildings are often oriented toward the street at main intersections and transit stops. ~~Regional~~ Community Street designs allow for moderate motor vehicle speeds and usually include four motor vehicle lanes and on-street parking. However, fewer travel lanes may be appropriate when necessary to provide for on-street parking. These facilities have some to many street connections, depending on the 2040 Growth Concept land-use components they serve. Community Streets have few driveways that are shared when possible. A center median serves as a pedestrian refuge and allows for left turn movements at intersections.

Community Streets are transit-oriented in design, with transit amenities at stops and station areas. Although less substantial than in Boulevard designs, pedestrian improvements are important on Community Streets, including sidewalks that are buffered from motor vehicle travel, crossings at all intersections and special crossing features at major intersections. Community Streets have striped or shared bikeways. These facilities also serve as secondary freight routes, and may include loading facilities within the street design, where appropriate.

Roads

Roads are traffic-oriented designs that provide motor vehicle mobility in the 2040 Growth Concept land use components they serve and accommodate a minimal amount of pedestrian and public transportation travel. These facilities may benefit from access management and ATMS techniques. Roads serve the travel needs of the region's low density industrial and employment areas as well as rural areas located outside the urban growth boundary (UGB). Roads are, therefore, divided into urban and rural designs.

Urban Roads

These facilities are designed to carry significant motor vehicle traffic while providing for some public transportation, bicycle and pedestrian travel. Urban Roads serve low density industrial areas, intermodal facilities and employment centers where buildings are less ~~rarely~~ oriented toward the street. These facilities also serve new urban areas (UGB additions) where plans for urban land use and infrastructure are not complete. Urban Roads are designed to accommodate moderate vehicle speeds and usually include four motor vehicle lanes, although additional lanes may be appropriate in some situations. These designs have some

street connections, but few driveways. Urban Roads rarely include on-street parking, and a center median primarily serves to optimize motor vehicle travel and to allow for left turn movements at intersections.

Urban Roads serve as primary freight routes, and often include special design treatments to improve freight mobility. These facilities are designed for transit through-service, with limited amenities at transit stops. Sidewalks are included in Urban Road designs, although buffering is optional. Pedestrian crossings are included at intersections. Urban Roads have striped bikeways.

Rural Roads

Rural roads are designed to carry rural traffic while accommodating limited public transportation, bicycle and pedestrian travel. In some cases rural roads serve to connect urban traffic to throughways. Rural roads ~~These facilities~~ serve urban reserves, rural reserves and green corridors, were development is widely scattered and usually located away from the road. These facilities are designed to allow moderate motor vehicle speeds and usually consist of two to four motor vehicle lanes, with ~~additional~~ occasional auxiliary lanes appropriate in some situations. Rural Roads have some street connections and few driveways. On-street parking occurs on an unimproved shoulder, and is usually discouraged. These facilities may include center turn lanes, where appropriate.

Rural Roads serve as primary freight routes and often provide important farm-to-market connections. Special design treatments to improve freight mobility are therefore important in these designs. Rural Roads rarely serve public transportation, but may include limited amenities at rural transit stops where transit service does exist. Bicycles and pedestrians share a common striped shoulder on these facilities, and improved pedestrian crossings occur only in unique situations (such as rural schools or commercial districts)..

Local Street Design

Local streets serve the immediate travel needs of the region at the neighborhood level. These facilities are multi-modal, and are designed to serve most short automobile, bicycle and pedestrian trips. They generally do not carry freight in residential areas, but are important to freight movement in industrial and commercial areas. Local streets may serve as transit routes in some situations. Local street designs include many connections with other streets, and bicycle and pedestrian connections where topography or development patterns prevent full street extensions.

The design of local street systems is generally beyond the scope of the RTP. However, the aggregate effect of local street design impacts the effectiveness of the regional system when local travel is restricted by a lack of connecting routes, and local trips are forced onto regional facilities. The following connectivity principles should guide future development of local street designs:

- Planning jurisdictions should create local street system plans or performance measures to ensure connections that meet regional connectivity standards. Local streets include all facilities not identified on the regional design map in Chapter 4 of this plan;.

- Local street system plans should anticipate opportunities to incrementally extend and connect local streets over time in primarily developed areas, and local design codes should encourage these connections as part of the development review process;.

- Local street design codes should allow street systems to serve a mix of development types within a continuous street pattern;.

- Local street designs should encourage pedestrian travel by ensuring that the shortest, most direct routes are provided to nearby existing or planned commercial services, schools, parks and other neighborhood destinations;.

- Local street design and zoning ordinances should ensure that neighborhood residents have access to existing or planned commercial services that provide for daily or weekly needs, including groceries, pharmacies and gas stations, without using Throughways, Regional Boulevards, Regional Streets or Urban Roads;.

- Where appropriate, local design codes should allow narrow street designs to conserve land, calm traffic or promote connectivity; ~~and~~.

- Closed street systems and cul-de-sac designs should be limited to situations where topography or existing development patterns prevent full street extensions or where connections would compromise local street function. Safety and environmental impacts should also be considered in the development of local street systems.

Regional Street System Management

Identifying land use priorities and serving the associated transportation needs is the first step of the transportation planning process. Once appropriate transportation systems are defined (e.g., freeways, transit, freight, etc.) and as additions to existing systems are built, the next critical step is to define the best ways of operating the facilities and systems. The following RTP goals and policies establish the region's heightened commitment to Transportation System Management (TSM). TSM addresses travel demand by managing existing transportation facilities rather than by building new roadways. TSM can relieve congestion, improve the safety and efficiency of transportation facilities during all times of day, and benefit all users of the regional system. Appropriate TSM techniques will be used to achieve specific goals of the regional street design concepts described in this section. There are four broad categories of TSM:

Facility Design

Facility design techniques address roadway safety and operations with minor roadway reconstruction. Projects might include re-striping travel lane widths, realigning roadways to enhance sight distances and geometry at intersection approaches, channeling of turning movements (e.g., stripping or roadway widening to provide left turn pockets, right turn

lanes, bus pullouts, etc.), improved signage of cross streets and activity centers and signalization control and phasing adjustment.

Access Management

Access management techniques reduce opportunities for conflict between through-movements and vehicles turning off and onto the roadway. They also reduce conflict between motor vehicles, pedestrians and bicycles. Examples include closing and/or consolidating commercial driveways, minimizing connection of local streets to regionally significant arterials and selectively prohibiting left turn and "U-turn" movements at and between intersections.

Traffic Calming

Traditionally, traffic calming techniques have been applied to existing neighborhood streets and collectors to protect them from *intrusion of through-traffic* seeking to avoid congested major facilities during peak periods and high-speed traffic at all hours. These "retrofit" techniques include speed bumps, traffic-rounds and traffic barriers and ~~are rarely appropriate for use~~ have not been typically used on larger regional facilities. They are, however, critical design elements that address secondary local effects of the regional system and operational policies promoted in the RTP.

Another class of calming techniques is defined in the RTP and are embedded in the design of streetscapes serving pedestrian-oriented land uses. These include narrowed travel lanes, wider sidewalks, curb-corner extensions, planted median strips and other features designed to unobtrusively reduce motor vehicle speeds and buffer pedestrians from the myriad effects of adjacent motor vehicle movements.

Advanced Traffic Management System (ATMS)

ATMS refers to proven traffic management techniques that use computer processing and communications technologies to optimize performance of multi-modal roadway and public transportation systems. A mature ATMS system will integrate freeway, arterial and public transportation management systems. A blueprint of the region's planned ATMS system is described in the ODOT/FHWA sponsored Portland-area ATMS Plan published in 1993. The ATMS Plan recognizes the inter-relationships between high-speed, limited access through-routes and the parallel system of regional and local minor arterials and collectors. ATMS provides techniques and management systems to facilitate region-wide auto, truck and transit vehicle mobility (i.e., ATMS prioritizes longer trips on freeway and arterial through-routes). ATMS systems also manage "short-trip" facilities that emphasize access to commercial/residential uses. Most important, the ATMS Plan emphasizes the importance of fully integrating through-route and local-system traffic management for optimum performance.

Regional Street System Management Goals and Objectives

Goal 1: Use TSM techniques to optimize performance of the region's transportation systems. Mobility will be emphasized on corridor segments *between* high priority land use designations. Access and livability will be emphasized *within* such designations. Selection of appropriate TSM techniques will be according to the functional classification of corridor segments.

1. **Objective:** Implement an integrated, regional ATMS program addressing:

   - Freeway Management (such as ramp meters and automated incident detection or rapid response)

   - Arterial Signal Coordination (such as comprehensive adjustment of signal timing to minimize stop-and-go travel, consistent with adjacent land use, street design type and function, and which coordinates with freeway and interchange operations)

   - Transit Operation (such as expanded reliance on Tri-Met's computer-aided fleet location and dispatch system and its integration with freeway and arterial management systems, with special emphasis on relaying incident detection data to allow rerouting of buses)

   - Multi-Modal Traveler Information Services (such as broadcast radio and television; highway advisory radio; variable message signs; on-line road reports; and on-board navigation aids)

2. **Objective:** Develop access management plans for urban areas that are consistent with regional street design concepts. For rural areas, access management should be consistent with Rural Reserve and Green Corridor land use objectives.

3. **Objective:** Integrate traffic calming elements into new street design as appropriate consistent with regional street design concepts, and as a method to optimize regional street system operation without creating excessive local travel on the regional system.

4. **Objective:** Continue to restripe and/or fund minor reconstruction of existing transportation facilities consistent with regional street design concepts.

