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OREGON PORTION

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Southwest Washington Regional Transportation Council Portion
(See Next Page)

chaining, and 4) walk and bike travel. Major emphasis will be placed on integrating the elemental improvements to a unified model.

Although unfunded at this point, the need exists for a longitudinal household survey panel to be created. This type of survey tracks the change in behavior to a small set of households over a period of time. With this data, two major improvements could include the development of an automobile holdings model and a household location model.

Other Federal Grants \$225,000

This represents the unfunded elements of this program in the area of person travel demand.

- 1) \$150,000 - Estimated cost of a proposed logitudinal household survey. This survey will ultimately be needed to model household location decisions and auto acquisition.
- 2) \$75,000 - Estimated cost of consultant resources to aid with the development of new tow (chain) based models. This help would make the use of Metro staff resources more efficient, leading to a shorter model development time.

Commodity Carrier Model

A two year work program was initiated in FY 1996 to collect and analyze data regarding commodity movement. Surveys are being planned for the Port of Portland facilities, truck weigh stations, and trucking firms. Vehicle classification count data is being assembled and summarized. Once all the data has been collected, origin and destination flow data can be derived from computer simulation. The information will be very useful in policy and investment analysis. The FY 97 budget of \$275,000 is split \$70,000 to Metro staff and \$205,000 to Port/Consultant.

PRODUCTS

- Improved decision algorithms assimilated into the travel demand model.
- Commodity flow allocation model.

EXPENDITURES		REVENUE	
	Amount	FTE	Amount
Personal Services	\$ 354,290	4.705	97 PL \$148,246
Transfers	107,714		97 Sec 8 27,523
Materials & Services	426,903		97 Metro STP *351,500
Computer	59,996		97 Metro STP/ODOT 17,254
			97 Tri-Met 50,000
			97 ODOT Supplement 50,000
			Other Federal Grants 225,000
			Metro 79,380
Total	\$948,903		Total \$948,903

*\$50,000 - To commodity flow contingent upon reaffirmation by TPAC and JPACT.

97uwp
3/12/96

FY97 UNIFIED WORK PROGRAM FUNDING SUMMARY

	97PL ODOT (1)	97 Sec 8* 80X005	97Metro STP* 33C	97Metro STP ODOTMt	97ODOT STP* 33D	97 ODOT Supplemt	97 Lcl TriMet	97ODOT S/N LOTTERY	97S/N DEIS TriMet	97S/N FEIS TriMet	FTA 96(e)(4) 29-9024	96TGM* Arterial Street Dsg	96FHWA* Pilot CgstrnPric	96 Planning TGM*	95 S/N AA/DEIS 299023*	CARRY OVER			93Metro STP33C* 3/93	FHWA 1000FNDS LAN0001	TriMet Cryovr Contracts	Other Federal Grants	97 SPR	Local Match	TOTAL
															94 S/N AA/DEIS 299022*	96Sec8* 80X004 7/95									
METRO																									
RTP Update/Refinement	261,626		39,726	2,273	100,000		41,700																	130,113	575,438
Arterial Street Design												73,723												21,277	95,000
Congestion Management	21,550																	20,000					5,150	46,700	
Intermodal Mgmt System	17,905		20,000	1,145	20,369																		6,481	65,900	
Regional Bike/Ped			48,712	2,788																			12,500	64,000	
Trans Imprv Program	35,765	35,000	45,000	2,575		45,000	45,000											25,000					30,060	263,400	
Urban Arterial Prog			27,941	1,599																			5,060	34,600	
Local Plan Coord	46,132		137,121	7,847																			35,000	226,100	
Congestion Pricing Prog													572,000										143,000	715,000	
Major Investment Study	8,500	0				16,000	2,500																5,000	32,000	
Willamette Crossing	35,105	5,000				47,000	10,000																56,895	154,000	
South/North DEIS								1,943,000	1,006,651						5,447,349	200,000							12,325	8,609,325	
S/N Extension								57,000							57,000										114,000
S/N FEIS									640,000																640,000
Westside Corridor Study																					65,000				65,000
PDX Alternative Mode Study											300,000													52,941	352,941
Survey & Research	148,246	27,523	351,500	17,254		50,000	50,000																225,000	79,380	948,903
1000 Friends																			40,000						40,000
Travel Model Refinement(2)	47,489	30,000	30,000	1,716		30,000	30,000																	42,445	211,650
Technical Assistance			75,000	4,292		22,000	8,300																	47,409	157,001
Coordination & Mgmt	43,277	34,000																						47,723	125,000
Data, Growth Monitoring(3)	73,030	66,000				15,000	37,500																	1,506,326	1,697,856
Region 2040																		65,000						7,440	72,440
Westside Station Area																					250,000				250,000
TGM Projects(4)														240,321										3,491	243,812
Metro Subtotal	738,625	197,523	775,000	41,489	120,369	225,000	225,000	2,000,000	1,006,651	640,000	300,000	73,723	572,000	240,321	5,504,349	200,000	45,000	65,000	40,000	315,000	225,000	0	2,250,016	15,800,066	
ODOT PLANNING ASSISTANCE																						440,000		440,000	
ODOT Subtotal																						440,000	0	440,000	
TRIMET			174,121																				22,509	196,630	
GRAND TOTAL																									
	738,625	197,523	775,000	41,489	120,369	225,000	225,000	2,000,000	1,006,651	640,000	300,000	73,723	572,000	240,321	5,504,349	200,000	45,000	65,000	40,000	315,000	225,000	440,000	2,250,016	16,240,066	
1: PL/ODOT is \$738,624.94 comprised of \$547,877.87 (89.73%) fed share, \$62,707.07 (10.27) ODOT plus carryover of \$114,890.29 federal and \$13,149.71 ODOT match.			2:Includes System Monitoring & Model Refinement			4:TGM-See project description																		16,240,066	
			3:Includes DRC Database & RLIS Support System			a.\$50,000 for Commodity Flow contingent upon re-affirmation of funding by TPAC & JPACT																			

*Federal funds only, no match included



MILWAUKIE COMMUNITY DEVELOPMENT DEPARTMENT

DATE: March 11, 1996

TO: Mike Hogland, Transportation Planning Manager
FROM: *MC* Maggie Collins, Community Development Director
TPAC Representative
RE: Information for Draft 1996-97 Unified Work program

DISCUSSION

Here are brief descriptions of projects that I understand may fit your "regionally significant" definition, and for which Milwaukie is the lead agency:

*** McLoughlin Blvd. (ORE 99E) Feasibility Study

Review design options for improvements to a .5 mile segment of McLoughlin Boulevard in downtown Milwaukie; part of the integrated Milwaukie Regional Center Arterial/Street Improvement Program.

Federal Share: \$100,000 STP

Total \$125,000

TGM Milwaukie Regional Center Master Plan

Identify and develop appropriate mixed use combinations for Milwaukie's 2040 Regional Center area; integrate with multi-modal transportation needs and improvements and with light rail station area planning.

Federal Share: \$100,000 (TGM Grant)

Total \$111,000 (Milwaukie/Metro Share)

COMMUNITY DEVELOPMENT • PUBLIC WORKS

6101 SE JOHNSON CREEK BLVD.

MILWAUKIE, OREGON 97206

PHONE: (503) 786-7600 • FAX: (503) 774-8236

Springwater-Milwaukie Bikeway

In this phase, construct bikeway west of McLoughlin Blvd. from the intersection of Harrison Street to the Jefferson Street Boat Ramp on the Milwaukie Riverfront (approximately 850 feet).

Federal Share: \$ 92,100 (CMAQ)

Total \$114,000

Lake Road Sub-Area Multi-Modal Connections Plan

Complete a multi-modal refinement plan for approximately 2.5 miles of Lake Road and its environs. Priority planning project of Milwaukie's Draft Transportation System Plan.

Federal Share: \$20,500

Total \$22,500

cc: Dan Bartlett
 Angus Anderson

DRAFT- Not For Release

March 14, 1996

Ms. Claudia Howells
Railroad Services Coordinator
ODOT Transportation Development Branch
555 13th Street NE
Salem, OR 97310

Subject: Proposed Union Pacific/Southern Pacific Merger

Dear Ms. Howells:

The Joint Policy Advisory Committee on Transportation (JPACT) for the Portland area offers the following comments on the proposed Union Pacific/Southern Pacific railroad merger. Consistent with the merger schedule, these comments represent our initial reaction to the proposal and are for inclusion in ODOT's March comments to the federal Surface Transportation Board. JPACT and the Metro Council intend to take a formal position on the merger through a Metro resolution later this year.

In general, JPACT, consisting of elected officials from local jurisdictions and the Metro Council, as well as transportation agency officials, views freight rail facilities within the region as an integral part of the regional transportation network. Roadways and railways in our growing region serve as the "circulatory system" for our regional economy and for trade passing through the region and the state. The ability of the railroad companies to efficiently serve our customers directly affects the ability of our region to attract and retain business and remain economically viable and healthy.

We see the proposed merger of the UP and SP railroads to have major beneficial impacts on rail operations and facilities. Through rationalization of operating facilities, we feel the combined company will have an impact on the regional transportation system. Specifically, based on the information and discussion to date, we support the merger as it offers significant benefits to the region and state, including:

- . Creating direct, single-line, north-south service from Canada through the Portland area to Mexico.

Ms. Claudia Howells

March 14, 1996

Page 2

- . Expanding single-line competition with other railroads to enhance operations.
- . Improving Portland area and State of Oregon rail service to the mid-western and southeastern regions of the United States.
- . Improving access for Willamette Valley and Portland area customers to Portland area marine terminals through single-line service.
- . Improving area intermodal operations through consolidation and improvements at the Lower Albina intermodal facility.

With approval of the merger, we feel these improvements will enhance rail freight operations and provide more and better choices for users of the freight system in the Portland area. We also feel that the proposed merger provides an opportunity for the region to develop partnerships to discuss merger-related operational improvements. Such partnerships should attempt to further meet a number of the region's other transportation objectives as they relate to commercially sound business decisions of the merged railroad. Areas that we would wish to pursue include the following:

1. Rail Facility Access. Continue to work with a combined UP/SP to improve access to major rail yards including Albina (specifically a grade-separated facility for business access), Brooklyn, and Kenton.
2. Rail Operations. Retention and full utilization of existing major rail and industrial infrastructure within the region is imperative if we are to manage growth consistent with the Region 2040 Growth Concept of growing and redeveloping from within and preventing "green field" fringe development.
3. Grade Crossings. Work with local governments and ODOT to examine the feasibility of eliminating or improving the operations and safety of key grade crossings throughout the region. Examples include blockages in Southeast Portland, Kenton mainline crossings at NE Columbia and NE Lombard; near the Fir and Hemlock sidings; at Railroad Avenue and Harmony Road east of Milwaukie; and at 201st, 164th, 223rd, and the Columbia Highway in east Multnomah County. Others throughout the region should also be identified and discussed.
4. Work with Tri-Met to identify potential available right-of-way for the South/North Light Rail. A key need is in the vicinity of the Brooklyn Yard. Approximately 7 to 20 acres are needed for a Maintenance Facility at that location.

Ms. Claudia Howells
March 14, 1996
Page 3

Other potential right-of-way opportunities exist along the entire line in segments running from the Hawthorne Bridge area south through Milwaukie to future extensions to Oregon City. Consideration should also be given to whether Tri-Met should accept operational control of the Steel Bridge.

In addition to these areas of concern, the region also requests that more information be provided in the following areas:

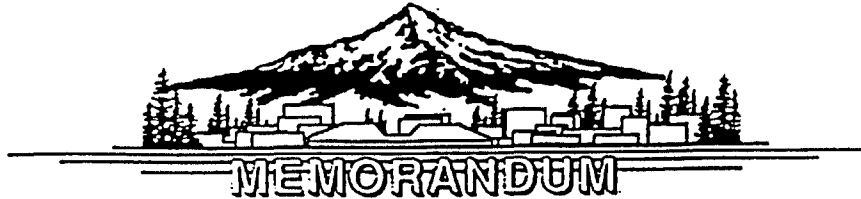
- . Analyses of current and forecast delays at major rail crossings.
- . Existing and anticipated truck, intermodal, and other general traffic volumes accessing major yards.
- . Plans for rail abandonments in order that they may be considered for regional recreational trails.
- . Impacts, if any, on current and proposed (e.g., high-speed rail) Amtrak operations in the state.

We thank you for keeping us informed on opportunities to comment. If you have questions or need clarification on our comments, please call Mike Heglund, Metro staff, at (503) 797-1743.

Sincerely,

Rod Monroe, Chair
Joint Policy Advisory Committee
on Transportation

RM:MH:lmk



City of Gresham
Community Development Department
Project and Policy Development Division

DATE: March 13, 1996

TO: Mike Hoglund, METRO (BY FAX)

FROM: Richard Ross, TPAC Member, Cities of Multnomah County

RE: JPACT Agenda Item 3, March 14, 1996 - Item: UPSP Merger Letter

Here is some alternate language to clarify the last bullet on Page Three of the letter.

I think this more accurately reflects the language that TPAC approved regarding possible impacts of the merger or passenger rail service. Dave Lohman's comment to the last JPACT about exciting possibilities of shared Columbia Gorge routes (a freight bottleneck) may also apply to passenger service.

ALTERNATE LANGUAGE Page 3, last bullet

- Impacts, if any, on current and proposed passenger rail operations (e.g. high speed rail) by Amtrak or others, within the state and on interstate routes.

cc: Claudiette LaVert, Councilor (by fax)
Mike Mabrey, Lead Transportation Planner
Rebecca Ocken, Transportation Planner



METRO

March 14, 1996

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Ms. Claudia Howells
March 14, 1996
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Ms. Claudia Howells
March 14, 1996
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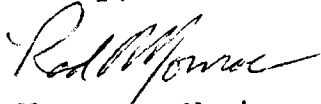
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We thank you for keeping us informed on opportunities to comment. If you have questions or need clarification on our comments, please call Mike Hoglund, Metro staff, at (503) 797-1743.

