

STAFF REPORT

FOR THE PURPOSE OF AMENDING THE FY 2000-03 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO INCLUDE \$3,443,122 OF CMAQ FUNDS FOR HIGH-SPEED RAIL TRACK IMPROVEMENTS IN THE PORTLAND AREA

Date: October 20, 2000

Presented by: Mike Hoglund

PROPOSED ACTION

This resolution would amend the Metropolitan Transportation Improvement Program (MTIP) to program \$3,433,122 of Congestion Mitigation Air Quality (CMAQ) funds to construct track and signal improvements within the Cascadia high-speed rail corridor from the Wilsburg Junction (approximately Tacoma Street) to the Steel Bridge in southeast Portland. This resolution also authorizes staff to refine programming of the funds as necessary with respect to phase of work and anticipated year of obligation.

EXISTING LAW

The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) authorized creation and special funding for five high-speed rail corridors in the country. The Pacific Northwest Rail Corridor, popularly known as the Cascadia Line, is one of these corridors, and runs from Eugene, Oregon, to Vancouver, British Columbia. The corridor is identified in the Regional Public Transportation System map in the adopted 2000 Regional Transportation Plan (RTP). Dedicated federal funds are available to support enhancement of designated rail corridors and are supplemented by myriad other funding sources. ODOT's rail division is lead agency for the Cascadia corridor improvement program in Oregon.

FACTUAL BACKGROUND AND ANALYSIS

The Oregon Transportation Commission authorized annual allotments of Congestion Mitigation/Air Quality (CMAQ) funds for use by ODOT's rail division to improve trackage and subsidize service in the Oregon portions of the Cascadia high-speed rail corridor. From this source, ODOT has approved programming of \$3,433,122 of CMAQ funds for two projects to improve trackage and signals in southeast Portland. The improvements would be built in various locations between Tacoma Street (Wilsburg Junction) and the east end of the Steel Bridge. (These two projects are part of a larger \$31 million program of 12 projects to make similar improvements from Eugene to Portland.)

The two southeast Portland projects fall within Metro's jurisdiction as MPO of the Portland urbanized area. Any programming of federal transportation funds in the MPO boundary must not only be approved by ODOT, but must also be included in the Portland Metropolitan

Transportation Improvement Program (MTIP). The CMAQ funds will be matched by approximately \$9.8 million of additional funds (\$13.2 million total cost) contributed by Amtrak (\$379,878), the Union Pacific Railroad (\$5,127,000) and other dedicated federal funds (\$4,250,000). The CMAQ funds allocated to the program will not reduce federal obligation limitation that will otherwise be available for projects in the Metro region. As noted, the high-speed rail corridor is identified in the 2000 RTP and supported in the RTP Chapter 1 policies. However, these specific improvements are not included in either the 1995 (federally acknowledged) or 2000 (federal acknowledgement pending) financially constrained RTP networks. They must be included in the network for federal review and approval purposes. The Department of Environmental Quality (DEQ) will be consulted on air quality conformity status prior to the Transportation Policy Alternatives Committee (TPAC) meeting of October 27, 2000.

Presently, three daily round-trips are provided in the corridor between Eugene and Portland. One round-trip is provided by the Amtrak "Starlighter" service from Los Angeles to Seattle, and two state-sponsored trips are run daily between Eugene and Portland. Completion of the subject improvements will enable scheduling of four round-trips. The current minimum round-trip time from Portland to Eugene is 2 hours and 35 minutes. Train speed increases will reduce this to 2 hours and 15 minutes. In the southeast Portland segments, train speeds between the east end of the Steel Bridge to SE Clay Street will increase from the current 20 mph to 35 mph; the 20 mph speed from Clay Street to Powell Boulevard will increase to 45 mph and 65 mph; and speeds from Powell Boulevard to Milwaukie Avenue will reach 70 mph.

The improved service schedule is predicted to greatly improve ridership. For instance, 1998 boardings were 108,369. This is expected to increase to 387,000 passengers in 2003. Improved ridership and operational efficiency is projected to decrease the per passenger subsidy. In 1997 the subsidy was about \$20.46. This will decrease to \$6.10 per passenger in 2003. A \$1.8 million surplus is projected in 2018. As rail service increases, the current supplemental "Motorcoach" service provided by Amtrak will be correspondingly reduced.