Regional Street System Implementation

While the primary mission of the RTP is implementation of the 2040 Growth Concept, the plan must also address other transportation issues that may not directly assist in implementing the growth concept. The plan must also protect the region's existing investments by placing a high priority on projects or programs that maintain or preserve infrastructure. The purpose of this section is to establish these key issues as the most important criteria when selecting transportation projects and programs. The following goals and objectives reflect this need to integrate 2040 Growth Concept objectives with other transportation needs or deficiencies in the development of the preferred, financially constrained and strategic RTP systems contained in Chapters 5, 7 and 8:

Regional Street System Implementation Goals and Objectives

Goal 1: Implement a regional transportation system that supports the 2040 Growth Concept through the selection of complementary transportation projects and programs.

1. **Objective:** Place the highest priority on projects and programs that best serve the transportation needs of the central city, regional centers, intermodal facilities and industrial areas.

2. **Objective:** Place a high priority on projects and programs that best serve the transportation needs of station communities, town centers, main streets and corridors.

3. **Objective:** Place less priority on transportation projects and programs that serve the remaining components of the 2040 Growth Concept.

4. Objective: Emphasize projects and programs that provide or help promote a wider range of transportation choices.

Goal 2: Emphasize the maintenance, ~~and~~ preservation and effective use of transportation infrastructure in the selection of the RTP projects and programs.

1. **Objective:** Place the highest priority on projects and programs that preserve or maintain the region's transportation infrastructure.

2. **Objective:** Place less priority on projects and programs that modernize or expand the region's transportation infrastructure.

Goal 3: Anticipate and address system deficiencies that threaten the safety of the traveling public in the implementation of the RTP.

1. **Objective:** Place the highest priority on projects and programs that address safety-related deficiencies in the region's transportation infrastructure.

2. **Objective:** Place less priority on projects and programs that address other deficiencies in the region's transportation infrastructure.

Regional Street System Performance

Implementation of the 2040 Growth Concept requires a departure from traditional transportation planning such that the region must identify key measures of transportation effectiveness which include all modes of transportation. Developing a full array of these measures will require additional analysis. Focusing~~Concentrating~~ development in the ~~high-density~~ most concentrated activity centers, including the central city, ~~and~~ regional centers and station communities, ~~may produce~~ requires the use of alternative modes in order to avoid unacceptable levels of congestion ~~that exceed existing standards, yet signal positive urban development for these areas~~ and to insure that accessibility by alternative modes is attractive. ~~Conversely,~~ tThe continued economic

vitality of important industrial areas and intermodal facilities largely depends on preserving or improving access to these areas and maintaining reasonable levels of mobility on the region's main throughways. Therefore, regional congestion standards and other regional system performance measures are tailored to reinforce the specific development needs of the individual 2040 Growth Concept land use components.

Regional Motor Vehicle System

The motor vehicle system provides access to the central city, regional centers, industrial areas and intermodal facilities, with an emphasis on mobility between these destinations. These goals and objectives recognize the need to accommodate a variety of trip types on the regional motor vehicle system that include personal errands, commuting to work or school, commerce, freight movement and public transportation. In general, this plan recognizes there would be a higher degree of mobility during the mid-day from the peak-hour.

Traditionally, the automobile has been the dominant form of passenger travel, and much of the region's roadway system has been designed to accommodate growing automobile demands. ~~However~~In addition, the motor vehicle system also plays an important role in the movement of freight, providing the backbone for commerce in the region. The motor vehicle system also serves the bus element of the regional public transportation system (which carries the largest share of public transportation riders). Finally, motorcycles and mopeds also use the motor vehicle system, and provide more fuel-efficient alternatives to automobile travel. Although motorcycles and mopeds are governed by the same traffic laws as other motor vehicles, they have special parking and security needs.

Although focused on motor vehicle travel, the system described in this section is multi-modal, with design criteria intended to serve motor vehicle mobility needs, while reinforcing the urban form of the 2040 Growth Concept. While the motor vehicle system usually serves bicycle and pedestrian travel, the system is designed to limit impacts of motor vehicles on pedestrian and transit-oriented districts.

Regional Motor Vehicle System Goals and Objectives

Goal 1: Provide a regional motor vehicle system of arterials and collectors that connect the central city, regional centers, industrial areas and intermodal facilities, and other regional destinations, and provide regional mobility.

1. **Objective:** Maintain a system of principal arterials for long distance, high speed ~~state-wide~~, interstate, inter-region and intra-region travel.

2. **Objective:** Maintain an appropriate level of mobility on the motor vehicle system during periods of peak demand.

3. **Objective:** Maintain an appropriate level of mobility on the motor vehicle system during off-peak periods of demand.

4. Objective: Provide an adequate system of local and collector streets that supports the regional system.

5. Objective: Develop improved measures of traffic generation and parking patterns for regional centers, town centers, station communities and main streets.

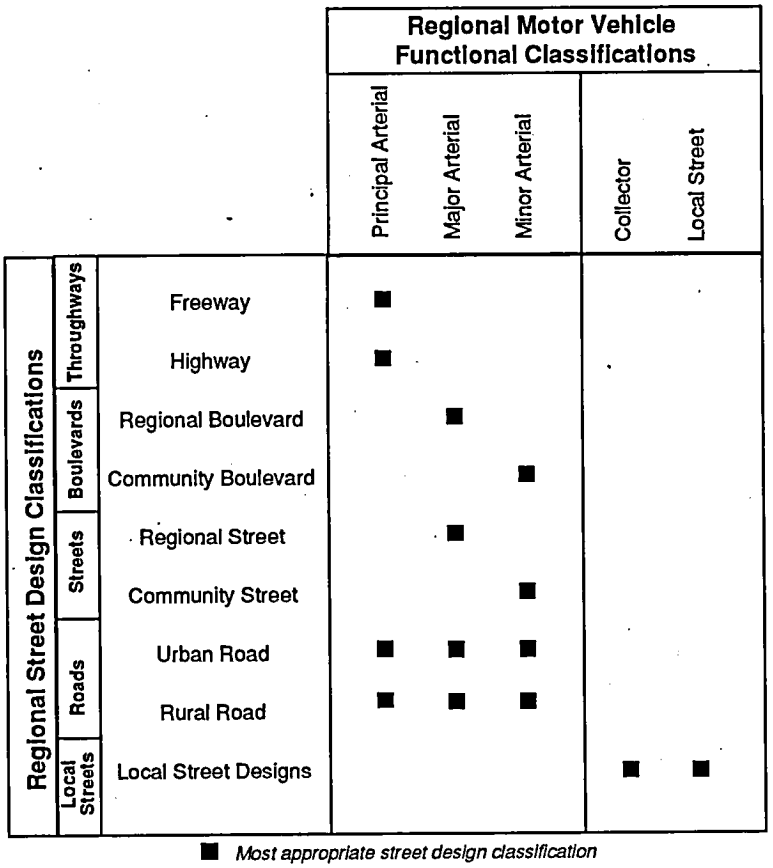
6. Objective: Develop improved measures of freight movement as defined in the 2040 Growth Concept.

Regional Motor Vehicle Classification System

The motor vehicle system includes principal arterials, major arterials and minor arterials and collectors of regional significance. These routes are designated on the motor vehicle system map in Chapter 4. Local comprehensive plans also include additional minor arterials, collectors and local streets. Figure 1.2 provides a chart of the regional motor vehicle functional classifications and their relationship to the regional street design classifications. The most appropriate street design classification for roadways that serve a given functional classification is indicated with a solid square(s). Following Figure 1.2 is a detailed description of the regional functional classification categories.

Figure 1.2

Relationship Between the Regional Street Design Classifications and the Regional Motor Vehicle Functional Classifications



■ *Most appropriate street design classification*

The following are the regional functional classification categories:

Principal Arterials: These facilities form the backbone of the motor vehicle network. Motor vehicle trips entering and leaving the urban area follow these routes, as well as those destined for the central city, regional centers, industrial areas or intermodal facilities. These routes also form the primary connection between neighbor cities and the urban area. Principal arterials serve as major freight routes, with an emphasis on mobility. These routes fall within regional freeway ~~and,~~ highway and road design principles.

Principal Arterial System Design Criteria:

- Principal arterials should provide an integrated system that is continuous throughout the urbanized area and also provide for statewide continuity of the rural arterial system.

- The principal arterial system should serve the central city, regional centers, industrial areas and intermodal facilities, and should connect key freight routes within the region to points outside the region.

- A principal arterial should provide direct service: (1) from each entry point to each exit point or (2) from each entry point to the central city. If more than one route is available, the most direct route will be designated as the principal arterial when it ~~complements~~ supports the planned urban form.

- ~~Principal arterial routes outside the Urban Growth Boundary should be treated as "Green Corridors," with very limited access and intergovernmental agreements designed to protect rural areas from the effects of urban through-travel.~~

Major Arterials: These facilities serve as primary links to the principal arterial system. Major arterials, in combination with principal arterials, are intended to provide general mobility for travel within the region. Motor vehicle trips between the central city, regional centers, industrial areas and intermodal facilities should occur on these routes. Major arterials serve as freight routes, with an emphasis on mobility. These routes fall within regional boulevard, regional street, urban road and rural road design principles.

Major Arterial System Design Criteria:

- Major arterials should provide motor vehicle connections between the central city, regional centers, industrial areas and intermodal facilities and connect to the principal arterial system. If more than one route is available, the more direct route will be designated when it ~~complements~~ supports the planned urban form.

- Major arterials should serve as primary connections to principal arterials, and also connect to other arterials, collectors and local streets, where appropriate.

- Freight movement should not be restricted on the principal arterial network.