Sincerely,



Rod Monroe, Chair
Joint Policy Advisory Committee
on Transportation

RM:MH:lmk



METRO

Date: March 6, 1996
To: JPACT
From: *MH* Michael Hoglund, Transportation Planning Manager
Subject: RTP Update

Metro staff will provide a progress report on the Regional Transportation Plan (RTP) Update at the March 14 meeting. The purpose of the progress report is to initiate discussion on the RTP Policy Element. As you recall, the RTP Update is being divided into two components. The first component identifies for adoption the regional transportation policies which tie the RTP to the Regional Framework Plan. The second component identifies revised transportation systems and the recommended strategies and projects necessary for the plan to implement the Regional Framework Plan. Staff will also discuss the RTP adoption schedule for the policy component and the concurrent public involvement activities. Attached for your review prior to the meeting is the following information:

1. A three-year *Integrated Timeline* which ties together key Framework and Transportation Plan decision dates. As shown in the chart, both the Early Implementation Measures and the RTP policy component are scheduled for adoption this spring.
2. A *Summary of CAC Actions*. This chart essentially identifies the key pieces of the RTP policy component. Both the RTP CAC and TPAC have been reviewing the various elements. As proposed, JPACT and the Metro Council will ultimately review a CAC-recommended policy component and, if applicable, any TPAC recommendations for revision.
3. A graphic showing *Regional Networks by Mode*. The multi-agency Regional Street Design work team has begun work on tying key street design components to the Region 2040 Growth Concept. The purpose is to better integrate roadway designs with the 2040 land use types (e.g., Regional Centers, Town Centers, Corridors, Industrial Areas, etc.) and to investigate methods to accommodate priority modes within individual roadways or corridors. The graphic shows the various modal components that may need to be addressed within any one roadway or corridor, depending on regional function.

JPACT
March 6, 1996
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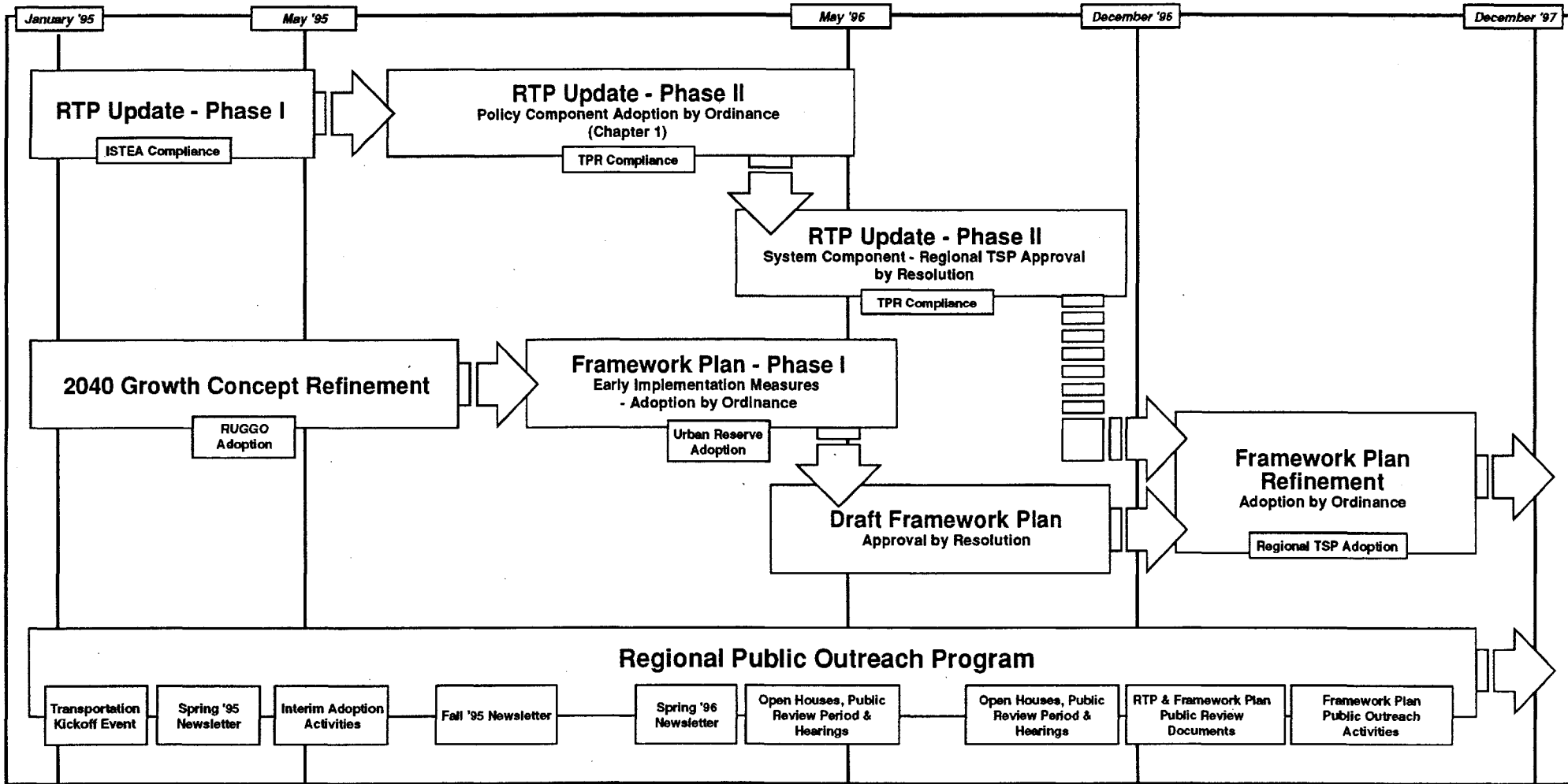
4. A matrix of *Design Concepts*. The matrix is an initial effort at identifying a system of Throughways, Boulevards, Streets, and Roads which will serve the 2040 land uses. The purpose of the matrix will primarily be to provide guidance to local jurisdictions and ODOT on a range of acceptable street designs for the various 2040 land uses. The work is in its early stages and provides the basis for a future consultant contract which will refine the guidelines consistent with updated RTP standards and accepted engineering principles.

MH:lmk

Attachments



Regional Framework Plan & Regional Transportation Plan Update Integrated Timeline





METRO

**RTP Chapter 1 Revisions
Summary of CAC Actions**

RTP Section	Review and Comment on Draft Revisions	Tentative Approval of Final Revisions	Notes
A. Introduction			<i>minor revisions only; to be included in final approval package</i>
B. History			<i>minor revisions only; to be included in final approval package</i>
C. Urban Form and Transportation			
D. Transportation System Design			
Systemwide Goals & Objectives			
Regional Street System Goals & Objectives			
Transit System Goals & Objectives	January 16, 1996		<i>TPAC has recommended that the CAC defer final action on this item until March 5, 1996</i>
Freight System Goals & Objectives	January 2, 1996		
Bicycle System Goals & Objectives	November 7, 1995	January 2, 1996	
Pedestrian System Goals & Objectives	January 16, 1996		
Transportation Demand Management Goals & Objectives	January 2, 1996		

February 6, 1996

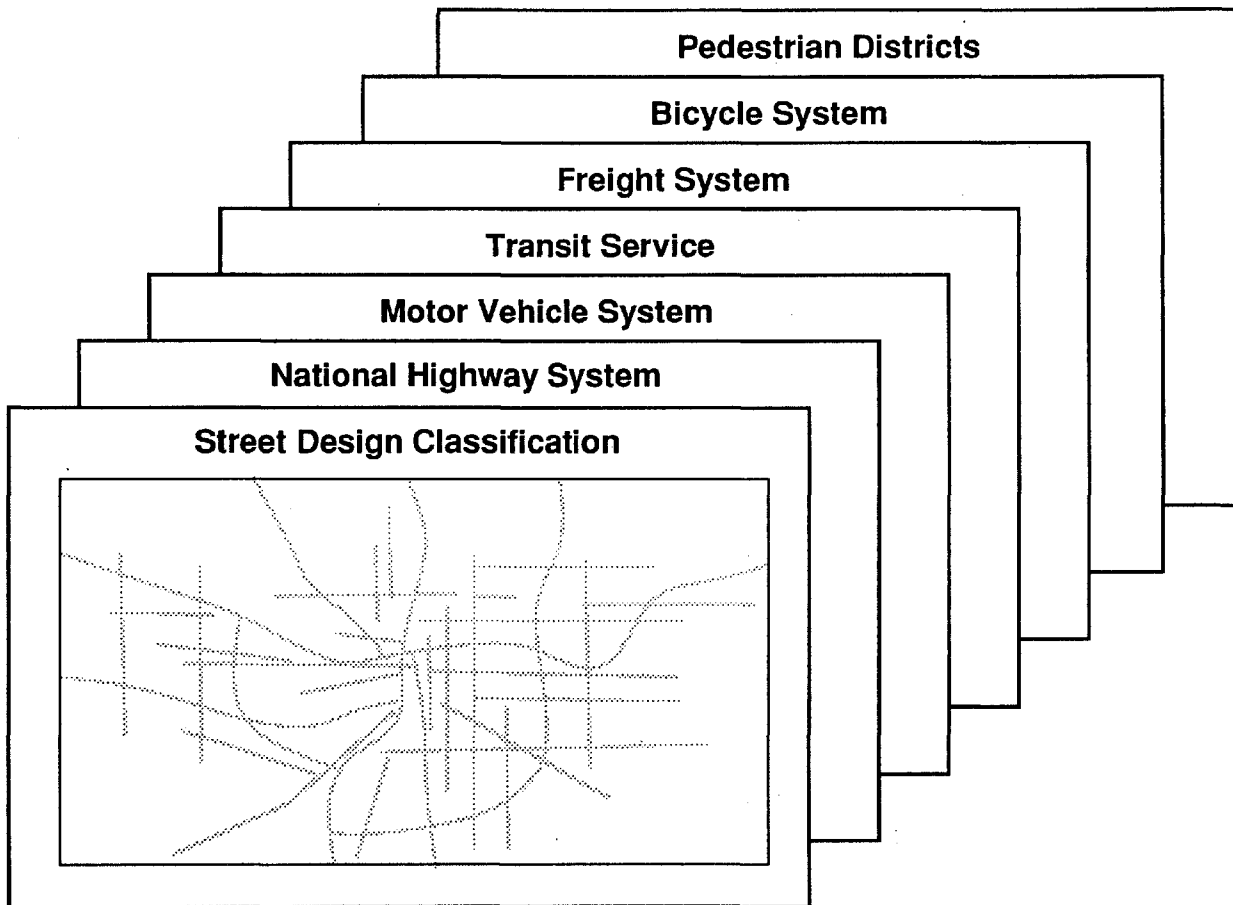


METRO

Regional Street Design Study

PLAN MAPS

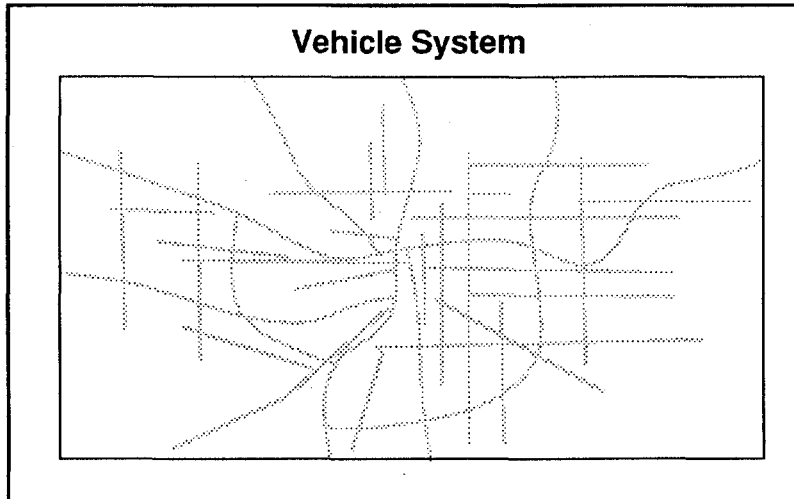
Regional Networks by Mode





METRO
Regional Street Design Study

PLAN MAPS
Motor Vehicle Networks



Motor Vehicle System Components

- Principal Arterials
- Major Arterials
- Minor Arterials
- Collectors (local system)
- Local Streets (local system)



METRO

Regional Transportation Plan Update

Chapter 1

Regional Transportation Policy

Preliminary Draft for CAC Review on March 19, 1996
(CAC Public Review Draft available March 22, 1996)



METRO

REGIONAL TRANSPORTATION PLAN UPDATE

Chapter 1 Regional Transportation Policy

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Regional Street System Goals and Objectives	1-13
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Regional Freight System	1-32
Regional Bicycle System	1-35
Regional Pedestrian System	1-36
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CHAPTER 1

Regional Transportation Policy

The introduction and history sections will be combined and substantially revised to reflect the overall philosophy of the RTP and its relationship to the Regional Framework Plan.

A. Introduction

This chapter presents the overall policy framework within which the specific transportation goals, objectives and actions contained in the adopted Regional Transportation Plan (RTP) were formulated. It also provides the basis for future planning and decision-making by the Metro Council and the implementing agencies, counties and cities. The remainder of this chapter is organized as follows:

- **History:** Identifies past regional transportation decisions and describes the evolution of the policy direction recommended in the RTP for the region's future transportation needs.
- **RTP Goals and Objectives:** Describes the policy direction of the Plan and establishes in measurable terms what level of mobility the transportation system is expected to provide.
- **Urban Form and Land Use:** Connects regional policy to transportation goals and objectives, with an emphasis on land use components of the regional urban form.
- **Transportation System Design:** Provides objectives regarding the performance and function of each element of the transportation system.

The RTP identifies both a preferred and a financially constrained set of 20-year improvements. The preferred system is a 20-year blue print intended to address growth by generally maintaining current levels of roadway performance and providing improved levels of alternative mode choice. The constrained system reflects a set of projects the region anticipates it can afford to construct over twenty years given available revenues. Federal Intermodal Surface Transportation Efficiency Act (ISTEA) planning guidelines require that the entire RTP, including the constrained system, be evaluated at least every three years to reflect changing conditions.

The Metro Transportation Improvement Program (MTIP) is the region's three year funding document. The MTIP schedules and identifies funding sources, for projects of regional significance to be built over a three year period. Federal law requires that all projects using federal funds be included in the MTIP. In developing the MTIP, the region gives top priority to

strategic transportation investments which leverage and reinforce the urban form outlined in Chapter 1, of this plan, and when adopted, the Regional Framework Plan. The MTIP is adopted both by Metro and the Oregon Transportation Commission for inclusion into an integrated State Transportation Improvement Program (STIP). The MTIP must be revised at least every two years.

Projects included in the MTIP must also be included in the financially constrained system. However, while the adopted financially constrained system should provide the basis for MTIP funding decisions, projects may also be selected for funding from the preferred system. In the event a project or projects are drawn from the preferred system for funding, the RTP constrained system will be amended to include the project or projects. In addition, when the constrained system is amended, financial constraint must be maintained either through identification of additional revenues or removal of other projects from the list. Except in the case of exempt projects (as defined by the federal and state conformity rules) any such action will require an air quality conformity determination (which is standard as part of the development of a new MTIP, see "Air Quality Conformity," below).

B. History

The adopted RTP is built upon the structure of transportation-related decisions and policies developed over the past two decades. The most significant of these benchmarks include:

- 1959 The Portland/Vancouver Metropolitan Area Transportation Study (PVMATS) was initiated as an ongoing regional transportation planning process and resulted in a proposal for an extensive system of new freeways and streets. In total, 50 new freeway projects were proposed to be constructed by 1990.
- 1969 The State Legislature provided for public takeover of the faltering privately-owned mass transit system. Tri-Met was formed.
- 1973 The first transit plan for the region was published.
- 1973 A Governor's Task Force was formed to clarify the transportation decision-making process in the region. This Task Force made landmark recommendations for restructuring transportation decision-making in the region, with some far-reaching implications:
- Fiscal and environmental realities made it impractical to rely solely upon new freeways as the solution for urban travel needs.
 - Improvements of existing state and regional highways on an incremental, more cost-effective basis was essential.
 - Transit and roadway planning should be done together, with shared rights-of-way and preferential treatment for transit in the major travel corridors.

- Better management of traffic was required, including support of carpooling, parking and transit policy coordination, and traffic engineering improvements to get more service from existing highways.

As a result of the recommendations, regional leaders decided to make better use of existing transportation corridors rather than building new ones; limit the growth of traffic on the region's highway system; and assign most of the new commuter growth to transit and carpooling.

- 1973 The Land Conservation and Development Commission (LCDC) was established. Cities and counties were required by LCDC to prepare comprehensive plans in compliance with state planning goals.
- 1975 A consensus was reached to withdraw the Mt. Hood Freeway from the Interstate System. These funds were later earmarked for various regional transit and highway projects including major corridor transitways.
- 1978 The decision was made to build light rail transit (LRT) in the Banfield corridor and to widen the freeway to improve auto travel.
- 1978 The I-505 Freeway was withdrawn from the Interstate System and the decision was made to replace it with lower cost improvements which upgrade Yeon Avenue to connect I-405 and Highway 30.
- 1979 The Metro Council adopted a Regional Transportation Corridor Improvement Strategy designed to guide in-depth analysis of corridor problems and potential solutions.
- 1982 The RTP was adopted by Metro after thorough public review and consensus among the local jurisdictions in the region, providing a framework for transportation planning and cost-effective investments over the next two decades.
- 1982 Regional air quality control plans to meet standards for ozone and carbon monoxide by the federal Clean Air Act deadline (December 31, 1987) were adopted by Metro and the Environmental Quality Commission after extensive public review and comment. These plans were approved by the Environmental Protection Agency (EPA) in the fall of 1982.
- 1983 The Regional Bicycle Plan element of the RTP was adopted by Metro to define regional policy with respect to bicycle facilities and programs and to provide guidelines for encouraging the use of bicycles as an alternate mode of transportation.
- 1983 The Sunset LRT was selected by the region as the preferred alternative to connect downtown Portland and Beaverton (to 185th) as the result of the Westside Corridor Project Alternatives Analysis and extensive public review and comment.
- 1987 Joint Policy Advisory Committee on Transportation (JPACT) adopted regional priority transportation improvements for the next 10 years. These improvements consist of a

balanced program of regional transportation investments in: a) the regional highway corridors; b) urban arterials; c) regional LRT corridors; and d) transit bus service expansion.

- 1988 An updated version of the Special Needs Transportation (SNT) Plan (originally adopted by Metro in 1985) that defines policies and transit service with regard to the elderly and handicapped population was adopted by Tri-Met. The full text of the adopted SNT Plan is included in the 1992 RTP as Appendix B.
- 1990 Congress approves the federal Clean Air Act Amendments. The new law requires that transportation plans conform to air quality standards.
- 1991 LCDC adopts the Goal 12 Transportation Rule requiring a reduction in the reliance on single-occupant vehicles and requiring local actions which encourage the development and use of reasonable alternatives such as transit and ridesharing. The Transportation Rule also requires the development of Transportation System Plans to be completed consistent with the state requirements for the RTP and for local jurisdictions. The plans must include methods to achieve reductions in per-capita vehicle miles traveled, increases in peak-hour auto occupancy rates and examination of alternative land use scenarios to address transportation needs.
- 1991 The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) is approved by Congress, and becomes law. The act has led to new flexibility in federal transportation funding, with a departure from projects that primarily serve the automobile, and a new focus on alternative modes of transportation that are more cost efficient and environmentally sound. The act also speaks to the importance of freight movement and intermodal connections in the nation's economic health and global competitiveness.
- 1991 Metro Council adopts the Regional Urban Growth Goals and Objectives which provide a set of land use planning goals and objectives, which are consistent with statewide planning goals, for purposes of planning coordination in the region.
- 1992 The region's voters approve the Metro Charter. Among the activities set in motion by approval of the charter are the Future Vision project and development of a regional framework plan. The RTP will serve as the transportation element of the framework plan.
- 1992 The Oregon Transportation Commission adopts the Oregon Transportation Plan (OTP), the state's first comprehensive transportation plan.
- 1993 The Statewide Planning and Metropolitan Planning Final Rule (23 CFR Part 450 and 49 CFR Part 613) is published in October. Although ODOT has the lead role in statewide planning, and Metro the lead in metropolitan planning, both sections apply to each agency. The Management and Monitoring Systems Interim Final Rule is published in December, and also applies to both agencies.

1994 The Metro Council approves, by resolution, the Region 2040 Growth Concept, and initiates a six-month refinement process prior to adoption of a final Growth Concept.

The vision statement and guiding principles that follow have been reviewed by the RTP Citizen Advisory Committee in draft form, but have not been approved as final revisions.

C. Regional Vision and Guiding Principles

Vision Statement

The Regional Transportation Plan seeks to implement the 2040 Growth Concept with a transportation system that:

- anticipates the region's future travel needs;
- promotes a balance among modes of travel, and;
- leverages 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 development of the plan;
2. Facilitate development of the Region 2040 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 increasingly limited 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 over 500,000 new jobs over 1995 levels for the Oregon portion of the metro area. Substantial investment in transportation improvements is needed to accommodate and this growth in a manner that complements 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, street designs that limit through traffic in neighborhoods, and air quality that meets standards. The RTP must address these needs by improving choices for how people travel within the region, while seeking de a balance among accessibility, system cost, the 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 development and review of Metro's transportation plans, programs and projects. The policy was developed in response to citizen interest and addresses recent state and federal planning requirements, and was adopted in July 1995.

The public involvement program for the RTP update is tied to the 2040 Framework public involvement process, and includes a widely distributed newsletter, periodic workshops, open houses and public meetings, 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 to provide 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 are the number of available travel modes 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.

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 preferred 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 the RTP. Within the growth concept are 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 vision. These areas provide the best opportunity for public policy to shape new development, and 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. Transportation planning must be viewed in terms of larger regional and community goals and values, such as protection of the environment, impact on the regional economy, and maintaining the quality of life that area residents 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 and congestion, energy costs, protection of natural resources and air quality impacts. Because of the multiple values which must be considered, RTP objectives will sometimes be in conflict. Since there are no rigid priorities which can be applied to all situations, each transportation project or program must be evaluated in terms of the extent to which it best achieves an overall balance among conflicting goals.

The urban form and land use policies that follow have been reviewed by the RTP Citizen Advisory Committee in draft form, but not approved as final revisions.

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 maintain 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 at the first step in developing the framework plan. Like the RUGGOs, the growth concept is not a final plan for the region, but rather, serves as a starting point for developing the regional framework plan, which will be a more focused vision for the future growth and development of the Portland area. 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 as the transportation element of the Framework Plan.

While the Region 2040 concept is primarily a land use framework, the success of the concept, in large part, hinges on regional transportation policy. Following are the Region 2040 land use components and their associated transportation elements, 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, and therefore they are the focus of Region 2040 early implementation policies and infrastructure investments.

- **Central City and Regional Centers**

Portland's central area already forms the hub of the regional economy, and regional centers in suburban locales like Gresham, Beaverton and Hillsboro are envisioned in the 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 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 Region 2040 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.

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 accommodating auto 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 have a similar emphasis on 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. This is largely due to a lack of street connections, which discourages walking and bicycling for local trips in these areas, and forces local auto trips onto the regional multi-modal arterial network. The 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 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 & 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 maintain a strong balance between jobs and households 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. Transportation System Design

Systemwide Goals and Objectives *[moved from Section C]*

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 complements the 2040 Growth Concept while recognizing the financial constraints and environmental impacts associated with that system. The remainder of this section: 1) presents the systemwide goals and objectives of the 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 which serves the region's future travel needs and complements the 2040 Growth Concept.

1. **Objective:** To implement a regional transportation system which complements the 2040 Growth Concept.
2. **Objective:** To provide the highest levels of access by multiple modes to and within the central city, regional centers, intermodal facilities and industrial areas.
3. **Objective:** To provide high levels of access by multiple modes to and within station communities, town centers, main streets and corridors.
4. **Objective:** To provide access by multiple modes to and within areas in the region not identified above.
5. **Objective:** To provide adequate levels of mobility within the region.

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

1. **Objective:** To maintain and preserve the existing transportation system.
2. **Objective:** To improve the efficiency of the existing transportation system.

3. **Objective:** To consider both land use and transportation benefits in the allocation of transportation funds.

System Goal 3: Protect the region's natural environment and livability.

1. **Objective:** To meet applicable standards for clean air and water.
2. **Objective:** To minimize the environmental impacts associated with transportation project construction activities.
3. **Objective:** To provide an improved pedestrian environment in order to increase walking for short trips and to contribute to community vitality.

System Goal 4: Improve the safety of the transportation system.

1. **Objective:** To reduce injuries, fatalities and property loss due to crashes.
2. **Objective:** To minimize conflicts between modes, particularly between motorized and non-motorized modes of transportation.

The street system policies that follows have been reviewed by the RTP Citizen Advisory Committee in draft form, but not approved as final revisions.

Regional Street System Goals and Objectives

In 1991, sweeping changes at the federal, state and regional level 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 which 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 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 complements individual 2040 Growth Concept land use components.

Regional Street Design

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

1. **Objective:** To develop and maintain a system of regional street design concepts that fully integrate automobile, transit, pedestrian, bicycle and freight needs as they relate to 2040 land use components.
2. **Objective:** To 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:** To develop and maintain standards for appropriate transition areas between street design types.

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

1. **Objective:** To provide model street designs as a resource for local TSP development that consider right-of-way and topographic constraints, while satisfying the general intent of the regional street design concepts.

2. **Objective:** To develop and maintain RTP street design guidelines to support local TSP development.
3. **Objective:** To develop and maintain RTP street design standards where regional design interests warrants consistency among local design standards.

Regional Street Design Concepts

The regional 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; and
- *Roads* that are traffic oriented; with designs that integrate all modes but primarily serve motor vehicles
- *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 land use components. The following is a detailed description of the purpose and design emphasis of each design types:

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 land use components. In addition to facility designs that promote mobility, Throughways may also benefit from access management and 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 4-6 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 4-6 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 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 and transit 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 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, and they 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 districts they serve. Community Streets have few driveways, and they 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 land use districts 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 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 Street designs, although buffering is optional. Pedestrian crossings are included at intersections. Urban Roads have striped bikeways.

Rural Roads

These facilities are designed to carry rural traffic while accommodating limited transit, bicycle and pedestrian travel. Rural Roads 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 and usually consist of 2-4 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 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 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, but may serve as transit facilities 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 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; and
- Where appropriate, local design codes should allow narrow street designs to conserve land, calm traffic or promote connectivity;
- 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

Transportation System Management (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 design purposes 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., striping 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 system 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 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 importantly, the 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.

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:** To implement an integrated, regional ATMS program addressing:

- Freeway Management (including ramp meters and automated incident detection or rapid response)
 - Arterial Signal Coordination (including 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
 - Multi-Modal Traveler Information Services
2. **Objective:** To develop access management plans consistent with regional street functional classifications.
 3. **Objective:** To integrate traffic calming elements into new street design consistent with regional street functional classifications and coordinate with local agencies to retrofit local circulation systems with traffic-calming techniques that do not adversely affect operation of the regional transportation system.
 4. **Objective:** To continue to restripe and/or fund minor reconstruction of existing transportation facilities consistent with regional street functional classifications.

Regional Street System Implementation

While the primary mission of the RTP is implementation of the Region 2040 Growth Concept, the plan must also address other transportation issues that may not directly assist in implementing 2040. 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 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:

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

1. **Objective:** To 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:** To 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:** To 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.

1. **Objective:** To place the highest priority on projects and programs that preserve or maintain the region's transportation infrastructure.
2. **Objective:** To 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:** To place the highest priority on projects and programs that address safety-related deficiencies in the region's transportation infrastructure.
2. **Objective:** To 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 past transportation planning practice. Focusing development in the most concentrated activity centers (including the central city, regional centers and station communities) may produce levels of congestion that exceed existing standards, yet 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.

This section to be completed as part of developing performance measures

The motor vehicle system policies that follows have been reviewed by the RTP Citizen Advisory Committee in draft form, but not approved as final revisions.

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 portions of 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 and intermodal facilities, and provide regional mobility.

1. **Objective:** To maintain a system of principal arterials for long distance, high speed, statewide travel.
2. **Objective:** To maintain an appropriate level of mobility on the motor vehicle system during periods of peak demand .
3. **Objective:** To 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 for 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. These routes fall within regional freeway and highway design principles.

Principal Arterial System Design Criteria:

- Principal arterials should provide an integrated system which 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 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.
- Freight movement should not be restricted on the principal arterial network.

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. 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 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. 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: The collector system generally operates at the community level to provide local connections from neighborhoods to nearby centers, corridors and main streets and 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. These routes 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 system 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 travel . 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 principles.

Local Street System Design Criteria:

- Local streets should connect neighborhoods 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.

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

The transit policies that follow have been reviewed by the RTP Citizen Advisory Committee in draft form, but not approved as final revisions.

Regional Transit System

The regional transit 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 over 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. Transit service is also prominent in Metro's Region 2040 Growth Concept, with key elements of the concept, including regional centers, town centers, corridors, main streets and station communities strongly oriented toward existing and planned transit. The overarching goal of the transit system within the context of the Region 2040 Growth Concept is to provide an appropriate level of transit access to regional activities to everyone residing within the Urban Growth Boundary (UGB).

The transit discussion is divided into two sections. The first defines the regional transit 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 transit service for each 2040 growth concept land use designation.

Regional Transit System Components

The following transit system components establishes the preferred transit network for serving the primary and secondary land-use components of the Region 2040 growth concept. This hierarchy serves as the framework for consistency among plans of local jurisdictions and Tri-Met. Figure 4-4 presents the network of high-frequency transit routes (existing and planned) of regional significance that are designated in this plan. Underlying this network of fast and frequent service is a secondary network of local bus, park-n-ride and demand responsive type service. 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 transit system (primary and secondary), the principal Region 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 (Light Rail Transit (LRT), Fastlink II (High Capacity Bus), Fastlink I 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 Region 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, 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 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 ten 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 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 Portland region.