- The principal and major arterial systems in total should comprise 5-10 percent of the motor vehicle system and carry 40-65 percent of the total vehicle miles traveled.*

Minor Arterials: The minor arterial system complements and supports the principal and major arterial systems, but is primarily oriented toward motor vehicle travel at the community level connecting town centers, corridors, main streets and neighborhoods. As such, minor arterials usually serve shorter trips than principal and major arterials, and therefore must balance mobility and accessibility demands. Minor arterials may serve as freight routes, providing both access and mobility. These routes fall within community boulevard, community street, urban road and rural road design principles.

Minor Arterial System Design Criteria:

- Minor arterials generally connect town centers, corridors, main streets and neighborhoods to the nearby regional centers or other major destinations.

- Minor arterials should connect to major arterials, collectors, local streets and some principal arterials, where appropriate.

- The principal, major and minor arterial system should comprise 15-25 percent of the motor vehicle system and carry 65-80 percent of the total vehicle miles traveled.*

Collectors: While come collectors are of regional significance, most of the collector system operates at the community level to provide local connections to the minor and major arterial systems. As such, collectors carry fewer motor vehicles than arterials, with reduced travel speeds. However, an adequate collector system is needed to serve these local motor vehicle travel needs. Collectors ~~should~~ may serve as freight access routes, providing local connections to the arterial network. Collectors fall within the plan's local street design principles.

Collector System Design Criteria:

- Collectors should connect neighborhoods to nearby centers, corridors, station areas, main streets and other nearby destinations.

- Collectors should connect to minor and major arterials and other collectors, as well as local streets.

- The collector system should comprise 5-10 percent of the motor vehicle system and carry 5-10 percent of the total vehicle miles traveled.*

Local Streets: The local street system is used throughout the region to provide for local circulation and access. However, arterials in the region's newest neighborhoods are often the most congested due to a lack of local street connections. The lack of local street connections forces local auto trips onto the principal and major arterial network, resulting in significant

* Metro will test the "system percentage" design criteria as part of the RTP system development phase to verify their appropriateness.

congestion on many suburban arterials. These routes fall within the plan's local street design principles.

Local Street System Design Criteria:

- Local streets should connect neighborhoods, provide local circulation and give access to adjacent centers, corridors, station areas and main streets.

- The local street system should be designed to serve local, low speed motor vehicle travel with closely interconnected local streets intersecting at no more than 660-foot intervals. Closed local street systems are appropriate only where topography, environmental or infill limitations exist. Local streets should connect to major and minor arterials and collectors at a density of 8-20 connections per mile.

- Direct freight access on the local residential street system should be discouraged~~, except where alternatives would create an unusual burden on freight movement~~.

- Local streets should comprise 65-80 percent of the motor vehicle system and carry 10-30 percent of the total vehicle miles traveled.*

Regional Public Transportation System

The regional public transportation system is a key component in providing access to the region's most important activity centers, and for 25 years has been the centerpiece to the region's strategies for improving air quality and reducing reliance on the automobile as a mode of travel. Since the construction of the transit mall in the early 1970s, peak-hour transit ridership to downtown Portland has grown to more than 40% of work trips, and the system has expanded to include light rail transit.

In 1994, the region's residents overwhelmingly approved funds to extend light rail as part of the South/North transit project. Public transportation service is also prominent in Metro's 2040 Growth Concept, such that key elements of the concept, including regional centers, town centers, corridors, main streets and station communities, are strongly oriented toward existing and planned public transportation. The overarching goal of the public transportation system within the context of the 2040 Growth Concept is to provide an appropriate level of access to regional activities for everyone residing within the Urban Growth Boundary (UGB).

~~Transit service~~ Public transportation should ~~be provided to~~ serve the entire urban area, and the hierarchy of service types described in this section define what level of service is appropriate for specific areas. The public transportation section is divided into two parts. The first defines the regional public transportation system components that are the basis for implementing the 2040 Growth Concept. The second section provides specific goals and objectives for implementing the

* Metro will test the "system percentage" design criteria as part of the RTP system development phase to verify their appropriateness.

appropriate level and type of public transportation service for each 2040 Growth Concept land use designation.

Regional Public Transportation System Components

The following public transportation system components establishes a network that serves the needs of individual 2040 land use components. This system serves as the framework for consistency among plans of local jurisdictions and Tri-Met. Underlying this network of fast and frequent service is a secondary network of local bus, park-and-ride and demand responsive type service that provide local public transportation. Specific elements of the secondary network will be developed by Tri-Met and local jurisdictions. Tri-Met is the primary public transportation provider for the metropolitan region and is committed to providing the appropriate level of service to achieve regional objectives and to implement the 2040 Growth Concept. However, the RTP recognizes providers other than Tri-Met to serve special transportation needs. While this is not required in the RTP, Metro is committed to helping coordinate agreements to address special needs as they arise. Such special needs may include private, public/private partnerships, or public actions, as appropriate. The following sections present a description of the modes that comprise the regional public transportation system (primary and secondary), the principal 2040 Growth Concept land uses (primary and secondary) served by each mode, and facility design guidelines to provide an appropriate operating environment and level of pedestrian and bicycle accessibility.

Primary Transit Network

The Primary Transit Network (PTN) is a long range transit network designed to serve the growth patterns adopted in the 2040 Growth Concept. The PTN supports intensification of specific land uses identified in the growth concept by providing convenient transit access and improved transit service connectivity. The PTN consists of four major transit modes (e.g., Light Rail Transit (LRT), Regional Rapid Bus, Frequent Bus and primary bus service) that operate at frequencies of 15 minutes or less all day. Specific modes of the PTN will target service to primary land use components of the 2040 Growth Concept including central city, regional centers, industrial areas and intermodal facilities (includes the Portland International Airport). Some secondary land-use components comprised of station communities, town centers, main streets and corridors will also be served by the PTN. Any transit trip between two points in the central city, regional centers, town centers, main streets, stations areas or corridors can be completed on the PTN. The functional and operational characteristics of the PTN's major transit modes are described below.

Light Rail Transit

Light rail transit (LRT) is a high speed and high capacity service that operates on a fixed guideway within an exclusive right-of-way (to the extent possible) that connect the central city with regional centers. LRT also serves existing regional public attractions such as civic stadium, the convention center, and the Rose Garden), and station communities (secondary land use component) LRT service runs at least every 10 minutes during the weekday and weekend midday base periods, operates at higher speed outside of the CBD and makes very few stops. A high level of passenger amenities are provided at transit stations and station communities including schedule information, ticket machines, lighting, benches, shelters, bicycle parking and commercial

services. The speed and schedule reliability of LRT can be maintained by the provision of signal preemption at grade crossings and/or intersections. ~~Other rail options include commuter rail along existing heavy rail lines, which may become economically feasible for serving specific destinations in the greater metropolitan region.~~

Regional Rapid Bus

Regional Rapid Bus provides high frequency, high speed service along major transit routes with limited stops. This service is a high-quality bus that emulates LRT service in speed, frequency and comfort. A high level of transit amenities are provided at major transit stops and at station communities. Regional Rapid Bus passenger amenities include schedule information, ticket machines, lighting, benches, covered bus shelters and bicycle parking.

Frequent Bus

Frequent Bus provides high frequency local service along major transit routes with frequent stops. This services include a high level of transit preferential treatments and passenger amenities along the route such as covered bus shelters, curb extensions, reserved bus lanes, lighting, median stations and/or signal preemption.

Primary Bus

Primary bus service is provided on most major urban streets. This type of bus service operates with maximum frequencies of 15 minutes with conventional stop spacing along the route. Transit preferential treatments and passenger amenities such as covered bus shelters, lighting, signal preemption and curb extensions are appropriate at high ridership locations.

Secondary Transit Network (STN)

The secondary transit network is comprised of secondary bus, mini-bus, paratransit and park-and-ride service. Secondary service is focused more on accessibility, frequency of service along the route and coverage to a wide range of land use options rather than on speed between two points. Secondary transit is designed as an alternative to the single-occupant vehicle by providing frequent, reliable service. Secondary bus service generally is designed to serve travel with one trip end occurring within a secondary land use component.

Secondary Bus

Secondary bus lines provide coverage and access to primary and secondary land use components. Secondary bus service runs as often as every 30 minutes on weekdays. Weekend service is provided as demand warrants.

Minibus

These services provide coverage in lower density areas by providing transit connections to primary, and secondary land use components. Minibus services, which may range from fixed route to purely demand responsive including dial-a-ride, employer shuttles and bus pools,

provide at least a 60 minute response time on weekdays. Weekend service is provided as demand warrants.

Paratransit

Paratransit service is defined as non-fixed route service that serves special transit markets, including "ADA" service throughout the greater metro region.

Park-and-Ride

Park-and-ride facilities provide convenient auto access to regional trunk route service for areas not directly served by transit. ~~Bike and walk~~ Bicycle and pedestrian access as well as ~~bike accommodations for~~ parking and storage accommodations for bicyclists are considered in the siting process of new park-and-ride facilities. In addition, the need for a complementary relationship between park-and-ride facilities and regional and local land use goals exists and requires periodic evaluation over time for continued appropriateness.

Other ~~Transit~~ Public Transportation Options

Other public transportation ~~transit~~ options may serve ~~become economically feasible for serving~~ certain destinations in the metropolitan areas. These services include commuter rail ~~along existing heavy rail lines,~~ and streetcars. ~~passenger rail connecting the region to other urban areas, and inter-city bus service that provide statewide access to the region's rail and air terminals.~~

Interurban Public Transportation

The federal ISTEA has identified interurban travel and passenger "intermodal" facilities (e.g., bus and train stations) as a new element of regional transportation planning. The following interurban components are important to the regional transportation system:

Passenger Rail

Inter-city high-speed rail is part of the state transportation system and will eventually extend from the Willamette Valley north to British Columbia. Amtrak already provides service south to California and east to the rest of the continental United States. These systems should be integrated with other public transportation services within the metropolitan region with connections to passenger intermodal facilities. High-speed rail needs to be complemented by urban transit systems within the region.