Fastlink II Bus

Fastlink II Bus provides high frequency, high speed service along major transit routes with limited stops. Fastlink II Bus is designed to be high quality bus service 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. Fastlink II passenger amenities include schedule information, ticket machines, lighting, benches, covered bus shelters and bicycle parking.

Fastlink I Bus

Fastlink I Bus provides high frequency local service along major transit routes with frequent stops. Fastlink I bus 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 Portland 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-n-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. This service includes "ADA" service throughout the Portland 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 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.

Transit Goals and Objectives

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

**Figure 1.1
Hierarchy of Transit Modes Serving
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
Transit Mode	LRT	■	■		□**	■	□					
	Fastlink II	■	■			■						
	Fastlink I	■	■				□	■				
	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) which may serve growth concept land use components
- ** Anticipated LRT services to Portland International Airport

Goal 1 - Develop a public transit 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 transit service available.

1. **Objective:** To provide a full range of transit service to the central city with core service provided by LRT, HCT Bus (Fastlink II) and Fastlink I.
2. **Objective:** To provide a full range of transit service to regional centers with core service provided by primary bus and above.
3. **Objective:** To serve industrial areas with primary and secondary transit service with core service provided by secondary bus.

4. **Objective:** To serve intermodal facilities with a mix of primary transit service 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 transit system to serve the 2040 Growth Concept secondary land use components (station communities, town centers, main streets, corridors) with high quality transit service.

1. **Objective:** To develop a network of primary and secondary transit service to growth concept station communities with core service provided by either LRT and/or HCT Bus (Fastlink II).
2. **Objective:** To develop a network of primary and secondary transit service to growth concept town centers with core service provided by primary bus.
3. **Objective:** To develop a network of primary and secondary transit service to growth concept main streets with core service provided by Fastlink I bus.
4. **Objective:** To develop a network of primary and secondary transit service to growth concept corridors with core service provided by primary bus.

Goal 3 - Develop a reliable, convenient and accessible system of secondary transit service to serve the 2040 growth concept "other urban components." (employment areas, outer neighborhoods and inner- neighborhoods)

1. **Objective:** To provide secondary transit service to employment areas with core service provided by mini-bus.
2. **Objective:** To provide secondary transit service to inner neighborhoods with core service provided by secondary bus.
3. **Objective:** To provide secondary transit service to outer neighborhoods with core service provided by mini-bus.

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

1. **Objective:** To install lifts on all new high floor transit vehicles or ramps on low floor transit vehicles.
2. **Objective:** To continue to work with local jurisdictions to make transit stops accessible.

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

1. **Objective:** To improve the existing level of safe transit operations.
2. **Objective:** To reduce the number of reportable accidents involving transit vehicles.
3. **Objective:** To improve the existing level of passenger safety and security on the transit system.

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

1. **Objective:** To increase awareness of transit and how to use it through expanded education and public information media and easy to understand schedule information and format.
2. **Objective:** To improve the system for receiving feedback information from transit riders.

The freight system policies that follow have been reviewed by the RTP Citizen Advisory Committee and tentatively approved as final revisions.

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 2 to 3 times by 2040 - 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.

Goals and Objectives

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

1. **Objective:** To maintain a reasonable and reliable travel (transit) time for moving freight through the region in freight transportation corridors.
2. **Objective:** To include the movement of freight when conducting multi-modal transportation studies.
3. **Objective:** To work with the private sector, local jurisdictions, ODOT and other public agencies to:
 - develop and maintain 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:** To 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;
 - transportation and/or land use actions or policies that result in lower speeds or less service on the freight network;
5. **Objective:** To 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, seamless, multi-modal transportation network that offers competitive choices for freight movement.

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

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

1. **Objective:** To 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:** To analyze market demand and linkages in estimating and expanding the life of public investments in the freight network.
3. **Objective:** To encourage efforts to provide flexible public funding for freight mobility investments.
4. **Objective:** To 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:** To 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;
 - 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.

The bicycle system policies that follow have been reviewed by the RTP Citizen Advisory Committee and tentatively approved as final revisions.

Regional Bicycle System

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. The 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 & Objectives

Goal 1 - Provide a seamless 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 metro region to develop a convenient, safe, accessible and appealing system of regional 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 which connect activity centers as identified in Region 2040 and the Regional Framework Plan.
2. **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.
3. **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 classification.

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

3. **Objective:** Ensure that jurisdictions implement bikeways in accordance with established design standards.
4. **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 of bicycle accidents in the metro area.
4. **Objective:** Identify and improve high-frequency bicycle accident locations. *(new objective based on CAC discussion)*

The pedestrian system policies that follow have been reviewed by the RTP Citizen Advisory Committee and tentatively approved as final revisions.

Regional Pedestrian Program

By providing dedicated space for those on foot or using mobility devices, pedestrian facilities are recognized as an important incentive in promoting walking as a mode of travel. Throughout this document, the term "walking" should be interpreted to include those 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 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. Transit

use is enhanced by pedestrian improvements, especially those facilities which connect stations or bus stops to surrounding areas or which provide safe and attractive waiting areas. Improving walkway connections in mixed use employment and commercial districts can allow employees to complete lunch-time errands and personal activities on foot, thereby reducing the need to bring an automobile to work and enhancing 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.

The demand management policies that follow have been reviewed by the RTP Citizen Advisory Committee and tentatively approved as final revisions.

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 a 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 Portland 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 '96). 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 Goals, 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 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 Region 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 Region 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 Region 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 - Maintain coordination 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 the regional programs and services that are available.

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 home-end 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 region 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.

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 2040 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 transit use.



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Regional Transportation Plan Update

PHASE I

Interim Federal RTP

Interim update to incorporate planning requirements of the Federal ISTEA (necessary for continued federal funding).

PHASE II

2040 Implementation - RTP Policy Component

Connecting land use and transportation: the policy document identifies key land use components of the 2040 growth concept, and new policies will ensure that the RTP complements and leverages 2040.

What do we need? Chapter 1 identifies the modal objectives and level-of-service standards that will be used to plan and evaluate the regional system.

How do we design it? The regional street design concepts will be used to connect modal objectives and land use needs.

PHASE III

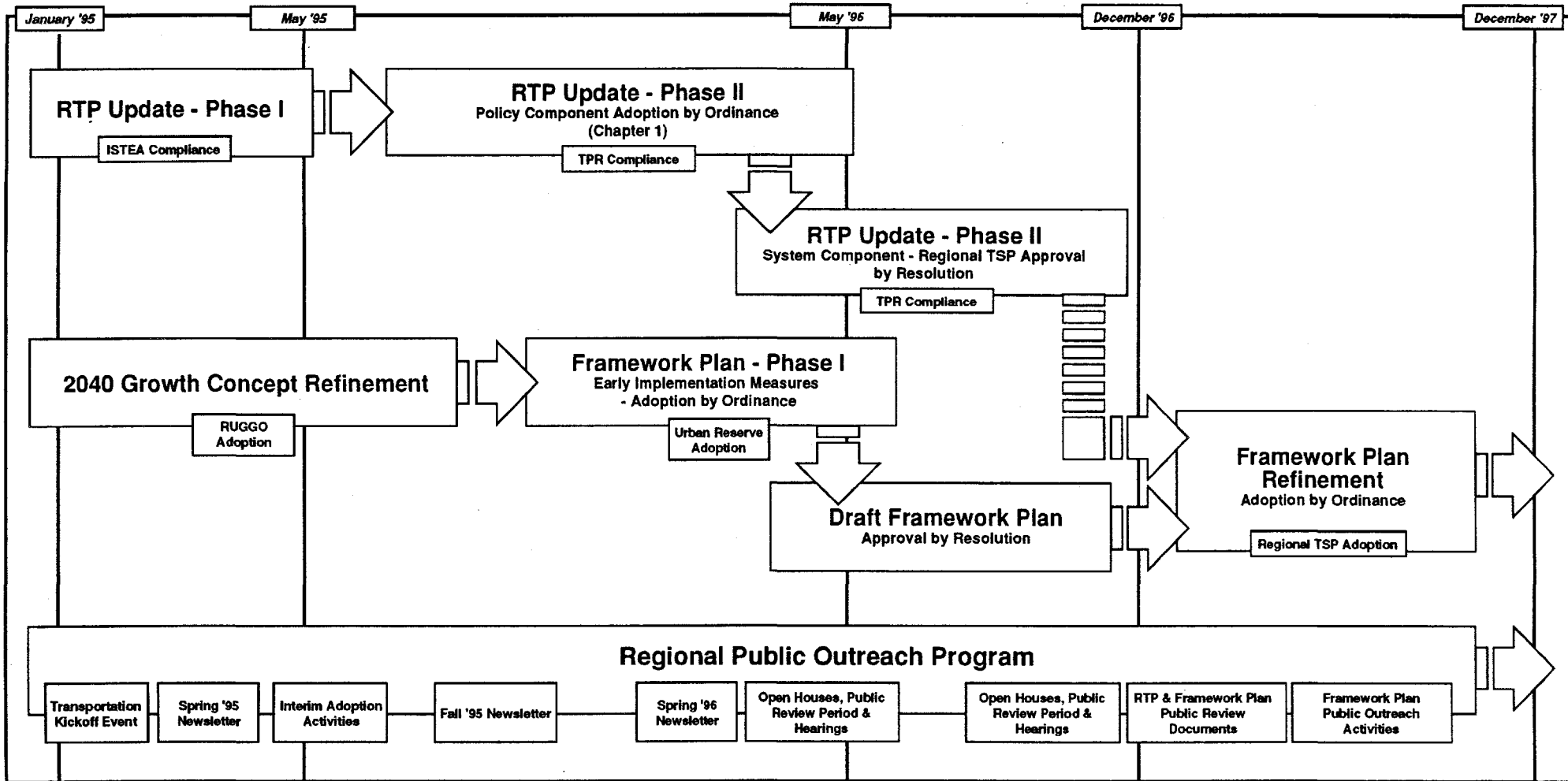
2040 Implementation - RTP System Component

The recommended system improvements in the RTP will be organized according to funding scenarios and timing within the 20-year plan period:

	<i>Plan Period (years)</i>			
	<i>5</i>	<i>10</i>	<i>15</i>	<i>20</i>
<i>Financially Committed</i>				
<i>Financially Constrained</i>				
<i>Strategic</i>				
<i>Preferred</i>				



Regional Framework Plan & Regional Transportation Plan Update Integrated Timeline





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RTP Citizen Advisory Committee

Lois Achenbach, Resident Delegate, City of Portland
Charles Becker, Resident Delegate, Cities of Multnomah County
Jan Campbell, Resident Delegate, Cities of Washington County
Robert Enninga, Resident Delegate, Washington County
Gregory Goodman, Business Delegate, City of Portland

Mark Heintz, Clark County/City of Vancouver Delegate
David Hurt, Youth At-Large Delegate
Joseph Intile, Business Delegate, Cities of Clackamas County
Kevin Kincaid, Transit Union At-Large Delegate
Paul Koch, Resident Delegate, Clackamas County

Patricia Lee, Senior Citizen At-Large Delegate
Gerri Sue Lent, Alternative Mode At-Large Delegate
Don MacGillivray, Metro Committee for Citizen Involvement (MCCI)
Charles Noble, Business Delegate, Cities of Washington County
Anne O'Ryan, Motorist At-Large Delegate

Karl Rohde, Resident Delegate, Cities of Clackamas County
Marjorie Schmunk, Resident Delegate, Cities of Multnomah County
Paul Spanbauer, Business Delegate, Cities of Multnomah County
vacant, Freight At-Large Delegate
Joe Walicki, Alternative Mode At-Large Delegate
Chris Wrench, Environmental Interest Group At-Large Delegate



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**RTP Chapter 1 Revisions
Summary of CAC Actions**

RTP Section	Review and Comment on Draft Revisions	Tentative Approval of Final Revisions	Notes
A. Introduction (History & Purpose)	March 19, 1996 (scheduled)	April 16, 1996 (scheduled)	<i>former introduction and history sections to be merged and revised to reflect overall RTP vision</i>
B. Urban Form and Transportation	March 5, 1996 (scheduled)	March 19, 1996 (scheduled)	
D. Transportation System Design			
Systemwide Goals & Objectives	March 19, 1996 (scheduled)	April 16, 1996 (scheduled)	
Regional Street System Goals & Objectives	March 19, 1996 (scheduled)	April 16, 1996 (scheduled)	
Motor Vehicle System Goals & Objectives	March 19, 1996 (scheduled)	April 16, 1996 (scheduled)	
Transit System Goals & Objectives	January 16, 1996	March 5, 1996 (scheduled)	<i>Upon TPAC's recommendation, the CAC is considering a second draft of this item</i>
Freight System Goals & Objectives	January 2, 1996	February 6, 1996	
Bicycle System Goals & Objectives	November 7, 1995	January 2, 1996	
Pedestrian System Goals & Objectives	January 16, 1996	February 20, 1996	
Transportation Demand Management Goals & Objectives	January 2, 1996	March 5, 1996 (scheduled)	<i>The CAC has tentatively approved this item; TDM Goal 2 to be discussed on March.</i>







February 6, 1996

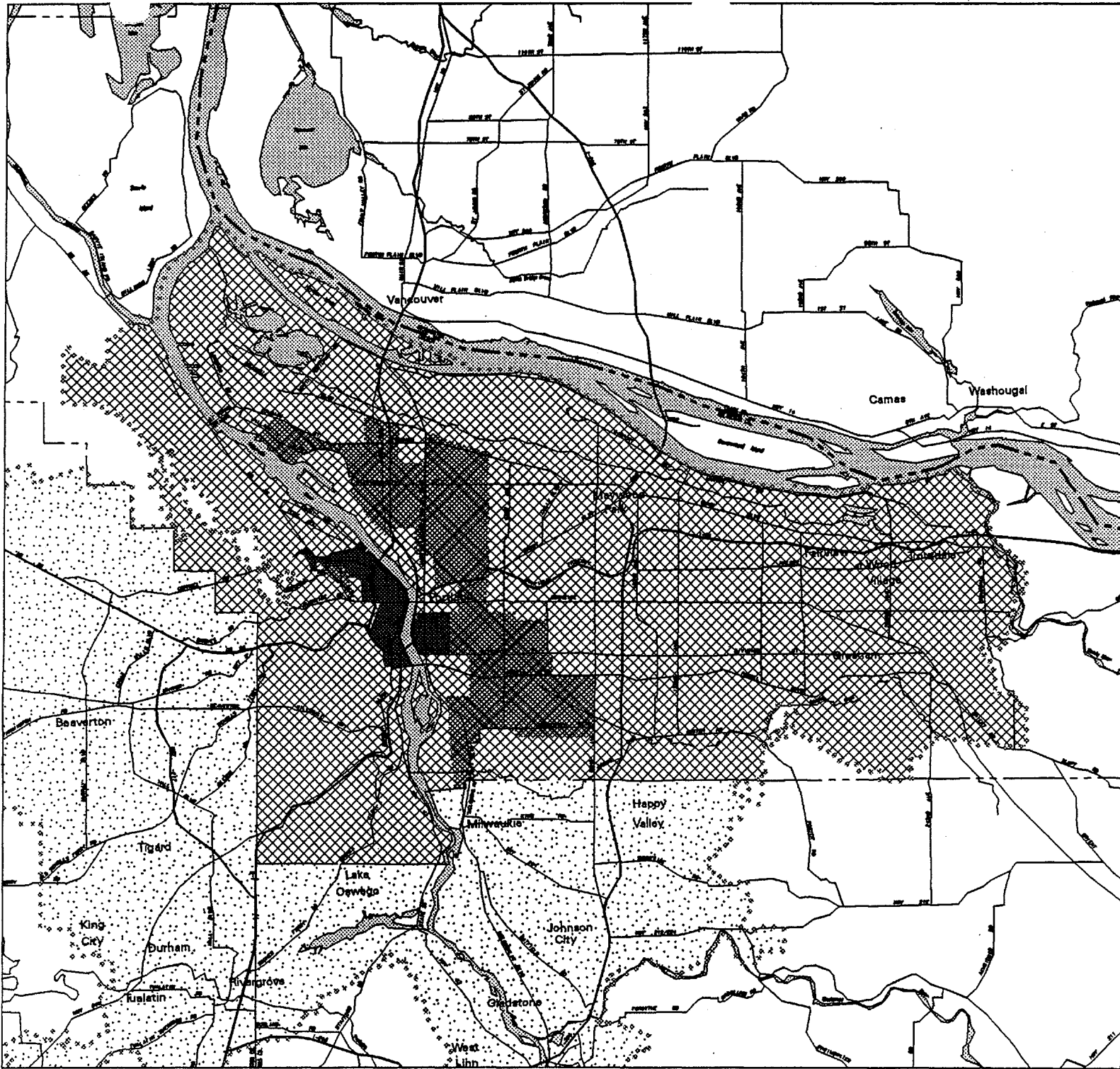
Metro Travel Survey (all trip purposes)

Mode Share						Vehicle Miles per Capita	Auto Ownership per Household
Area Type	% Walk	% Bike	% Transit	% Auto	% Other		
Good Transit/ Mixed Use	28.5 %	2.5 %	8.8 %	58.8 %	1.4 %	12.55	1.25
Good Transit Only	14.0 %	2.5 %	5.7 %	77.2 %	0.68 %	15.01	1.61
Balance of Mult. County	9.8 %	1.7 %	4.3 %	83.4 %	0.84 %	22.67	1.80
Balance of Region	7.6 %	1.1 %	1.6 %	89 %	0.83 %	23.75	2.05

Transportation Survey

Households by Stratum Multnomah County

-  Stratum Boundary
-  Urban Growth Boundary
-  Good Transit and Mixed Land Use
-  Good Transit Only
-  Balance of Multnomah County
-  Balance of Region



600 NE Grand Ave
 Portland, OR 97232-2736
 (503) 797-1742



METRO

Metro Travel Survey (all trip purposes)

Mode Share						Vehicle Miles per Capita	Auto Ownership per Household
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Balance of Mult. County	9.8 %	1.7 %	4.3 %	83.4 %	0.84 %	22.67	1.80
Balance of Region	7.6 %	1.1 %	1.6 %	89 %	0.83 %	23.75	2.05

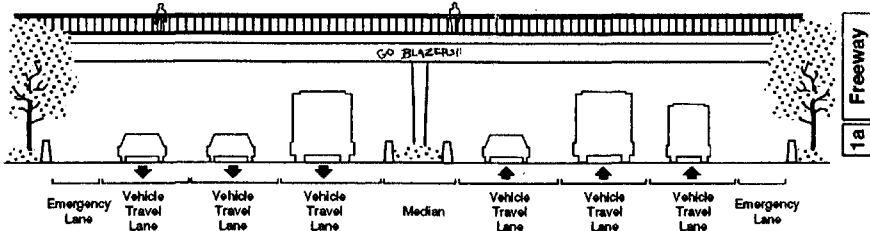


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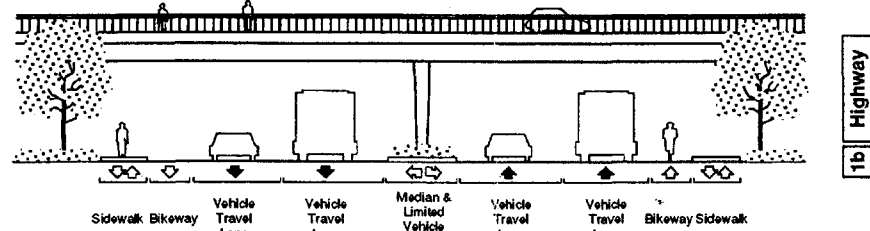
Regional Street Design Study

Design Concepts

Throughways

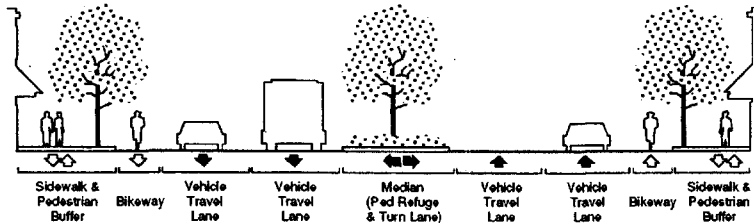


1a Freeway

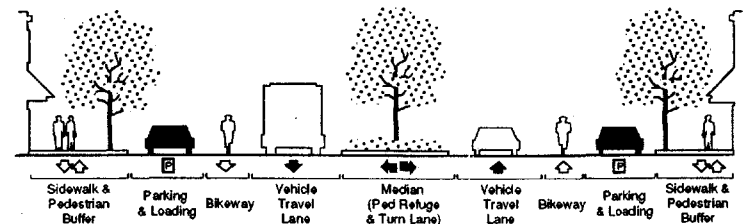


1b Highway

Boulevards



2a Regional Boulevard



2b Community Boulevard

STREET DESIGN COMPONENTS

2040 Design District	Bldgs Oriented Toward Street	Vehicle Travel Lanes	Vehicle Speed	Turn/Median	Street Connect	Drive-ways	On-Street Parking	Transit Amenities	Pedestrian Amenities	Improved Ped Xings	Bikeways	Freight Function
Any District	Never	Usually 4-6; add'l lanes in some situations	High	No	Few; always with separated grades	None	Emergency Only	Through-service supported with amenities only at station areas; transit priority where appropriate at interchanges	None	On overpasses	Usually Parallel	Primary Freight Routes
Any District	Never	Usually 4-6; add'l lanes in some situations	High	In some locations	Few; mix of separate and at-grade	Few to None	Usually Prohibited	Through-service supported with amenities only at station areas; transit priority designs where appropriate at intersections	Minimum sidewalk width with optional buffering	On overpasses and at intersections	Striped	Primary Freight Routes
Central City Regional Center Station Community Some Main Streets Town Center	Usually	Usually 4; add'l lanes or couplets in some situations	Low to Moderate	Yes; designed as pedestrian refuge	Many	Some (combined when possible)	Usually	High-quality service supported with substantial amenities at stops and station areas	Maximum sidewalk width with buffering, special lighting and crossing amenities	At all intersections	Striped or Shared	Primary Freight Routes; provide access to markets with loading amenities within the right-of-way
Central City Regional Center Station Community Some Main Streets Town Center	Usually	Usually 4; less in some situations	Low	If possible; designed as pedestrian refuge	Many	Many (combined when possible)	Usually	High-quality service supported with substantial amenities at stops and station areas	Maximum sidewalk width with buffering, special lighting and crossing amenities	At all intersections	Striped or Shared	Secondary Freight Routes; provide access to markets with loading amenities within the right-of-way

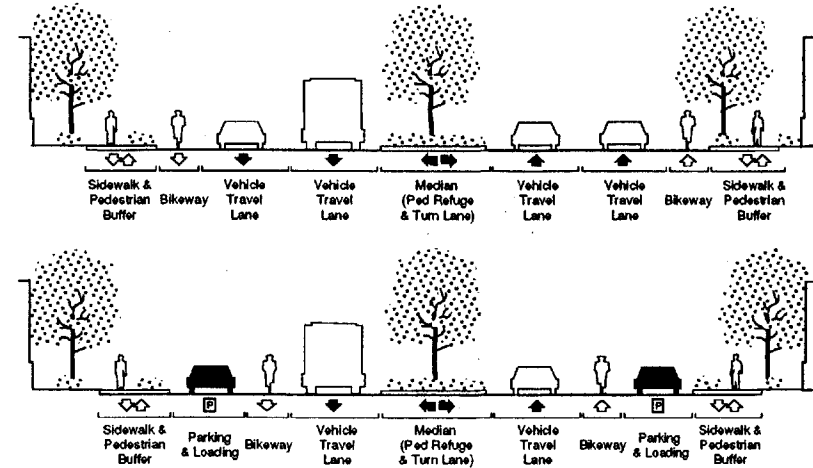


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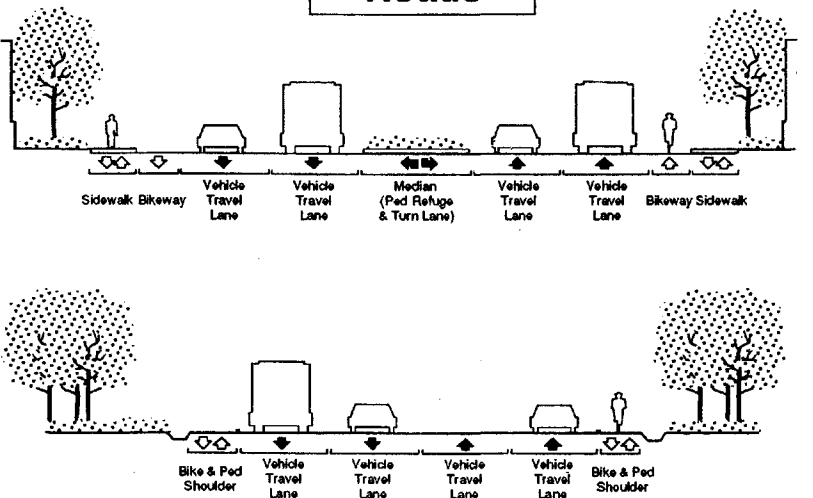
Regional Street Design Study

Design Concepts

Streets



Roads



STREET DESIGN COMPONENTS

2040 Design District	Bldgs Oriented Toward Street	Vehicle Travel Lanes	Vehicle Speed	Turn/Median	Street Connect	Driveways	On-Street Parking	Transit Service/Amen.	Pedestrian Amenities	Improved Ped Xings	Bikeways	Freight Function
Corridor Some Main Streets Inner Neighborhood Outer Neighborhood	At major intersections and transit stops	Usually 4; add'l lanes in some situations	Moderate	Mix of medians and turn lanes that provide pedestrian refuge	Some to Many	Few (combined when possible)	Allowed	High-quality service supported with amenities at major stops and station areas	Moderate sidewalk width with buffering; lighting and special crossing amenities tied to major transit stops	At signaled intersections	Striped or Shared	Primary Freight Routes; provide access to markets and may include loading amenities within the right-of-way
Corridor Some Main Streets Inner Neighborhood Outer Neighborhood	At major intersections and transit stops	Usually 4; less in some situations	Moderate	Mix of medians and turn lanes that provide pedestrian refuge	Some to Many	Some (combined when possible)	Allowed	High-quality service supported with amenities at major stops and station areas	Moderate sidewalk width with buffering; lighting and special crossing amenities tied to major transit stops	At signaled intersections	Striped or Shared	Secondary Freight Routes; provide access to markets and may include loading amenities within the right-of-way
Employment Center Industrial Area UGB Additions	Rarely	Usually 4; add'l lanes in some situations	Moderate	Yes	Some	Few	Rarely	Limited service supported with limited amenities at major stops	Minimum sidewalk width with optional buffering	At major intersections	Striped	Primary Freight Routes
Urban Reserve Rural Reserve Green Corridor	Rarely	Usually 2-4; add'l lanes in some situations	Moderate	Sometimes	Some	Few	Rarely	Through-service supported with limited amenities at major stops	Bike/Ped striped shoulder	None	Bike/Ped striped shoulder	Primary Freight Routes

Phase I of the
Regional
Framework Plan

Discussion Draft

February, 1996



METRO

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REGIONAL FRAMEWORK PLAN - PHASE 1

A functional plan scope for early implementation of the Metro 2040 Growth Concept

Introduction

Metro was created after a vote of the citizens of the region as an elected regional government for addressing issues of regional significance in the metropolitan area, and is enabled by state law, adopted by the Oregon Legislature in 1977. In addition, the voters of the region adopted a Metro Charter in 1992, which describes additional responsibilities for the agency. Metro has an elected Executive Officer and a Metro Council which propose and determine region-wide policies.

The Metro Policy Advisory Committee, (MPAC), is comprised of local government elected officials and appointed citizens from throughout the region and created to advise the regionally elected Metro Council on matters of metropolitan significance. It was included in the Metro Charter adopted by a vote of the citizens of the metropolitan area. MPAC has recommended specific policies to be included in a new functional plan to be adopted by the Metro Council as soon as practicable. This adoption would be prior to the deadline for completion of the all of the Metro Charter required elements of the regional framework plan. This recommendation was made by MPAC to begin implementation of the regional policies of the Metro 2040 Growth Concept as adopted by the Metro Council by Ordinance No. 95-625-A. Early implementation is intended to take advantage of opportunities now, rather than the later date when all of the required elements of the regional framework plan would be available for adoption to meet the mandate and time line of the Metro Charter.

MPAC, as well as the Joint Policy Advisory Committee on Transportation, (JPACT) and the Water Resource Policy Advisory Committee (WRPAC) have made recommendations for the scope and contents and are the basis for this functional plan scope. All of the elements were deemed by MPAC, JPACT and WRPAC to be of metropolitan significance. The following text states the scope of recommended regional policies which will apply to all 24 cities and 3 counties within the Metro region for early implementation of the 2040 Growth Concept. Phase 1 is a functional plan addressing some of the required elements of the regional framework plan. Additional implementing policies will be included in Phase 2 to complete all of the required components of the regional framework plan. The elements in this functional plan scope along with Phase 2, will be readopted in official components of the Metro Charter mandated Regional Framework Plan, on or before December 30, 1997.

It should also be noted that this functional plan relies on further actions, primarily changes to local government comprehensive plans and implementing ordinances, to effectuate the actions described below.