Inter-city Bus

Inter-city bus connects points within the region to nearby destinations, including neighboring cities, recreational activities and tourist destinations. Several private inter-city bus services are currently provided in the region.

Passenger Intermodal Facilities

Passenger intermodal facilities serve as the hub for various passenger modes and the transfer point between modes. These facilities are closely interconnected with urban public transportation service and highly accessible by all modes. They include Portland International Airport, Union Station and inter-city bus stations.

Regional Public Transportation System Goals and Objectives

Figure 1.~~12~~3 provides a hierarchy of public transportation service for 2040 Growth Concept land use components. "Core service" is defined as the most efficient level of public transportation service planned for a given land use and is indicated with a solid square(s). Specific goals and objectives reference Figure 1.~~12~~3.

Figure 1.3

Hierarchy of Public Transportation Services and the 2040 Growth Concept

		Primary Components				Secondary Components				Other Urban Components		
		Central City	Regional Centers	Industrial Areas	Intermodal Facilities	Station Communities	Town Centers	Main Streets	Corridors	Employment Areas	Inner Neighborhood	Outer Neighborhood
Service Types	LRT	■	■		□**	■	□					
	Regional Rapid Bus	■	■			□			□			
	Frequent Bus	■	■			□	□	■	□			
	Primary Bus	■	■	□		□	■	□	■			
	Secondary Bus	□	□	■	■	□	□	□	□	■	■	□
	Mini-bus	□	□	□		□	□	□	□	■	□	■
	Paratransit	□	□	□		□	□	□	□	□	□	□
	Park-and-Ride		□			□	□		□		□	■

■ *Best public transportation mode(s) designed to serve growth concept land use components*

□ *Additional public transportation mode(s) that may serve growth concept land use components*

** *Anticipated LRT services to Portland International Airport*

Goal 1: Develop a public transportation system that provides regional access to ~~serves~~ 2040 Growth Concept primary land use components (central city, regional centers, industrial areas, intermodal facilities) and special regional destinations (such as major colleges or entertainment facilities) with an appropriate level, quality and range of public transportation ~~available~~.

1. **Objective:** Provide a full range of public transportation services to the central city with core service provided by LRT, Regional Rapid Bus and Frequent Bus.

2. **Objective:** Provide a full range of public transportation services to regional centers with core service provided by LRT, Regional Rapid Bus, Frequent Bus and primary bus.

3. **Objective:** Serve industrial areas with primary and secondary public transportation services with core service provided by secondary bus.

4. **Objective:** Serve intermodal facilities with a mix of primary public transportation services with core service to freight facilities provided by secondary bus and core service to the Portland International Airport (passenger facility) provided by LRT.

5. **Objective:** Ensure that existing regional destinations located outside of the primary land use areas are served with LRT, rapid bus, frequent bus or primary bus.

Goal 2: Develop a public transportation system to provide community access to ~~serve~~ the 2040 Growth Concept secondary land use components (station communities, town centers, main streets, corridors) and special community destinations (such as local colleges or entertainment facilities) with high quality ~~transit~~ service.

1. **Objective:** Develop a network of primary and secondary public transportation services to growth concept station communities with core service provided by either LRT and/or Regional Rapid Bus.

2. **Objective:** Develop a network of primary and secondary public transportation services to growth concept town centers with core service provided by primary bus.

3. **Objective:** Develop a network of primary and secondary public transportation services to growth concept main streets with core service provided by Frequent Bus.

4. **Objective:** Develop a network of primary and secondary public transportation services to growth concept corridors with core service provided by primary bus.

5. **Objective:** Ensure that existing community destinations located outside of the secondary land use areas are served with frequent bus or primary bus.

Goal 3: Develop a reliable, convenient and accessible system of secondary public transportation ~~service~~ that provides access to ~~serve~~ the 2040 Growth Concept "other urban components" (e.g., employment areas, outer neighborhoods and inner-neighborhoods).

1. **Objective:** Provide secondary public transportation services to employment areas with core service provided by mini-bus.

2. **Objective:** Provide secondary public transportation services to inner neighborhoods with core service provided by secondary bus.

3. **Objective:** Provide secondary public transportation services to outer neighborhoods with core service provided by mini-bus.

4. **Objective:** As appropriate, consider providing secondary bus or other public transportation alternatives to serve outlying regional destinations.

Goal 4: Continue to develop fixed-route service and complementary paratransit services which comply with the Americans with Disabilities Act of 1990 (ADA).

1. **Objective:** Provide service to persons determined to be eligible for ADA paratransit that is comparable with service provided on the fixed route system.

2. **Objective:** Continue to work with local jurisdictions to make public transportation stops and walkway approaches accessible.

Goal 5: Continue efforts to maintain transit as the safest forms of motorized transportation in the region.

1. **Objective:** Improve the existing level of safe public transportation operations.

2. **Objective:** Reduce the number of ~~reportable~~ avoidable accidents involving transit vehicles.

3. **Objective:** Improve the existing level of passenger safety and security on ~~the~~ public transportation ~~system~~.

Goal 6: Expand the amount of information available about ~~the~~ public transportation ~~system~~ to allow more people to use the system.

1. **Objective:** Increase awareness of public transportation and how to use it through expanded education and public information media and easy to understand schedule information and format.

2. **Objective:** Improve the system for receiving and responding to feedback from public transportation ~~riders~~ users.

3. **Objective:** Explore new technologies to improve the availability of schedule, route, transfer and other service information.

Goal 7: Continue efforts to make public transportation an environmentally friendly form of motorized transportation.

1. **Objective:** Continue to reduce the amount of air pollutants and noise generated by public transportation vehicles.

Regional Freight System

Developing and adopting the Regional Freight Network and associated system goals and objectives acknowledges that the movement of goods and services makes a significant contribution to the region's economy and wealth, and that it contributes to our quality of life. The region's relative number of jobs in transportation and wholesale trade exceeds the national average. The regional economy has historically, and continues to be closely tied to the transportation and distribution sectors. This trend is projected to increase. Freight volume is projected (by the 2040 Commodity Flow Analysis) to grow two to three times by 2040 - a rate faster than population growth.

The significant growth in freight projected by the 2040 Commodity Flow Analysis indicates the need to make available adequate land for expansion of intermodal facilities, manufacturing, wholesale and distribution activities, and to continue maintaining and enhancing the freight transportation network. The 2040 Land Use Scenario identifies industrial sanctuaries for distribution and manufacturing activities; the RTP freight network identifies the transportation infrastructure and intermodal facilities that serve these land uses and commodities flowing through the region to national and international markets. The following goals and objectives direct the region's planning and investment in the freight transportation system.

Regional Freight System Goals and Objectives

Goal 1: Provide efficient, cost-effective and safe movement of freight in and through the region.

1. **Objective:** Maintain a reasonable and reliable travel (transit) time for moving freight through the region in freight transportation corridors.

   - Freight Operation (such as weigh-in-motion, automated truck counts, enhanced signal timing on freight connectors)

   - Where appropriate, consider improvements that are dedicated to freight travel only

2. **Objective:** ~~Include~~ Consider the movement of freight when conducting multi-modal transportation studies, as identified in the RTP of local transportation system plans (TSPs).

3. **Objective:** Work with the private sector, local jurisdictions, ODOT and other public agencies to:

   - develop the regional Intermodal Management System (IMS) and Congestion Management System (CMS);

   - monitor the efficiency of freight movements on the regional transportation network;

- identify existing and future freight mobility problems and opportunities; and

- reduce inefficiencies or conflicts on the freight network.

4. **Objective:** ~~Implement TSM improvements that enhance the efficiency of the existing infrastructure;~~ cCoordinate public policies to reduce or eliminate conflicts between current and future land uses, transportation uses and freight mobility needs, including those relating to:

   - land use changes/encroachments on industrial lands; and

   - transportation and/or land use actions or policies that reduce accessibility to terminal facilities or reduce the efficiency of the freight system ~~result in lower speeds or less service on the freight network~~.

5. **Objective:** Ensure that jurisdictions develop local strategies that provide adequate freight loading and parking strategies in the central city, regional centers, town centers and main streets.

Goal 2: Maintain and enhance the region's competitive advantage in freight distribution through efficient use of a flexible, continuous, multi-modal transportation network that offers competitive choices for freight movement.

1. **Objective:** Provide high-quality access between freight transportation corridors and the region's intermodal facilities and industrial sanctuaries.

Goal 3: Protect and enhance public and private investments in the freight network.

1. **Objective:** Improve opportunities for partnerships between the private freight transportation industry and public agencies to improve and maintain the region's integrated multi-modal freight network:

   - Work with the private transportation industry, Oregon Economic Development Department, Portland Development Commission, the Port of Portland and others to identify and realize investment opportunities that enhance freight mobility and support the state and regional economy.

2. **Objective:** Analyze market demand and linkages in estimating and expanding the life of public investments in the freight network.

3. **Objective:** Encourage efforts to provide flexible public funding for freight mobility investments.

~~4. **Objective:** Give priority to investments, projects and actions that enhance efficient freight movement on the designated regional freight network.~~

- ~~Where appropriate, make improvements to main freight routes that minimize freight/non-freight conflicts on connector routes.~~

Goal 4: ~~Ensure~~Promote the safe operation of the freight system.

1. **Objective:** Correct existing safety deficiencies on the freight network relating to:
   - roadway geometry and traffic controls;
   - bridges and overpasses;
   - at-grade railroad crossings;
   - truck ~~traffic~~ infiltration in neighborhoods;
   - congestion on interchanges and hill climbs; and
   - hazardous materials movement.
2. **Objective:** Identify and monitor potential safety problems on the freight network:
   - Collect and analyze accident data related to the freight network using the IMS data base.

Regional Bicycle System

The bicycle is an important component in the region's strategy to provide a multi-modal transportation system. The 2040 growth concept focuses growth in the central city and regional centers, station communities, town centers and main streets. One way to meet the region's travel needs is to provide greater opportunity to use bicycles for shorter trips.

The regional bikeway system identifies a network of bikeways throughout the region that provide for bicyclist mobility between and accessibility to and within the central city, regional centers and town centers. A complementary system of on-street regional bikeway corridors, regional multi-use trails and local bikeways is proposed to provide a continuous network. In addition to major bikeway corridors that create a network of regional through routes, the system provides accessibility to and within regional and town centers. ~~Adoption of the Regional Bicycle Plan element of the RTP continues the region's recognition of bicycling as an important transportation alternative.~~ Metro's 1994 travel behavior survey found that places in the region with good street continuity, ease of street crossing and gentle topography experience more than a three percent bicycle mode share, while lower density areas experience around one percent bicycle mode share. A greater understanding of bicycle travel is still needed, and development of a regional bicycle forecasting model is underway. Implementation of the regional bicycle plan element of the RTP will provide for consistently designed, safe and convenient routes for bicyclists between jurisdictions and to major attractions throughout the region, will work toward

increasing the modal share of bicycle trips, and will encourage bicyclists and motorists to share the road safely.

Regional Bicycle System Goals and Objectives

Goal 1: Provide a continuous regional network of safe and convenient bikeways integrated with other transportation modes and local bikeway systems.

1. **Objective:** Integrate the efforts of the state, counties and cities in the region to develop a convenient, safe, accessible and appealing regional system of bikeways.

2. **Objective:** Ensure that the regional bikeway system functions as part of the overall transportation system.

Goal 2: Increase the modal share of bicycle trips.

1. **Objective:** Develop and update a system of regional bikeways that connect activity centers as identified in the 2040 Growth Concept and the Regional Framework Plan.

2. **Objective:** Promote increased bicycle use for all travel purposes.

3. **Objective:** Coordinate with Tri-Met to ensure improved bicycle access and parking facilities at existing and future LRT stations, transit centers and park-and-ride locations.

4. **Objective:** Develop travel-demand forecasting for bicycles use and integrate with regional transportation planning.

Goal 3:Ensure that all transportation projects include bicycle facilities using established design standards appropriate to regional land use and street classifications.

1. **Objective:** Ensure that bikeway projects, bicycle parking and other end-of-trip facilities are designed using established standards, and that bikeways are connected with other jurisdictions and the regional bikeway network.

2. **Objective:** Ensure that jurisdictions implement bikeways in accordance with established design standards.

3. **Objective:** Ensure integration of multi-use paths with on-street bikeways using established design standards.

5. **Objective:** Provide appropriate short and long term bicycle parking and other end-of-trip facilities at regional activity centers through the use of established design standards.

Goal 4: Encourage bicyclists and motorists to share the road safely.

1. **Objective:** Coordinate regional efforts to promote safe use of roadways by bicyclists and motorists through a public awareness program.

2. **Objective:** Expand upon local traffic education programs to provide region wide coverage and actively distribute safety information to local jurisdictions, law enforcement agencies, schools and community organizations that informs and educates bicyclists, pedestrians and motorists.

3. **Objective:** Reduce the ~~number~~ rate of bicycle-related accidents in the region.

4. **Objective:** Identify and improve high-frequency bicycle-related accident locations.

Regional Pedestrian ~~Program~~System

By providing dedicated space for those on foot or using mobility devices, pedestrian facilities are recognized as an important incentive that promotes walking as a mode of travel. Throughout this document, the term "walking" should be interpreted to include traveling on foot as well as those pedestrians using mobility aids, such as wheelchairs. Walking for short distances is an attractive option for most people when safe and convenient pedestrian facilities are available. Combined with adequate sidewalks and curb ramps, amenities such as benches, curb extensions, marked street crossings, landscaping and wide planting strips make walking an attractive and convenient mode of travel. The focus of the regional pedestrian systemprogram is identifying areas of high, or potentially high, pedestrian activity in order to target infrastructure improvements that can be made with regional funds.

A well-connected, high–quality pedestrian environment facilitates walking trips by providing safe and convenient access to pedestrian destinations within a short distance. Public transportation use is enhanced by pedestrian improvements, especially those facilities that connect stations or bus stops to surrounding areas or that provide safe and attractive waiting areas. Improving walkway connections between office and commercial districts and surrounding neighborhoods provides opportunities for residents to walk to work, shopping or to run personal errands. This reduces the need to bring an automobile to work and enhances public transportation and carpooling as commute options. An integrated pedestrian system supports and links every other element of the regional transportation system and complements the region's urban form and growth management goals.

Regional Pedestrian ~~Program~~ System Goals and Objectives

Goal 1: Increase walking for short trips and improve access to the region's public transportation system through pedestrian improvements and changes in land use patterns, designs and densities.

1. **Objective:** Increase the walk mode share for short trips, including walking to public transportation, near and within the central city, regional centers, town centers, main streets, corridors and LRT station communities.

2. **Objective:** Improve ~~pedestrian~~ walkway networks serving ~~those~~ transit centers, stations and stops ~~with high frequency transit service~~.

Goal 2: Make the pedestrian environment safe, convenient, attractive and accessible for all users.

1. **Objective:** Complete pedestrian facilities (i.e., sidewalks, street crossings, curb ramps) needed to provide safe and convenient pedestrian access to and within the central city, regional centers, town centers, main streets, corridors and to the region's ~~primary~~ public transportation network.

2. **Objective:** Improve street amenities (e.g., landscaping, pedestrian-scale street lighting, benches and shelters) affecting the pedestrian and transit user near and within the central city, regional centers, town centers, main streets, corridors and the primary transit network.

Goal 3: Provide for pedestrian access, appropriate to existing and planned land uses, street classification and public transportation ~~service~~, as a part of all transportation projects.

1. **Objective:** Focus priority among regionally funded pedestrian projects on those projects which are most likely to increase pedestrian travel, improve the quality of the pedestrian system, and help complete pedestrian networks near and within the central city, regional centers, town centers, main streets, corridors and LRT station communities.

2. **Objective:** Integrate pedestrian access needs into planning, programming, design and construction of all transportation projects.

Goal 4: Encourage motorists, bicyclists and pedestrians to share the roadway safely.

1. **Objective:** Coordinate regional efforts to promote safe use of roadways by motorists, bicyclists and pedestrians through a public awareness program.

2. **Objective:** Expand upon local traffic education programs to provide region wide coverage, and actively distribute safety information to local jurisdictions, law enforcement agencies, schools and community organizations that informs and educates motorists, bicyclists and pedestrians.

Regional Transportation Demand Management Program

~~The following describes the goals, objectives and performance measures for the region's transportation demand management program.~~

Regional Transportation Demand Management

Transportation demand management (TDM) is not one action, but rather a series of actions to promote shared ride and the use of alternative modes, especially during the most congested times of the day. The term TDM encompasses the strategies, techniques and supporting actions that

encourage non–single occupant vehicle travel (i.e., transit, walk, bike, carpool and telecommute), as well as measures to reduce per-capita vehicle miles traveled (VMT).

The primary benefit of managing travel demand is to minimize the need to expand the capacity of the region's transportation system (i.e., building new highways or adding lanes to existing highways) and make more efficient use of non–SOV modes (transit, walk, bike, carpool and telecommute) of travel. Managing travel demand will also help the region reduce overall per-capita vehicle travel, reduce air pollution and maximize energy conservation in a relatively low–cost manner.

An important consideration for selecting demand management measures is to combine those that are mutually supportive into a comprehensive program. This approach is important to the success of TDM because of the close linkages between many TDM measures and programs at the regional and local level. Therefore, local jurisdictions should consider the design of demand management measures in a comprehensive manner in the preparation of local system plans and incorporate policies that implement those combinations of TDM measures that best support regional goals and that meet local needs for both work and non-work travel.

In addition, the state's Transportation Planning Rule (TPR) requires a 10 percent reduction in VMT per capita by 2015 and a 10 percent reduction in parking spaces per capita by 2015. In order to provide for maximum achievement of the TPR, air quality and accessibility goals, local jurisdictions should incorporate policies that support and help implement the TDM measures and projects listed in Chapter 5.

The following describesthe region's TDM program goals, and objectives ~~and performance measures~~. Goals and objectives are in part to assist the region to meet state goals for reducing parking and vehicle miles per capita. It is understood that TDM strategies will be area specific following further analysis as part of the systems element of the RTP (scheduled to be completed in December 1996). Consequently, many of the TDM policies may not be applicable to areas such as the Central City where significant transportation demand management, public transportation and other alternative mode actions are in place as a result of the Central City Transportation Management Plan (CCTMP).

Regional TDM Program Goal and Objectives

The function of TDM support programs are to: (1) provide the physical amenities necessary to make non-SOV modes more attractive; (2) provide incentives (monetary and non-monetary) to encourage people to use non-SOV modes; ~~and~~ (3) remove barriers such as regulation and/or restrictions that would make it more difficult for people to choose non-SOV modes; and (4) reduce travel demand.

TDM support programs are designed to help the region achieve the TPR VMT per capita and parking space per capita reduction goals, complement local jurisdiction efforts to assist employers in implementing measures to meet DEQ's Employee Commute Options (ECO) rule, and to help the region achieve its 2040 Growth Concept land use accessibility goals.