The Meaning of Regional Functional Plan Adoption

The following regional policies recommend and require changes to city and county plans to implement regional goals and objectives constituting the Phase 1 Regional Framework Plan under ORS 268.390, RUGGO Goal I, and Resolution No.96-____. The requirements for plan changes, including implementing regulations, shall be adopted by all cities and counties in the Metro region within eighteen (18) months from the effective date of this ordinance.

Local determination not to incorporate functional plan policies into comprehensive plans shall be subject to the conflict resolution and mediation processes included within the RUGGO, Goal I provisions. Local actions inconsistent with functional plan requirements are subject to appeal for violation of the functional plan.

Regional Policy Basis

The regional policies described below are formulated from, and consistent with the Regional Urban Growth Goals and Objectives, (RUGGO), including the Metro 2040 Growth Concept. These adopted Metro policies will be incorporated into the Regional Framework Plan. Also, the overall principles of the Greenspaces Master Plan are incorporated.

In addition, the 1996 Regional Transportation Plan¹, when adopted, will serve as the transportation element of the Framework Plan. It will be the primary transportation policy implementation of the 2040 Growth Concept. However, early implementation land use policies in this functional plan are integrated with early implementation transportation policies derived from preparation of the 1996 Regional Transportation Plan, and consistent with the Metro 2040 Growth Concept.

Required Regional Framework Plan Phase 1 Elements

Title 1 Requirements for Overall Accommodation of Growth

Section 1. Local Plan Accommodation of Allocated Growth Targets.

State law and Metro code require that the Metro UGB have sufficient capacity to accommodate the expected growth for 20 years. In order to minimize the amount of urban growth boundary expansion required for the expected population by 2015 consistent with Statewide Goals 11,12 and 14 especially, it is beneficial and desirable to increase the density permitted for development within the UGB consistent with the Metro 2040 Growth Concept. In order to better accommodate expected demand for households and employment in the regional urban

¹ Metro has an adopted Regional Transportation Plan. However, because of changing local and regional conditions as well as state and Federal requirements, a new 1996 edition is being written.

growth boundary, local governments must allow construction at densities that will accommodate the share of regional growth allocated to their jurisdiction.

Section 2. Growth Targets for Local Governments within the Metro Boundary

The Growth Targets for Housing Units and Employment are contained in the Appendix and labeled Table 1.

Section 3. Review of Permitted Capacity of Housing Units and Employment.

The purpose of this review is to determine the extent of amendments to comprehensive plans and implementing ordinances to comply with Section 4. All cities and counties within the Metro region are hereby required to review the permitted capacity of their current comprehensive plans, and calculate the expected capacity of housing units and employment by the year 2015. These estimates shall be conducted using the following method:

a) Local governments shall use Metro estimates of vacant land, and land likely to redevelop, unless the local government has data which it believes is more accurate. In this case the local government shall use their data, but shall include a justification for the data, including:

- i) The source of the data
- ii) The reasons that the locally developed data is a more accurate estimate than the Metro estimate of vacant and redeveloped land.
- iii) The database that the above were derived from.

b) In estimating current capacity, local governments shall not estimate actual capacity at more than 80%² of maximum permitted density, unless

- i) actual practice since 1990 has permitted and developed at density greater than 80% of permitted density, or,
- ii) minimum density standards are adopted or proposed for adoption in the zoning code that require development at greater than 80% of maximum permitted density.

c) Local governments shall estimate the effect of each of the following on its overall development capacity;

- i) Required dedications for public streets, consistent with the "skinny street" provisions of this plan;
- ii) Off-street parking, consistent with this plan;
- iii) Landscaping, setback, and maximum lot coverage requirements;
- iv) The effects of tree preservation ordinances, environmental protection ordinances, view preservation ordinances, solar access ordinances, or any other

² The 80% general rule for maximum capacity is based on a history of approximately 23 % "underbuild".

regulations that may have the effect of reducing the capacity of the land to develop at the permitted density.

v) The effects of areas dedicated to bio-swales, storm water retention, open space dedications, and other requirements of local codes that may reduce the development density.

Section 4. Permitted Capacity Amendments to Comprehensive Plans and Development Regulations Required

If the capacity estimates developed under Section 3 above are less than the jurisdiction's Growth Targets, then the jurisdiction is hereby required to amend its comprehensive plans and implementing ordinances to provide the capacity for 2015 population and employment targets contained in Section 2. The capacity calculation shall be made according to the same methodology the jurisdiction used in Section 3. The jurisdiction shall demonstrate consideration of the following:

- a) The permitted densities are at locations and densities that the market is likely to build,
- b) The capacity calculation must use only those development types that are an outright permitted use in the development code. Any discretionary decision must not affect the permitted density, nor lengthen the approval process.
- c) Local governments must adopt minimum permitted densities for housing units, or minimum permitted floor-area ratios in all zoning designations that provide more than 10% of that jurisdiction's growth capacity for housing units or employment.
- d) Local governments are hereby required to amend their comprehensive plans and implementing ordinances to allow flag lots in those areas of the city or county where existing lot sizes are two or more times that of the minimum lot size.

Title 2 Requirements to Accommodate Growth in Mixed Use Areas.

Section 1. Comprehensive Plan and Implementing Ordinance Review Procedures and Standards

In those areas within a planning jurisdiction designated by the Metro 2040 Growth Concept as Central City, Regional Centers, Town Centers, Station Areas, and Mainstreets cities or counties shall;

Review the permitted capacity of their current comprehensive plans in these mixed use areas, and calculate the expected capacity of housing units and employment by the year 2015. These estimates shall be conducted using the following method:

a) Local governments shall use Metro estimates of vacant land, and land likely to redevelop, unless the local government has data which it believes is more accurate. In this case the local government shall use their data, but shall include a justification for the data, including:

- i) The source of the data;
- ii) The reasons that the locally developed data is a more accurate estimate than the Metro estimate of vacant and redeveloped land; and
- iii) The database that the above were derived from.

b) In estimating current capacity, local governments shall not estimate actual capacity at more than 80% of maximum permitted density, unless

- i) actual practice since 1990 has permitted and developed at density greater than 80% of permitted density, or,
- ii) minimum density standards are in place that require development at greater than 80% of maximum permitted density.

c) Local governments shall estimate the effect of each of the following on its overall development capacity;

- i) Required dedications for public streets;
- ii) Off-street parking;
- iii) Landscaping, setback, and maximum lot coverage requirements;
- iv) The effects of tree preservation ordinances, environmental protection ordinances, view preservation ordinances, solar access ordinances, or any other regulations that may have the effect of reducing the capacity of the land to develop at the permitted density.
- v) The effects of areas dedicated to bio-swales, storm water retention, open space dedications, and other requirements of local codes that may reduce the development density.

Section 2. Growth Targets for Local Governments within the Metro Boundary for Mixed Use Areas

The Growth Targets for Housing Units and Employment for Mixed Use Areas are contained Table 2 in the Appendix.

In addition, cities and counties with land use authority for station areas communities are hereby required to amend their comprehensive plans and implementing ordinances to ensure compact urban form within these areas consistent with the standards in Table 3 included in the appendix.

Section 3. Amendments to Comprehensive Plans and Development Regulations Required for Mixed Use Areas

If the capacity estimates developed using the methodology in Section 1 above for the total combined capacity for all mixed use areas within a jurisdiction are less than the jurisdiction's Growth Targets, then the jurisdiction shall amend its comprehensive plans and implementing ordinances to permit the growth targets contained in Section 2. The calculation shall be made according to the same methodology the jurisdiction used in Section 1. The jurisdiction shall consider the following:

- a) The permitted densities are at locations and densities that the market is likely to build,
- b) The capacity calculation must use only those development types that are an outright permitted use in the development code. Any discretionary decision must not affect the permitted density, nor lengthen the approval process.
- c) Local governments must adopt minimum permitted densities for housing units, or minimum permitted floor-area ratios in all zoning designations that provide more than 10% of that jurisdiction's growth capacity for housing units or employment.

In addition, the cities and counties of the region shall examine their implementing ordinances and demonstrate that densities identified in the communities regulations can actually be achieved when all other requirements are applied.

Title 3 - Regional Parking Policy

A compact urban form requires that each use of land is carefully considered and that more efficient forms are favored over less efficient ones. Parking, especially if provided in new developments can result in a less efficient land usage and lower floor to area ratios. Parking also has implications for transportation. 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. Reductions in auto trips when substituted by non-auto modes can reduce congestion and increase air quality.

Accordingly, cities and counties are hereby required to revise their comprehensive plans and implementing regulations to ensure that the development codes meet the following minimum standards:

- A. Require no more parking than the minimum as shown on Table 4, in the appendix;
- B. Establish parking maximums in transit, bicycle and pedestrian convenient areas at rates no more than those listed for Zone A in Table 4 and as illustrated in the Parking Maximum map. For all urban areas outside Zone A, cities and counties shall establish parking space maximums no greater than those listed in Zone B in Table 4 and as illustrated in the Parking Maximum map.
- C. Adopt an administrative or public hearing process for considering ratios for individual or joint developments which are: (i) in excess of the maximum parking ratios, and (ii) less than the minimum parking ratios. Local governments may grant an adjustment from maximum parking ratios or minimum parking ratios through an adjustment or variance process.

Surface parking spaces available for no fee are subject to the regional parking maximums. Parking spaces in parking structures, fleet parking, parking for vehicles that are for sale, lease, or rent, employee car pool parking spaces, dedicated valet parking spaces, spaces which are user paid, market rate parking or other high-efficiency parking management alternatives may be exempted from maximum parking standards. Sites which are proposed for redevelopment may be allowed to phase in reductions as a local option. Where mixed land uses are proposed, local governments shall provide for blended parking rates. It is recommended that local governments count adjacent on street parking spaces, nearby public parking and shared parking toward required parking minimum standards.

Local governments shall monitor and provide the following data to Metro on an annual basis: 1) the number and location of actual parking spaces developed, and 2) demonstration of compliance with the minimum and maximum parking standards, including the application of any local adjustments to the regional standards in this title.

Title 4. Stream Corridor Conservation

Section 1. Intent

Land use policies which allow greater residential and non-residential densities than current comprehensive plans must be accompanied by actions which ensure that human and properties are not at risk, and that natural resources and water quality are not significantly degraded as a result of more intense development. The Metro 2040 Growth Concept and the Metropolitan

Greenspaces Master Plan use a coordinated watershed management approach to protect lives and property as well as portions of our natural landscape - a vital part of our overall quality of life. Watershed planning is intended to apply uniformly to all cities and counties in the region, because rivers and streams cross jurisdictional boundaries. This approach will help to protect lives and property and protect and restore the natural features of streams, wetlands and floodplains to the maximum extent possible. The purpose of stream corridor conservation is that it is a cost-effective means of protecting these multiple values. It protects human life and private property, through stormwater runoff control. In addition, it protects or restores fish and wildlife habitat, by reestablishing water temperatures to those nearer to original levels, protects native plant populations and restores water quality levels through the reduction of sediment by controlling soil erosion.

Section 2. Protection of Stream Corridors Required.

Cities and counties are required to amend their comprehensive plans and implementing regulations to protect the natural system of existing stream corridors, wetlands and floodplains that are included in the map of environmental constraints (in Exhibit __3 attached and incorporated into this plan) to the minimum standards contained below:

- a. Prohibit development of the area defined in the map as riparian protection zone, except for specifically defined activities in the local regulation;
- b. Permit only those developments which have no additional stormwater runoff to a receiving stream, or contribute commensurate to their stormwater runoff increase to a watershed-wide stormwater facility;
- c. Permit only those developments which provide low velocity stormwater outfalls;
- d. Development is defined as alteration of the land surface by:
 1. Grading, filling, cutting or other earth-moving activity involving more than fifty (50) cubic yards on any lot. Grading for any development which involves 50 or greater cubic yards within a floodplain shall be done on a balanced cut and fill basis;
 2. The removal of five percent (5%) of the total number of living (or dead trees) over six (6) inches diameter at breast height (DBH), whichever is greater, on any lot within any one (1) calendar year, or any form of commercial logging, except that trees ten (10) inches DBH or greater shall not be removed. Living native trees of six (6) to ten (10) inches that are cut shall be replaced at a ratio of three native trees for each one removed. The replacement trees shall be a minimum of one-half (1/2) inch DBH and selected from an approved plant list. All trees shall be planted onsite;

3. Construction of a building, road, driveway, parking area, or other structure;

4. Culverting of any stream.

e. The local ordinance shall contain language which requires that:

1) Any native species of tree over six (6) inches DBH shall be retained to the greatest extent feasible.

2) Fill and culverting shall be permitted only for streets, access, or utilities. The crossing shall be at right angles to the creek channel to the greatest extent possible. Fill shall be kept to a minimum.

3) The general topography of those areas defined as riparian protection areas shall be retained.

d. Permitted activities, when build consistent with the provisions listed above, may include;

1) sewer, water or stormwater pipes with a maximum construction zone width of 20 feet;

2) overhead or underground electric power, telecommunications and cable television lines within a sewer, water or stormwater right-of-way or with a maximum construction zone width of 20 feet;

3) roads;

e. Local Governments may demonstrate conformance with these natural resource protection requirements by implementing the following recommendations to protect, restore and enhance stream corridors, wetlands and natural areas by:

1. Allowing generous on-site density transfers to obtain urban densities while maintaining wetlands, floodplains, steep slopes, riparian areas and maximizing the zoning potential of the property by building on the remaining parts of the site.

2. Assuring consistent ecologically and water quality based stream corridor protection, restoration and enhancement throughout entire watersheds.

3. Requiring residential, commercial and industrial land use permits, transportation and utility projects to implement measures that eliminate or mitigate non-point source pollution from those activities consistent with local management plans.

Adverse affects on natural resources and their functional values should be avoided and minimized when no feasible alternatives exist. When on site mitigation projects are necessary, they should incorporate non-structural techniques and bioengineering. An overriding objective is to maintain and enhance multiple natural resource values.

F. Metro recommends that local governments preserve open space to maintain connections between open spaces and to address water quality and stormwater management issues as envisioned in the Metropolitan Greenspaces Master Plan and Open Spaces Acquisition refinement plans utilizing tools such as density transfers, acquisition and use of easements, and establish a minimum density for redeveloping sites as the existing density of current use (on larger sites, where a master plan for the entire site achieving minimum densities is approved, development may proceed in phases).

G. Metro shall assist local governments in addressing the LCDC Goals by providing draft findings to a local government in implementing this Title, and shall assist in the defense of any challenge to the adoption or implementation of this Title.

Title 5) Retail in Employment and Industrial Areas.

Section 1 Intent

It is the intent of the Metro Growth Concept that Industrial areas contain very little retail development, and that limited retail uses are to be allowed in Employment Areas, especially those with high traffic volumes and parking needs.