Goal 1: Enhance mobility and support the use of alternative transportation modes by improving regional accessibility to public transportation, carpooling, telecommuteing, bicycleing and ~~pedestrian~~ walking options.

1. **Objective:** Provide transit supportive design and infrastructure in 2040 Growth Concept central city, regional centers, town centers, station communities, main streets and along designated transit corridors.

2. **Objective:** Develop and encourage local access to Tri-Met's regional carpool matching database.

3. **Objective:** Coordinate with Tri-Met on the provision of regional vanpool service to major employment centers.

Goal 2: Promote policies and strategies that reduce travel by single occupant vehicles (SOV) in order to help the region achieve the 10 percent reduction in vehicle miles traveled (VMT) per capita and 10 percent reduction in parking spaces per capita as required by the Transportation Planning Rule (TPR) over the planning period, and that improve air quality.

1. **Objective:** Implement appropriate parking ratios and investigate other measures throughout the region that reduce parking demand or lead to more efficient parking design options.

2. **Objective:** Support efforts to provide maximum allowable tax benefits and subsidies to users of alternative modes of transportation

3. **Objective:** Conduct further study of market-based strategies such as parking pricing, congestion pricing and parking-cash out as measures to promote more compact land use development, increase alternative mode shares, ~~and to~~ reduce VMT and encourage more efficient use of resources.

4. **Objective:** Investigate the use of HOV lanes to reduce roadway congestion.

Goal 3: Provide incentives for employers and developers to build/locate in the 2040 Growth Concept central city, regional centers, town centers, station communities and transit corridors to promote more compact land use.

1. **Objective:** Provide density bonus for employers and developers who locate or build in the central city, regional centers, town centers, station communities and along transit corridors.

2. **Objective:** As conditions permit, provide lower than average~~reduce the average~~ local traffic impact fees for development in the 2040 Growth Concept central city, regional centers, town centers, station communities and transit corridors.

3. **Objective:** Include transit oriented design guidelines in local development approval process.

Goal 4: Continue to coordinate efforts to promote TDM at the regional and local level.

1. **Objective:** Continue to use the TDM Subcommittee as a forum to discuss TDM issues and implementation procedures.

2. **Objective:** Provide TDM materials that outline available ~~the~~ regional programs and services to the public and to local jurisdictions in the region ~~that are available~~.

Goal 5: Implement TDM support programs to reduce the need to travel, and to make it more convenient for people to use alternative modes for all trips throughout the region.

1. **Objective:** Encourage development of public/private TDM partnerships with service providers.

2. **Objective:** Promote the establishment of Transportation Management Associations (TMAs) in areas identified as major employment, retail and/or regional centers.

3. **Objective:** Work with local jurisdictions and neighborhood organizations to develop citizen outreach efforts to provide options and marketing material to residential areas.

4. **Objective:** Promote flexible work hours and/or compressed work weeks for employees with public and private sector employers.

5. **Objective:** Work with local employers to promote telecommuteing as a viable option for commuting (this can include the establishment of centralized telecommute centers).

6. **Objective:** Allow use of HOV lanes by motorcycles with single riders in order to further reduce congestion.

Goal 6: Increase public knowledge and understanding about TDM as a tool to reduce congestion, reduce air pollution, implement the 2040 Growth Concept and to help the region meet the TPR VMT per capita and parking per capita reduction targets.

~~1. Objective: Expand Tri-Met's public outreach and education program.~~

~~2~~1. **Objective:** Maintain information on TDM services available for local employers.

~~3~~2. **Objective:** Promote public sector involvement in employer-based TDM programs and provide examples of successful programs.

TDM Infrastructure/ Support Programs

~~Parking Management~~

~~*[Note: the parking section is still being developed and coordinated with the results of the parking inventory and implementation of Growth Concept interim measures for parking.]*~~

~~The state's Transportation Planning Rule (TPR) requires that the Regional Transportation Plan (RTP) include methods to reduce parking spaces per capita by 10 percent over the next 20 years. The requirement is one aspect of the rule's overall objective to reduce single-occupant vehicle travel, promote alternative modes and encourage pedestrian friendly urban areas. However, the mode of travel used to make a trip is directly influenced by the convenience and cost of parking. As parking in densely developed areas becomes less convenient and more costly, alternative modes of travel become relatively more attractive. In addition, as alternative modes of travel are increasingly used for work trips, scarce parking spaces are released for shopping and other non-work purposes. Parking management is therefore particularly important in areas that are currently developed at high densities (Central City) and in areas planned for new high-density development such as Regional Centers and Town Centers.~~

~~In addition, parking management programs should be complementary to other TDM strategies aimed at meeting DEQ's Parking Ratio Rule and to those aimed at increasing both ridesharing and public transportation use.t~~

Regional Parking Management

The State Transportation Planning Rule (TPR) requires that the Regional Transportation Plan (RTP) include methods to reduce non-residential parking spaces per capita by 10 percent over the next 20 years (by 2015). The requirement is one aspect of the rule's overall objective to reduce per-capita vehicle miles traveled (VMT), promote alternative modes and encourage pedestrian and bicycle friendly development.

The mode of travel is directly influenced by the convenience and cost of parking. As auto parking in densely developed areas becomes less convenient and more costly, alternative modes of travel (e.g., public transportation, bicycle, walk and telecommute) become relatively more attractive. In addition, as alternative modes of travel are used more for work and non-work trips, the demand for scarce parking decreases. The reduction in demand will allow the region to develop more compactly and provide the opportunity for redevelopment of existing parking into other important and higher end uses.

The regional parking management program is designed to be complementary to the Transportation Demand Management (TDM) element of the RTP, meet the 10 percent reduction in parking spaces per capita required by the Transportation Planning Rule (TPR), assist with implementation of the Department of Environmental Quality's voluntary parking ratio program contained in the region's Ozone Maintenance Plan, and support the implementation of the "Interim Parking" measures adopted in ~~the Regional Framework Plan~~ Urban Growth Management Functional Plan.

Regional Parking Goals and Objectives

Goal 1: Reduce the demand for parking by increasing the use of alternative modes for accessing the central city, regional centers, town centers, main streets and employment areas.

1. Objective: Encourage the designation of preferential parking stalls for carpool, vanpool, motorcycle, bicycle and moped parking at major retail centers, institutions and employment centers.

2. Objective: Consider the redesignation of existing parking as park-and-ride spaces.

3. Objective: Consider the use of timed parking zones.

Goal 2: Reduce the number of off-street parking spaces per capita.

1. Objective: Promote the use and development of shared parking spaces for commercial and retail land uses.

2. Objective: Require no more parking in designated land uses than the minimum as shown in the Regional Parking Standards Table shown in Title 2 of the Urban Growth Management Functional Plan

3. Objective: Establish parking maximums at ratios no greater than those listed in the Urban Growth Management Functional Plan parking standards table under Zone A (Appendix 1)

   (note: Parking spaces are subject to the regional parking maximums. Parking spaces in structures may apply for limited increases in this ratio, not exceeding 20%. Parking for vehicles that are for sale, lease, or rent are exempt from the standard). The criteria for zone A is defined as:

   - within 1/4 mile of bus stops with 20 minute or less headways in the A.M. and P.M. peak hours with existing service or an adopted Tri-Met 5-year service plan; or
   - within 1/2 mile of light rail stations; or
   - within a 2040 Growth Concept design type (except neighborhoods).

   (Distances are calculated along public rights-of-way and discounted for steep slopes. It is recommended that cities or counties also include within Zone A non-residential areas with a good pedestrian environment within a 10-minute walk of residential areas with street and sidewalk designs and residential densities which can be shown to have significant non-auto mode choices. Zone B is the rest of the region)

5. Objective: Establish parking maximums *(see notation in Objective 2)* at ratios no greater than those listed in the Regional Parking Standards Table under Zone B for areas outside of Zone A.

Goal 3: Provide regional support for implementation of the voluntary parking provisions of the Portland region's Ozone Maintenance Plan.

1. Objective: Allow property owners who elect to use the minimum parking ratios shown in the Regional Parking Standards Table as maximum ratios to be exempted from the Employee Commute Options (ECO) program.

2. Objective: Provide priority DEQ permit processing to land owners who elect to use the minimum parking ratios as maximum ratios.

Goal 4: Manage and optimize the efficient use of public and commercial parking in the central city, regional centers, town centers, main streets and employment centers to support the 2040 Growth Concept and related RTP goals and objectives.

1. Support local adoption of parking management plans within the central city, regional centers, town centers, main streets and employment centers.

Glossary

METRO

Chapter 1 Glossary

Accessibility - The ability to move easily from one mode of transportation to another mode or to a given land use destination. This is determined by the spatial distribution of potential destinations, the ease of reaching each destination and the magnitude, quality and character of the activities found there. The less that travel costs in time and money, the more places that can be reached within a certain budget, the greater the accessibility. Accessibility is governed by both land use patterns and the number of travel alternatives provided by the transportation system.

Access Management - The principles, laws and techniques used to control access off and onto streets, roads and highways from roads and driveways. One of the primary purposes of controlling access is to reduce conflicts between motor vehicles, pedestrians and bicyclists. Examples of access management include limiting or consolidating driveways, selectively prohibiting left turn movements at and between intersections and using physical controls such as signals and raised medians.

Air Quality Conformity - This term refers to the Clean Air Act Amendments of 1990 which require the metropolitan region to document with computer modeling that regionally significant transportation projects, if built, would result in (1) automotive emissions lower than those estimated to have occurred in 1990; (2) lower emissions than would result without building the project; and (3) total emissions lower than the "mobile source budget" adopted in the regional air quality maintenance plan.

Alternative Transportation Mode - This term refers to all passenger modes of travel except for single occupancy vehicle, including bicycling, walking, public transportation, carpooling and vanpooling.

Advanced Traffic Management System (ATMS) - This term refers to traffic management techniques that use computer processing and communications technologies to optimize performance of motor vehicle, freight and public transportation systems. ATMS is a subset of Intelligent Transportation System (ITS) technologies and must be addressed as one of the sixteen ISTEA planning factors.

Americans With Disabilities Act (ADA) of 1990 - Civil rights legislation enacted by the U.S. Congress that mandates the development of a plan to address discrimination and equal opportunity for disabled persons in employment, transportation, public accommodation, public services and telecommunications. Tri-Met's ADA transportation plan outlined the requirements of the ADA as applied to Tri-Met services, the deficiencies of the existing services when compared to the requirements of the new Act and the remedial measures necessary to bring Tri-Met and the region into compliance with the Act. Metro, as the region's Metropolitan Planning Organization (MPO) is required to review Tri-Met's ADA Paratransit Plan annually and certify that the plan conforms to the Regional Transportation Plan. Without this certification, Tri-Met cannot be found to be in compliance with the ADA. ADA also affects the design of pedestrian facilities being constructed by local governments.

Bicycle - A vehicle having two tandem wheels, a minimum of 14" in diameter, propelled solely by human power, upon which a person or persons may ride. A three-wheeled adult tricycle is considered a bicycle. In Oregon, a bicycle is legally defined as a vehicle. Bicyclists have the same right to the

roadways and must obey the same traffic laws as the operators of other vehicles.

Bicycle Facilities - A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities, all bikeways and shared roadways not specifically designated for bicycle use.

Bike Lane - A portion of a roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

Bicycle Network - A system of connected bikeways that provide access to and from local and regional destinations and to adjacent bicycle networks.

Bikeway - A bikeway is created when a road has the appropriate design treatment for bicyclists, based on motor vehicle traffic volumes and speeds. On-road bikeways include shared roadway, shoulder bikeway, bike lane or bicycle boulevard design treatments. Another type of bikeway design treatment, the multi-use path, is separated from the roadway.

Capacity - The maximum number of vehicles (vehicle capacity) or passengers (person capacity) that can pass over a given section of roadway or transit line in one or both directions during a given period of time under prevailing roadway and traffic conditions.

Central City Transportation Management Plan (CCTMP) - A plan created by the city of Portland to establish an overall policy framework in which to support growth in the Central City while managing its parking and transportation system.

Citizen Advisory Committee (CAC) - Selected for a specific issue, project, or process, a group of citizens volunteer and are appointed by Metro to represent citizen interests. The RTP citizen advisory committee reviews regional transportation issues.

Clean Air Act Amendments of 1990 - Amendments to the Clean Air Act which specify that no transportation project, whether federally or locally funded, may interfere with attainment or maintenance of federal air quality standards. With respect to transportation planning, this requirement means that the Federal Highway Administration and the Federal Transit Administration must affirm that all regionally significant transportation projects must be identified in the Metro Transportation Improvement Program and must be demonstrated to conform with the 1982 Oregon State (Air Quality) Implementation Plan (SIP). Note: The SIP is currently being amended to show Portland-area attainment of national air quality standards and methods adopted to maintain the standards for a 20-year period. EPA approval of the SIP amendment is expected in late 1997.

Community - For the purposes of the RTP, this term refers to informal subareas of the region, and may include one or more incorporated areas and adjacent unincorporated areas that share transportation facilities or other urban infrastructure. For example, references to the east Multnomah County community usually includes the cities of Gresham, Troutdale, Fairview and Wood Village, and unincorporated areas that abut these jurisdictions (see "Regional").

Congestion Management System (CMS) - The CMS is one of the six management systems required by ISTEA. The CMS is to provide "information on transportation system performance and alternative strategies to alleviate congestion and enhance mobility." A key provision of CMS is that consideration must be given to a variety of demand reduction and operational management strategies as alternatives to increases in single occupant vehicle capacity when addressing deficiencies. This includes methods to monitor and evaluate performance, identify alternative actions, assess and implement cost-effective actions and evaluate the effectiveness of implemented actions.

Congestion Pricing - A transportation management tool which applies market pricing principles to roadway use. This tool involves the use of user surcharges or tolls on congested facilities during peak traffic periods. The theory of peak period pricing suggests that charging drivers per mile of travel during the congested times of the day will relieve traffic congestion by discouraging some vehicle trips and shifting others to alternative modes, facilities, destinations or times of travel.

Density Bonus - This term refers to allowing developers to build at higher densities than stated in local zoning code. This incentive is designed to promote more compact development, reduce trip lengths and promote alternative modes of travel.

Employee Commute Options (ECO) Rule - The ECO Rule is part of House Bill 2214 which was adopted by the 1992 Legislature. The Rule directs the Department of Environmental Quality to institute an employee trip reduction program. The Rule is designed to reduce 10 to 20 percent of commuter trips for all businesses that employ 50 or more persons at a single site.

Freight Intermodal Facility - An intercity facility where freight is transferred between two or more modes (e.g., truck to rail, rail to ship, truck to air, etc.)

Functional Plan - A limited purpose multi-jurisdictional plan for an area or activity having significant district-wide impact upon the orderly and responsible development of the metropolitan area that serves as a guideline for local comprehensive plans consistent with ORS 268.390.

Greater Metropolitan Region - Defined as the greater area surrounding and including Metro's jurisdictional area, including parts of Multnomah, Clackamas and Washington counties as well as urban areas in Marion, Columbia and Yamhill counties (see "Metropolitan Region").

Growth Concept - A concept for the long-term growth management of our region, stating the preferred form of the regional growth and development, including if, where, and how much the urban growth boundary should be expanded, what densities should characterize different areas, and which areas should be protected as open space.

High Occupancy Vehicle (HOV) - This term refers to vehicles that are carrying two or more persons, including the driver. An HOV could be a transit bus, vanpool, carpool or any other vehicle that meets the minimum occupancy requirements of the specific facility. In practice, only vehicles with two or three or more persons would be able to use a designated "HOV" travel lane.

Intermodal Facility - A transportation element that accommodates and interconnects different modes of transportation and serves the statewide, interstate and international movement of people and goods. *See also passenger intermodal facility and freight intermodal facility definitions.*

Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 - The ~~most recent~~ federal highway/~~transit~~public transportation funding reauthorization; which among other features~~provides regions and states with additional funding~~ funds the national highway system and gives states and local governments more flexibility in making transportation decisions. The Act places significant emphasis on broadening public participation in the transportation planning process to include key stakeholders, including the business community, community groups, transit operators, other governmental agencies and those who have been traditionally underserved by the transportation system. Among other things, the Act requires the metropolitan area planning process to consider such issues as land use planning, energy conservation, intermodal connectivity; and ~~methods to~~ enhancement of transit service;. Finally, the Act integrates transportation planning with achievement of the air quality conformity requirements embodied in the Clean Air Act Amendments of 1990 and State air quality plans. ~~and needs identified through the management systems~~.

Joint Policy Advisory Committee on Transportation (JPACT) - A 17-member committee that consists of ~~local-area~~ elected officials from area cities and counties as well as leaders from public agencies in the region with an interest in transportation., ~~Metro councilors and other transportation officials who coordinate transportation decisions for the region~~. This committee's role is to evaluate transportation needs and coordinate transportation decisions for the region, and give recommendations to the Metro Council.

Land Conservation and Development Commission (LCDC) - The 7-member directorship of Oregon's statewide planning program. The LCDC is responsible for approving comprehensive land use plans promulgating regulations for each of the statewide planning goals.

Local Comprehensive Plan - A generalized, coordinated land use map and policy statement of the governing body of a city or county that inter-relates all functional and natural systems and activities related to the use of land, consistent with state law.

Metro -The regional government and designated Metropolitan Planning Organization (MPO - see below) of the Portland metropolitan area. It is governed by a 7-member Metro Council (see below) elected by and representing districts within Metro's jurisdictional boundaries: Multnomah County and generally the urban portions of Clackamas and Washington Counties. Metro is responsible for the Washington Park Zoo, solid waste landfills, the Oregon Convention Center, the Portland Center for the Performing Arts, establishing and maintaining the Urban Growth Boundary (UGB - see below), and for regional transportation planning activities such as the preparation of the RTP (see below), and the planning of regional transportation projects including light-rail.

Metro Committee for Citizen Involvement (MCCI) - A committee composed of citizen representatives from the Tri-Counties area, to "advise and recommend actions to the Metro Council on matters pertaining to citizen involvement."

Metro Council - A committee composed of 7 members (formerly 13) elected from districts throughout the metropolitan region (urban areas of Clackamas, Multnomah and Washington counties). The Council approves Metro policies, including transportation plans, projects and programs recommended by the Joint Policy Advisory Committee on Transportation (JPACT - see above).

Metro Policy Advisory Committee (MPAC) - A committee Eestablished by the Metro Charter and composed of local elected officials (including representatives from Clark County, WA and the State of Oregon), MPAC is responsible for recommending to the Metro Council adoption of or amendment to any element of the Charter-mandated Regional Framework Plan.

Metropolitan Planning Organization (MPO) - An individual agency designated by the state governor in each federally recognized urbanized area to coordinate transportation planning for that metropolitan region. Metro (see above) is that agency for Clackamas, Washington and Multnomah Counties; for Clark County, Washington, that agency is the Southwest Washington Regional Transportation Council (SWRTC, formally the Intergovernmental Resource Center - see below).

Metropolitan Region - Defined as the area included within Metro's jurisdictional boundary, including parts of Multnomah, Clackamas and Washington counties (see "Greater Metropolitan Region").