Section 2. Comprehensive Plan and Implementing Ordinance Changes Required.

Cities and counties are hereby required to amend their comprehensive plans and implementing regulations to prohibit retail uses larger than 50,000 feet of gross leasable area per lot in the Employment Areas specifically designated on the map attached and incorporated herein in Exhibit ____.

Section 3. Exceptions

Exceptions to this standard may be included for:

- 1) low traffic generating, land-consumptive commercial uses with low parking demand which have a community or regionwide market, or
- 2) Employment Areas, as indicated on the map in Exhibit ____, which already have developed a substantial amount of retailing may allow new or redeveloped retail uses consistent with regional parking ratios in Title 3.

Title 6) Neighbor Cities and Rural Reserves

Section 1. Intent

The intent of this title is to clearly define Metro policy with regard to areas outside the Metro urban growth boundary. **NO PORTION OF THIS TITLE CAN REQUIRE ANY ACTIONS BY NEIGHBORING CITIES.** Metro, if neighboring cities jointly agree, will adopt or sign rural reserve agreements for those areas designated rural reserve in the Metro 2040 Growth Concept with Multnomah, Clackamas, and Washington County, and Neighbor City Agreements with Sandy, Canby, and North Plains. Metro would welcome discussion about agreements with other cities if they request such agreements.

In addition, Metro will require counties and cities within the Metro boundary to amend their comprehensive plans and implementing ordinances to reflect the rural reserves and green corridors policies described in the Metro 2040 Growth Concept.

Section 2. Metro Intent with Regard to Rural Reserves

Metro shall attempt to designate and protect common rural reserves between Metro's urban growth boundary and designated urban reserve areas and each neighbor city's urban growth boundary and designated urban reserves, and designate and protect common locations for green corridors along transportation corridors connecting the Metro region and each neighboring city. For areas within the Metro boundary, counties are hereby required to amend their comprehensive plans and implementing ordinances to identify and protect the rural reserves and green corridors described in the Metro 2040 Growth Concept and shown on the 2040 Growth Concept Map. For areas outside the Metro boundary, Metro shall encourage intergovernmental agreements with the cities of Sandy, Canby and North Plains.

Section 3. Invitations for Intergovernmental Agreements

Metro shall invite the local governments outside the Metro boundary and named in Section 1 of this title to sign an Intergovernmental Agreement, similar to the draft agreements attached hereto.

Section 4. Metro Intent with Regard to Green Corridors

Metro shall attempt to negotiate a Green Corridor Intergovernmental Agreement with ODOT and the three counties (Clackamas, Multnomah and Washington) to designate and protect areas along transportation corridors connecting Metro and neighboring cities.

Title 7. Regional Accessibility

Section 1. Intent

Early implementation of the 2040 Growth Concept must acknowledge that focusing development in the most concentrated activity centers, including the central city, regional centers, and station communities, may produce levels of congestion that exceed existing standards, yet signal positive urban development for these locales. Conversely, the continued economic vitality of industrial areas and intermodal facilities is largely dependent on preserving or improving access to these areas and maintaining reasonable levels of freight mobility on the

region's main throughways. Therefore, regional congestion standards and other regional system performance measures shall be tailored to reinforce the specific development needs of the individual 2040 Growth Concept land use components.

These regional standards will be linked to a series of regional street design concepts that fully integrate transportation and land use needs for each of the 2040 land use components. The designs generally form a continuum; a network of throughways (freeways and highways) will emphasize auto and freight mobility and connect major activity centers. Slower-speed boulevards within concentrated activity centers will balance the multi-modal travel demands of these areas. Street and road designs will complete the continuum, with multi-modal designs that reflect the land uses they serve, but also serving as moderate-speed vehicle connections between activity centers that complement the throughway system. Of these new designs, the need to implement amenity-oriented boulevards that better serve pedestrian and transit travel in the central city, regional centers and station areas is a key step in the overall implementation of the Metro 2040 Growth Concept.

Section 2. Boulevard Design

In the central city, regional centers, station communities and mainstreets designated on the 2040 Growth Concept Map, all cities and counties within the Metro region are hereby required to amend their comprehensive plans and implementing ordinances to create boulevard designs for existing and planned arterial streets that include:

- A) wide sidewalks with pedestrian amenities such as benches, awnings and special lighting;
landscape strips, street trees and other design features that create a pedestrian buffer between curb and sidewalk;
- B) marked pedestrian crossings at all intersections, and mid-block crossings where intersection spacing is excessive;
- C) permitted use of landscaped medians where appropriate to enhance pedestrian crossings and the visual quality of the streetscape;
- D) bikeways on all major arterials;
- E) on-street parking whenever possible; and
- F) minimal vehicle lane width standards that maximize the extent of the above improvements by calming vehicle traffic.

Section 3. Local Street Network and Design Policies

The design of local street systems is generally beyond the scope of the Regional Transportation Plan. 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 the regional network. Therefore, the RTP will include design standards for connectivity aimed at improving local circulation in a manner that protects the integrity of the regional system.

A) As an interim measure, all cities and counties with the Metro region are hereby required to amend their comprehensive plans and implementing ordinances to adopt the following:

1) a map which identifies those portions of the planning jurisdiction that contain vacant land in blocks of one acre or larger that are expected to subdivide or partition. A local street master plans for all vacant lands shown on the inventory shall be adopted which contain:

a) a map of approximate local street connections in developing areas with spacing of no more than 660 feet between connecting streets, and a requirement that through street dedications and improvements occur in a manner that these general alignments reflect;

b) policies that encourage pedestrian travel by requiring that as development occurs, that the shortest, most direct public right-of-way routes are created to connect residential uses with nearby existing and planned commercial services, schools, parks and other neighborhood facilities;

c) policies that prohibit new cul-de-sac longer than 200 feet, and no more than 25 dwelling units on a closed-end street system.

d) policies that require bike and pedestrian accessibility even when full street connections are not possible.

B) Metro recommends that local governments develop street design plans and policies that anticipate and encourage opportunities to incrementally extend and connect local streets over time in primarily developed areas through periodic redevelopment activity.

Title 8. Narrow Streets Policy

Section 1. Intent

An early implementation policy that will begin transportation implementation of the Metro 2040 Growth Concept is a regional "skinny streets" policy.

The following "skinny streets" measures will maximize the use of urban land, compensate for the increased street coverage resulting from improved connectivity, and create more livable streets. The following alternative local street design standards are hereby required to be adopted into local comprehensive plans and implementing ordinances.

Section 2. Curb-to-Curb Standards

Cities and counties are hereby required to review local street standards and develop new street design alternatives, so that they amend their comprehensive plans and implementing ordinances to permit pavement widths of no more than 28 feet, curb-face to curb-face.

Section 3. Maintaining Slower Speeds on Local Streets

Cities and counties are hereby required to amend their comprehensive plans and implementing ordinances to slow traffic to 25 mph or less on local streets, or on any street in a mainstreet, regional, or town center.

Section 4. Protecting the Pedestrian Environment

Local Governments shall review local street standards and shall protect pedestrian amenities within the framework of the "skinny street" design alternatives, including minimum sidewalk widths and landscaped buffer strips and street trees between sidewalks and the street.

Title 9 Compliance Procedures

Section 1. Compliance Required

All local governments within the Metro boundary are hereby required to amend their comprehensive plans and implementing ordinances to comply with the provisions of this functional plan within eighteen months of the effective date of this ordinance.

Section 2. Compliance Procedures

On or before the deadline established in Section 1, local governments shall transmit to Metro the following:

- a) An evaluation of their local plans, and the amendments necessary to comply with this functional plan;
- b) Copies of all applicable comprehensive plans and implementing ordinances, as proposed to be amended
- c) Findings that explain how the amended local comprehensive plans will achieve the standards required in titles 1 through 8 of this functional plan.

Section 3. Any Comprehensive Plan Change must Comply

After the effective date of this ordinance, any change to a comprehensive plan or implementing ordinance must consider the functional plan requirements contained in titles 1 through 8 and to comply or assist the local government in compliance with all applicable functional plan

requirements. Upon request, Metro will review propose comprehensive pland and implement- ing ordinacnes for functional plan compliance prior to city or county adoption.

Section 4. Enforcement

City or county actions to amend a comprehensive plan or implementing ordinance in violation of this functional plan shall be subject to appeal or other legal action for violation of a regional functional plan requirement. Prior to a final action to amend a comprehensive plan or implementing ordinance, a local determination that a functional plan should not or cannot be implemented shall be subject to the conflict resolution process provided for in the Regional Urban Growth Goals and Objectives, Goal I.

Section 5. Compliance Plan Assistance

Any local government may request of Metro a compliance plan which contains the following:

- i) An analysis of the local government's comprehensive plan and implementing ordinances, and what sections require change to comply with the performance standards.
- ii) Specific amendments that would bring the jurisdiction into compliance with the requirements of Sections 1 to 8, if necessary.

Jurisdictions must make the request within four months of the effective date of this ordinance. The request shall be signed by the highest elected official of the jurisdiction.

Metro shall deliver a compliance plan within four months of the request date. The compliance plan shall be a recommendation from the Executive Officer. The compliance plan shall be filed with the Metro Council two weeks before it is transmitted, for possible review and comment.

Section 6. Growth Concept Must be Addressed

In developing its compliance plan, the local jurisdiction must address the Metro 2040 Growth Concept, and explain how the compliance plan relates to the Growth Concept.

APPENDIX

Table 1 - Additional Household & Job Capacity - Year 2015

City or County	Household Increase to be Accommodated	Single Family/Townhouse/Multi-family Split	Job Increase to be Accommodated
Beaverton			
Cornelius			
Durham			
Fairview			
Forest Grove			
Gladstone			
Gresham			
Happy Valley			
Hillsboro			
Johnson City			
King City			
Lake Oswego			
Maywood Park			
Milwaukie			
Oregon City			
Portland			
River Grove			
Sherwood			
Tigard			
Troutdale			
Tualatin			
West Linn			
Wilsonville			
Wood Village			
Clackamas County*			
Multnomah County*			
Washington County*			

*Standards apply to the urban unincorporated portion of the county only.

Table 2 - Additional Household & Job Capacity in Mixed Use Areas- Year 2015

City or County	Household Increase to be Accommodated	Single Family/Townhouse/ Multi-family Split	Job Increase to be Accommodated
Beaverton			
Cornelius			
Durham			
Fairview			
Forest Grove			
Gladstone			
Gresham			
Happy Valley			
Hillsboro			
Johnson City			
King City			
Lake Oswego			
Maywood Park			
Milwaukie			
Oregon City			
Portland			
River Grove			
Sherwood			
Tigard			
Troutdale			
Tualatin			
West Linn			
Wilsonville			
Wood Village			
Clackamas County*			
Multnomah County*			
Washington County*			

*Standards apply to the urban unincorporated portion of the county only.

Table 3 - Station Area Community Standards

Jurisdiction	Housing Unit Capacity*	Employment Capacity*
Beaverton		
Gresham		
Hillsboro		
Portland		
Washington County		

* Capacity must be shown to be met by each jurisdiction for their combined station areas. Station areas may vary substantially one from another as long as the jurisdictional total is met.

Table 4 - Regional Parking Ratios

(parking ratios are based on spaces per 1,000 sq ft of gross leasable area unless otherwise stated)

(Numbers represent the current level of discussion and are subject to revision)

Land Use	Minimum Park- ing Requirements (See DEQ Stds for Central City)	Maximum Permitted Parking - Zone A:	Maximum Permitted Parking Ratios - Zone B:
	<i>Requirements may Not Exceed</i>	<i>Transit and Pedestrian Accessible Areas¹</i>	<i>Rest of Region</i>
General Office (includes Office Park, "Flex-Space", Government Office & misc. Services) (gsf)	2.7	3.4	4.1
Light Industrial Industrial Park Manufacturing (gsf)	1.6	None	None
Warehouse (gross square feet; parking ratios apply to warehouses 150,000 gsf or greater)	0.3	0.4	0.5
Schools: College/ University & High School (spaces/#of students and staff)	0.2	0.3	0.3

Table 4 - Regional Parking Ratios

(parking ratios are based on spaces per 1,000 sq ft of gross leasable area unless otherwise stated)

(Numbers represent the current level of discussion and are subject to revision)

Land Use	Minimum Park- ing Requirements (See DEQ Stds for Central City)	Maximum Permitted Parking - Zone A:	Maximum Permitted Parking Ratios - Zone B:
	<i>Requirements may Not Exceed</i>	<i>Transit and Pedestrian Accessible Areas¹</i>	<i>Rest of Region</i>
Tennis Racquetball Court	1.0	1.3	1.5
Sports Club/Recreation Facilities	4.3	5.4	6.5
Retail/Commercial, including shopping cen- ters	4.1	5.1	6.2
Supermarket	2.9	3.6	4.4
Bank with Drive-In	4.3	5.4	6.5
Movie Theater (spaces/number of seats)	0.3	0.4	0.5
Fast Food with Drive Thru	9.9	12.4	14.9
Other Restaurants	15.3	19.1	23
Place of Worship (spaces/seats)	0.5	0.6	0.8
Medical/Dental Clinic	3.9	4.9	5.9
Residential Uses			
Hotel/Motel	1	none	none
Single Family Detached	1	none	none
Residential unit, less than 500 square feet per unit, one bedroom	1	none	none
Multi-family, townhouse, one bedroom	1.25	none	none
Multi-family, townhouse, two bedroom	1.5	none	none
Multi-family, townhouse, three bedroom	1.75	none	none

Note: Ratios for uses not included in this table would be determined by local governments. In the event that a local government proposes a different measure, for example, spaces per seating area for a restaurant instead of gross

leasable area, Metro may grant approval upon a demonstration by the local government that the parking space requirement is substantially similar to the regional standard.

Definitions

(To be developed)

DHB

Metro

Metro Boundary

Metro Urban Growth Boundary

BASIC INFORMATION ABOUT WHO IS IN THE GROUP.

It is useful to know a few basics about the group of stakeholders. Please make the selection that is most accurate from the list of responses provided.