Metropolitan Transportation Improvement Program (MTIP) - A staged, multi-year, intermodal program of transportation projects which is consistent with the metropolitan transportation plan.

Mobility - The ability to move people and goods from place to place, or the potential for movement. Mobility reflects the spatial structure of the transportation network and the level and quality of its service. Mobility is determined by such characteristics as road capacity and design speed.

Motor Vehicle Level of Service (LOS) - A qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A level of service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort, convenience and safety. An LOS rating of "A" through "F" describes the traffic flow on streets and highways and at intersections. The following table describes general traffic flow characteristics for each level of service on a street or highway:

LOS	Traffic Flow Characteristics
A	Virtually free flow; completely unimpeded
B	Stable flow with slight delays; reasonably unimpeded
C	Stable flow with delays; less freedom to maneuver
D	High density but stable flow
E	Operating conditions at or near capacity; unstable flow
F	Forced flow, breakdown conditions
Greater than F	Demand exceeds roadway capacity, limiting volume than can be carried and forcing excess demand onto parallel routes and extending the peak period

Source: 1985. Highway Capacity Manual (A through F descriptions)
Metro (>F Description)

Multi-use Path - A ~~bikeway~~ path that is physically separated from motor vehicle traffic by an open space or barrier and is either within the highway right-of-way or within an independent right-of-way, used by bicyclists, pedestrians, joggers, skaters and other non-motorized travelers.

Neighbor City - Nearby incorporated cities with separate urban areas from the Metro urban area, but connected to the metropolitan area by major highways. Neighbor cities include Sandy, Estacada, Canby, Newberg, North Plains and Scappoose.

Oregon Bicycle and Pedestrian Plan - An element of the Oregon Transportation Plan, this plan offers the general principles and policies that ODOT follows to provide bikeways and walkways along state highways. This plan also provides guidance to cities and counties, as well as other organizations and private citizens, in establishing bicycle and pedestrian facilities on local transportation systems.

Oregon's Statewide Planning Goals - The 19 goals which provide a foundation for the state's land use planning program. The 19 goals can be grouped into four broad categories: land use, resource management, economic development, and citizen involvement. Locally adopted comprehensive plans and regional transportation plans must be consistent with the statewide planning goals.

Oregon Transportation Plan (OTP) - The State's official statewide, intermodal transportation plan that will set priorities and state policy in Oregon for the next 40 years. The plan, developed by the Oregon Department of Transportation through the statewide transportation planning process, responds to federal ISTEA requirements (see above) and Oregon's Transportation Planning Rule (TPR - see below).

Park-and-Ride - A mode of travel, usually associated with movements between work and home, that involves use of a private auto on one portion of the trip and a transit vehicle (i.e., a bus or a light rail vehicle) on another portion of the trip. Thus, a park-and-ride trip could consist of an auto trip from home to a parking lot, and transfer at that point to a bus in order to complete the trip to work.

Parking Cash-Out - This term refers to a transportation demand management strategy where the market value of a parking space is offered to an employee by the employer. The employee can either spend the money for a parking space, or pocket it and then use an alternative mode to travel to work. Measures such as parking cash-out provide disincentives for commuting by single occupancy vehicles.

Passenger Intermodal Facility - The hub for various statewide, national and international passenger modes and transfer points between modes (e.g., airport, bus and train stations).

Pedestrian - A person on foot, in a wheelchair or walking a bicycle.

Pedestrian Facility - A facility provided for the benefit of pedestrian travel, including walkways, crosswalks, signs, signals, illumination and benches.

Public Transportation - This term refers to both publicly and privately funded transportation serving the general public, including fixed-route bus and rail service, inter-city passenger bus and rail service, dial-a-ride and demand responsive services, client transport services and commuter/rideshare programs. For the purposed of the RTP, school buses and taxi subsidy programs are not included in this definition.

Regional - For the purposes of the RTP, this term refers to large subareas of the region, or the entire region, and usually includes many incorporated areas and adjacent unincorporated areas that share major transportation facilities or other urban infrastructure (see "Community").

Regional Framework Plan - Required of Metro under the Metro Charter, the Regional Framework Plan must address nine specific growth management and land use planning issues (including transportation), with the consultation and advice of MPAC (see above). To encourage regional uniformity, the regional framework plan shall also contain model terminology, standards and procedures for local land use decision making that may be adopted by local governments.

Regional Transportation Plan (RTP) - The official intermodal transportation plan that is developed and adopted thorough the metropolitan transportation planning process for the metropolitan planning area.

Regional Urban Growth Goals and Objectives (RUGGOs) - An urban growth policy framework that represents the starting point for the agency's long-range regional planning program.

Right-of-Way (ROW) - This term refers to publicly-owned land, property or interest therein, usually in a strip, within which the entire road facility (including travel lanes, medians, sidewalks, shoulders, planting areas, bikeways and utility easements) must reside. The right-of-way is usually defined in feet and is acquired for or devoted to multi-modal transportation purposes including bicycle, pedestrian, public transportation and vehicular travel.

Rural Area - Those areas located outside the Metro Urban Growth Boundary (UGB).

Shared Roadway - A type of bikeway where bicyclists and motor vehicles share a travel lane.

Sidewalk - A walkway separated from the roadway with a curb, constructed of a durable, hard and smooth surface, designed for preferential or exclusive use by pedestrians.

Single-occupancy vehicle (SOV) - This term refers to vehicles that are carrying one person.

State Transportation Improvement Program (STIP) - A federally required document that allocates transportation funds to a staged, multi-year, statewide, intermodal program of transportation projects ~~with is~~ consistent with the Statewide transportation plan and planning processes and metropolitan plans, TIPs and processes. The metropolitan TIP must be included in the STIP without change.

Technical Advisory Committee (TAC) - A group of technical staff from government agencies participating in the project. The TAC is responsible for producing the base technical information that will ultimately be used by local decision-makers to complete the project purpose.

Telecommute - This term refers to a transportation demand management strategy whereby an individual substitutes working at home for commuting to a work site on either a part-time or full-time basis.

Traffic Calming - A transportation system management technique that aims to prevent inappropriate through-traffic and reduce motor vehicle travel speeds on a particular roadway. Traditionally, this technique has been applied to local residential streets and collectors and may include speed bumps, curb extensions, planted median strips or rounds and narrowed travel lanes.

Transit - For purposes of the RTP, this term refers to publicly-funded and managed transportation services and programs within the urban area, including light rail, regional rapid bus, frequent bus, primary bus, secondary bus, mini-bus, paratransit and park-and-ride.

Transit Level of Service - The comfort, safety, convenience and utility of transportation service, measured differently for various types of transportation systems.

Transit-Oriented Development - 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. Key features include: a mixed use center and high residential density.

Transportation Demand Management (TDM) - Actions, such as ridesharing and vanpool programs, the use of alternative modes, and trip-reduction ordinances, which are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity.

Transportation Disadvantaged/Persons Potentially Underserved by the Transportation System - Those individuals who have difficulty in obtaining transportation because of their age, income, physical or mental disability.

Transportation Management Area (TMA) - As defined in federal regulations, this term refers to "an urbanized area with population over 200,000" and "applies to the entire metropolitan planning area." All locations must meet certain standards and non-attainment TMA's must meet additional planning requirements.

Transportation Planning Rule (TPR) - The implementing rule of statewide land use planning goal (#12) dealing with transportation, as adopted by the State Land Conservation and Development Commission (LCDC - see above). Among its many provisions, the Rule includes requirements to preserve rural lands, reduce vehicle miles traveled (VMT) per capita by 20% in the next 30 years, reduce parking spaces and to improve alternative transportation systems.

Transportation Policy Alternatives Committee (TPAC) - Senior staff-level policy committee which reports and makes policy recommendations to JPACT (see above). TPAC's membership includes technical staff from the same governments and agencies as JPACT, plus representatives of the Federal Highway Administration and the Southwest Washington Regional Transportation Council (SWRTC - see above); there are also six citizen representatives appointed by the Metro Council (see above).

Transportation System Management (TSM) - Strategies and techniques for increasing the efficiency, safety, capacity or level of service of a transportation facility without major new capital improvements. This may include ~~programs that encourage transit, carpooling, telecommuting, alternative work hours, bicycling, walking,~~ signal improvements, intersection channelization, access management, HOV lanes, ~~etc~~ramp metering, incident response, targeted traffic enforcement and programs that smooth transit operations.

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.

Tri-Met - Tri-County Metropolitan Transportation District, which is the transit agency for most of Clackamas, Multnomah and Washington Counties.

Urban Area - Those areas located within the Metro Urban Growth Boundary (UGB).

Urban Growth Boundary - The politically defined boundary around a metropolitan area outside of which no urban improvements may occur (sewage, water, etc.). It is intended that the UGB be defined so as to accommodate all projected population and employment growth within a 20-year planning horizon. A formal process has been established for periodically reviewing and updating the UGB so that it accurately reflects projected population and employment growth.

Urban Growth Management Functional Plan (UGMFP) - A regional functional plan with requirements binding on cities and counties in the Metro region, as mandated by Metro's Regional Framework Plan. The UGMFP addresses such issues as accommodation of projected regional population and job growth, regional parking management, water quality conservation, retail in employment and industrial areas and accessibility on the regional transportation system. All cities and counties in the Metro region shall adopt changes to local comprehensive plans and zoning codes to address these issues within 24 months after the adoption of the UGMFP ordinance by the Metro Council.

Walkway - A hard-surfaced transportation facility built for use by pedestrians, including persons using wheelchairs. Walkways include sidewalks, paths and paved shoulders.

Wide Outside Lane - A wider than normal curbside travel lane that is provided for ease of bicycle operation where there is insufficient room for a bike lane or shoulder bikeway.