1. What "Metro Council District" do you live in?
1= District 1 = Gresham, Troutdale, Wood Village, Fairview
2= District 2 = Happy Valley, Gladstone, Oregon City, West Linn
3= District 3 = Tigard, Tualatin, Sherwood, Wilsonville
4= District 4 = Beaverton, Hillsboro, Forest Grove
5= District 5 = NW Portland, North Portland, lower NE Portland
6= District 6 = outer SE Portland, Milwaukie?
7= District 7 = SE Portland, SW Portland, Milwaukie
8= Outside of Metro Council regions
9= I don't know
2. Which "Regional Center" do you live in or closest to? (What are the regional centers?)
1= 2= 3= 4= 5= 6= 7=
3. In or close to which "Regional Center" do you work, go to school or do most of your "daily activities"?
1= 2= 3= 4= 5= 6= 7=
4. How long have you lived in the Metro Region?
1=Less than 1yr. 2=1-5yrs. 3=6-10yrs 4=11-20yrs 5=21-30yrs. 6=More than 31yrs.
5. What age group are you in?
1= Under 18 2= 18-24 3= 25- 34 4= 35-44 5= 45-54 6= 55-64 7= 65+
6. How many people live in your household?
1= 1 2= 2 3= 3 4= 4 5= 5 6= 6 7= 7 8= 8 9= 9 or more
7. What is your yearly household income?
1= Less than \$25,000 2= \$25,000 – \$49,999 3= \$50,000 – \$74,999 4= More than \$75,000

WHERE YOU LIVE AND HOW YOU GET AROUND

8. Which of these best describes the area in which you live?
1= Urban 2= Suburban 3= Rural changing to suburban 4= Rural 5= Other
9. Which of the following best describes the neighborhood you live in?
1= Downtown- Central Part of a City or Urban Center
2= Urban Mixed Residential- Near an urban center with a mix of homes, apartments and plexes.
3= Urban Single Family- Majority of the neighborhood is single family homes on grid streets.
4= Urban Limited Access Development- Homes, condos or apartment developments "close in".
5= Mixed Residential + Commercial- Not downtown but a substantial commercial presence.
6= Suburban Mixed Residential- Suburban area with a mix of homes, apartments and plexes.
7= Suburban Single Family- Majority of the neighborhood is single family homes on grid streets.
8= Suburban Limited Access Development- Including home, condo or apartment developments.
9= Somewhat Rural- Not in a development. Residences are pretty spread out.
10= Very Rural- Residence is in a agricultural or somewhat isolated place.

10. Which of the following best describes the street you live on?
- 1= Urban Center: Two or more lanes in "downtown"
 - 2= Urban Residential: Two lanes, grid and/or light traffic street
 - 3= Urban Residential: Two or more lanes and/or heavy traffic street
 - 4= Urban Residential: Limited access street or single lane or dead end street or culdesac
 - 5= Mixed Use Street: Like NW 23rd, SE Hawthorne or Sandy Boulevard
 - 6= Suburban Residential: Two lane, grid and/or light traffic street
 - 7= Suburban Residential: Two or more lanes and/or heavy traffic street
 - 8= Suburban Residential: Limited access street or single lane or dead end street or culdesac
 - 9= Rural: Light traffic street
 - 10= Rural: Heavy traffic street
11. The sidewalks in my neighborhood and on my street are:
- 1= None 2= Not continuous 3= There but marginal 4= There and good 5= There and great
12. Which of the following best describes your residence?
- 1= House with garage 2= House no garage 3= Plex 4= Apartment building 5= Other
13. Regarding cars and trucks and similar motorized vehicles I:
- 1= Don't own/use one 2= Borrow/share one 3= Own one vehicle 4= Own two 5= Own 3 +
14. Which best describes your transportation pecking order for work-a-day traveling in the Metro region?
- 1= Car primarily
 - 2= Car mostly with some public transit
 - 3= Public transit mostly with some car
 - 4= Public transit primarily
 - 5= Bicycle mostly with some public transit
 - 6= Bicycle primarily
 - 7= Walk mostly with some public transit
 - 8= Walk primarily
 - 9= Other

INFORMATION ON HOW YOU CHOOSE TO GET AROUND

For this set of statements please respond using the following range of choices:

1= Never/Rarely 2= Seldom 3= Sometimes 4= Frequently 5= Almost always

When I shop, do errands or make social trips:

- 15. I choose to walk
- 16. I choose to ride a bicycle
- 17. I choose to take public transit (or a taxi)
- 18. I choose to take a carpool or van pool
- 19. I choose to drive a car or have someone drive me

WHY YOU CAME TO THIS OPEN HOUSE

Rate each of the following statements by how strongly you agree with how well it describing you and the motivation for your coming to this event.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

Regarding matters of Regional Growth Management, Transportation and Livability:

20. I'm here to learn about these regional matters because I don't know much about them.
21. I'm here to learn about Metro's role in these matters because I don't know much about it.
22. I'm here to learn about how regional issues impact local issues because I don't know much about that.
23. I'm here because I want to support the planning effort; the process is of interest or concern to me
24. I'm here because generally Growth Management and Livability are of interest or concern to me
25. I'm here because moving the Urban Growth Boundary is of interest or concern to me
26. I'm here because the Urban Reserve Study Areas are of interest or concern to me
27. I'm here because the implementation of Metro's 2040 Growth Concept is of interest or concern to me
28. I'm here because Regional Transportation Issues or Plans are of interest or concern to me
29. I'm here because Greenspaces, Stream Corridors and Natural Areas are of interest or concern to me
30. I'm here because Waste Disposal Issues are of interest or concern to me
31. I'm here because Low Income Housing and Poverty Issues are of interest or concern to me
31. I'm here because what my City or County is doing or not doing is of interest or concern to me
32. I'm here because I'm worried about the future
33. I'm here because I want to talk to the elected officials or their staff
34. I'm here because I wanted to voice my opinions
35. I'm here because I didn't have a choice, I had to come because of an outside influence

GROWTH MANAGEMENT AND URBAN GROWTH BOUNDRY ISSUES

To implement the adopted Metro 2040 Growth Concept, more housing will have to be built in remaining space to minimize expansions to the Urban Growth Boundary. Indicate how much you agree with the following strategies or statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

36. Allow more building of "granny flats", perhaps 1 per block, in existing single family neighborhoods
37. Developing vacant properties in single family neighborhoods into lots smaller than those in the surrounding neighborhood (but still single family houses)
38. Encouraging apartments above stores and offices
39. Building 2-3 story apartments along major streets that have frequent bus service
40. Permitting duplexes or 2 story apartments on vacant lands between commercial areas and single family neighborhoods;
41. Building houses on flag lots (narrow access to a lot set back) behind existing single family houses
42. In moderation, all of the above should be used to minimize expansion of the urban growth boundary.
43. Accommodate new homes and growth by expanding the urban growth boundary.
44. I'm not sure. I need additional information.

(How much of this can we blend into the above?) **Phase 1 of the Regional Framework Plan includes a package of objectives to protect the region from urban sprawl and maintain livability.** Indicate how much you agree with the following strategies or statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

- 45. A mix of use. (more on all here)
- 46. Smaller lot sizes for new homes
- 47. "Fill in" vacant or over sized lots with new homes
- 48. Less parking for new commercial developments
- 49. Limiting large scale retail stores
- 50. More development in transit corridors
- (What else here?)

Metro believes that fewer parking spaces are needed for new retail, commercial, offices and other places of employment if they are built so that walking, biking and transit are very convenient. Indicate how much you agree with the following strategies or statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

- 51. New development should be built so that everyone can drive and always park conveniently - walking, biking and transit convenience are not necessary.
- 52. New development should be built so that walking, biking and transit use is more convenient and less parking is needed and provided.
- 53. I need more information.

In the future, more development will be directed to transit corridors, that is, along arterial or major streets in your community. Indicate how much you agree with the following strategies or statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

- 54. If well designed, I would support this type of development, because it would bring more shopping, employment and housing opportunities to my neighborhood and minimize expanding the urban growth boundary;
- 55. I don't like this because it will bring more traffic and congestion to my neighborhood. Growth would be better situated in new areas, even if this means expanding the urban growth boundary.
- 56. I need more information.

In the future, vacant or oversized lots within established neighborhoods will likely be "filled in" with new homes, home built on flag-lots, or existing homes could have accessory units/granny flats. Indicate how much you agree with the following strategies or statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

- 57. If these new homes are designed to fit into my neighborhood and the roads are managed and maintained to ensure that travel speeds are not excessive, I could support these changes as my neighborhood's contribution to a compact region.
- 58. Change should occur out where there is lots of land. If this means expansion of the urban growth boundary, this is more acceptable than change in my neighborhood.
- 59. I need additional information.

STREAM CORRIDORS , NATURAL AREAS AND FLOODPLAINS

A stream corridor is the land area along a stream that is affected by the presence of water. Stream corridors (sometimes referred to as stream buffers) can remove pollutants, provide food and habitat for wildlife and help control flooding. Natural areas are..... Floodplains are..... Indicate how much you agree with the following strategies or statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

- 60. Protecting Stream corridors is important to the livability of our region.
- 61. Protecting Natural Areas (greenspaces?) is important to the livability of our region.
- 62. Protecting floodplains from development is important to the livability of our region
- 63. I need more information

Consequences and trade-offs. Indicate how much you agree with the following strategies or statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

- 64. I would be willing to accept an additional home in my neighborhood to protect streams,
- 65. I would be willing to accept an additional home in my neighborhood to protect natural areas
- 66. I would be willing to accept an additional home in my neighborhood to protect and floodplains
- 67. I would be willing to expand the urban growth boundary to protect streams, natural areas and floodplains
- 68. I Need more information.

69. Where would you most likely to go for information about regional livability issues?

- 1 = My workplace
- 2 = My local government (City or County)
- 3 = Metro
- 4 = My children's school
- 5 = My local library
- 6 = On the internet
- 7 = Cable access TV
- 8 = Newspaper
- 9 = Radio
- 10 = Other

TRANSPORTATION ISSUES

The following is a list of potential strategies or activities to improve transportation. Indicate how important the you think the following strategies or activities are.

1= Zero Importance 2= Not Important 3= Neutral 4= Important 5= Very Important

- 70. Additional transit service such as more light rail and buses, park and ride lots, bus shelters, etc.
 - 71. Information and incentive programs to encourage carpooling and vanpooling by commuters
 - 72. New regional roads and bypasses
 - 73. Adding traffic capacity to existing regional roads and freeways that are very congested
 - 74. Adding traffic signals and left turn lanes to improve intersections
 - 75. Adding sidewalks, pedestrian crossings, and other pedestrian facilities
 - 76. Adding bike lanes, off street bike paths, bike lockers, bike parking and other bicycle facilities
 - 77. Bringing homes, work locations, and shopping closer together
 - 78. Consolidating driveways and restricting left turns on major streets to make traffic flow more smoothly.
 - 79. Slowing traffic on neighborhood streets with curb extensions, traffic circles, speed bumps, and other traffic calming improvements
- (could go back to pick the most important from this list)?

80. What is the biggest barrier to your walking for short trips?

- 1 = There are no sidewalks near my home
- 2 = Have to walk too close to fast moving cars
- 3 = No paths connect me to shopping areas
- 4 = The streets are too wide to cross
- 5 = Lack of traffic signals for pedestrians at intersections
- 6 = I don't live close enough to commercial areas to walk to them
- 7 = The weather; hills
- 8 = Personal safety issues
- 9 = I don't have enough time
- 10 = I'm not able to walk/physical condition

81. What is the biggest barrier to your children walking or biking to school?

- 1 = Lack of sidewalks in my neighborhood
- 2 = Lack of bike lanes
- 3 = Distance is too great
- 4 = Afterschool activities
- 5 = I'm afraid for my children to walk alone
- 6 = I don't have any children

82. What is the biggest barrier to your making trips by bus or light rail?

- 1 = Schedules are hard to use
- 2 = No park and ride near my house and/or park and ride lots are full
- 3 = I live too far from the bus stop and/or lack of bus service in my neighborhood
- 4 = I have to make a lot of stops
- 5 = I have to wait too long
- 6 = There's no place to put my packages, grocery bags, etc.
- 7 = Lack of bike parking at light rail stations or transit stops
- 8 = The weather; lack of covered bus shelters
- 9 = Personal Safety issues
- 10 = I don't have enough time to ride the bus or take MAX

83. What is the biggest barrier to your making short trips by bike?

- 1 = Lack of secure bike parking
- 2 = Not enough striped bike lanes
- 3 = The weather; too dark in the winter
- 4 = Bike lanes and routes don't connect to my destination
- 5 = There are no facilities for showering and changing when I reach my destination
- 6 = Too much auto traffic; cars drive too fast
- 7 = Hills and river crossings
- 8 = Physical condition
- 9 = I don't own or ride a bike

84. Which of the following would be the most effective place to reach people with bicycle safety and education programs?

- 1 = Elementary schools
- 2 = High schools
- 3 = Driver's education classes
- 4 = Oregon driver's license test
- 5 = Local government (city or county)
- 6 = Metro
- 7 = Bike store
- 8 = I don't know

The following is a list of programs or offerings that could help rush hour transportation problems and help make other transportation options more workable. Please rate each of the following by how likely you are to take advantage of the following programs and offerings. (or should we rate them by importance toward solving problems mentioned here?)

1= Zero Likelihood 2= Not Likely 3= Neutral 4= Likely 5= Very Likely

85. Car pool and van pool matching

86. Telecommuting or working at home

87. Discounted transit pass for the bus or MAX

88. Pay fee to use special "fast" highway lanes put aside for rush hour traffic times

89. Preferential parking for car pools

90. Guaranteed ride home if I need to get home quickly on a day that I commuted by transit, bike or foot

91. Secure bike parking or lockers and facilities for showering and changing

92. More than 25% of the region's economy is attributed to trade. In your opinion, how important to our region is improving the freight connections between trucks, rail, seaports and the airport?

1= Zero Importance 2= Not Important 3= Neutral 4= Important 5= Very Important

93. How important is it to you to reduce truck travel through your neighborhood?

1= Zero Importance 2= Not Important 3= Neutral 4= Important 5= Very Important

(Haven't put in the multiple choice for why truck traffic goes through the neighborhood. Didn't seem consistent or to get at something)

COMMITTEE MEETING TITLE JPACT
 DATE 3-14-96

NAME	AFFILIATION
Rod Monroe	Metro
David Yaden	Tri-met
DON MORISSETTE	METRO
Loam Lookingbill	XTC
Linda Peters	Wash Co.
Claudiette La Vert	Cities of mult. Co.
Mary Leary	WSDOT
BRUCE WARNER	ODOT
Roy ROGERS	WASHINGTON County
Mike Burton	Metro
Kathy Bussac	Mult Co
TOM KLOSTER	NETRO
JOHN RIST	CLACKAMAS Co.
BO SANDOZ	"
Pamela Peck	Metro
Daniel Kent	Dolan & Associates
GB ARRWYHW	TRI-MET
STEVE DOTERRER	CITY OF PORTLAND STAFF
Greg Lomack	Cities of Clackamas Co
Jon Kvistad	METRO
JERRY PARMENTER	WASH COUNTY
Jan Whitell - Boynt	Metro
Bernie Bottomly	Tri-met
Nadine Smith	City of Seaside
Maureen Quaid	OR Environmental Council
Mike Hoyle	Auto.