As rail ridership increases, auto trips on congested I-5 segments will reduce. Improved train speed and realigned rail crossings will reduce auto delay in southeast Portland. The track improvements will also benefit freight rail operations which will also reduce auto delay. All of these factors are expected to reduce both auto and train related emissions in the Portland area. ODOT environmental staff will provide calculation of these benefits for review and approval by DEQ and US DOT staff prior to federal approval of the MTIP/STIP amendment that authorizes obligation of the CMAQ funds.

BUDGET IMPACT

There would be no direct or indirect impact on Metro's finances from approval of this resolution.

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BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE FY)
2000-03 METROPOLITAN TRANSPORTATION)
IMPROVEMENT PROGRAM (MTIP) TO)
INCLUDE \$3,443,122 OF CMAQ FUNDS FOR)
HIGH-SPEED RAIL TRACK IMPROVEMENTS)
IN THE PORTLAND AREA)

RESOLUTION NO. 00-3001

Introduced by Jon Kvistad,
JPACT Chair

WHEREAS, The Intermodal Surface Transportation Efficiency Act (ISTEA) established five "high-speed rail corridors" and;

WHEREAS, The Pacific Northwest Rail Corridor, which extends between Eugene, Oregon, and Vancouver, British Columbia, is one of the five corridors (Cascadia High Speed Rail service); and

WHEREAS, The long-range planning for upgrading passenger rail service in the corridor is jointly managed by ODOT, Washington State DOT, the Province of British Columbia, Canada, Amtrak, the US DOT and the Union Pacific (UP) and Burlington Northern/Santa Fe (BNSF) railroads; and

WHEREAS, The Cascadia service provides three round-trips daily between Eugene and Portland, Oregon (one round-trip provided by Amtrak "Starlighter" service from Los Angeles to Seattle and two state-sponsored trips from Eugene to Portland), with minimum one-way travel time of 2 hours and 35 minutes; and

WHEREAS, Various track and signal improvements in southeast Portland have been identified as necessary to reduce one-way travel time to 2 hours and 15 minutes; and

WHEREAS, These improvements will lead to an increase in train speeds between the east end of the Steel Bridge to SE Clay Street from the current 20 mph to 35 mph; the 20 mph speed from Clay Street to Powell Boulevard to 45 mph and 65 mph; and permit speeds from Powell Boulevard to Milwaukie Avenue of 70 mph; and

WHEREAS, These and eleven other programmed improvement projects will permit scheduling of four round-trips by 2003; and

WHEREAS, Current supplemental "Motorcoach" service provided by Amtrak can be correspondingly reduced with addition of the new rail service; and

WHEREAS, Annual ridership is expected to increase from the 1998 level of 108,369 boardings to 387,000 passengers in 2003; and

WHEREAS, The per passenger subsidy is expected to decrease from the 1997 level of \$20.46 to \$6.10 in 2003 and to generate a \$1.8 million surplus in 2018; and

WHEREAS, The Congestion Mitigation Air Quality (CMAQ) funds are being matched by approximately \$9.8 million of additional funds (\$13.2 million total cost) contributed by Amtrak (\$379,878), the Union Pacific Railroad (\$5,127,000) and other dedicated federal funds (\$4,250,000); and

WHEREAS, Increased train ridership will reduce travel demand on congested segments of I-5; and

WHEREAS, Vehicle delays at current crossings will be reduced due to improved train speeds and realigned crossings; and

WHEREAS, The proposed improvements will also benefit general freight train operations; and

WHEREAS, Policy support for the Cascadia High-Speed Rail service is included in the RTP; and

WHEREAS, All federal transportation funds approved for obligation in the State Transportation Improvement Program (STIP) in the Metro region must also be shown in the Metropolitan Transportation Improvement Program (MTIP); and

WHEREAS, The Oregon Transportation Commission has authorized ODOT to allocate CMAQ funds to the Cascadia program so that funds allocated to the program will not reduce federal obligation limitation that will otherwise be available for projects in the Metro region; and

WHEREAS, ODOT staff are coordinating with Oregon DEQ and FHWA staff regarding demonstration of air quality benefits from the project, which is a condition for federal approval for proposed programming of CMAQ funds; now, therefore,

BE IT RESOLVED:

1. The MTIP is amended to approve obligation of \$3, 443,122 of CMAQ funds for construction of the Cascadia Rail: Wilsburg Junction to Steel Bridge track and signal improvement program in FY 2001.
2. Approval of the project is contingent on demonstration by ODOT to Metro, DEQ and to US DOT that implementation of the project will result in reduction of automobile emissions.
3. Both the federally recognized 1995 and 2000 (pending) financially constrained RTP networks are amended to include the Cascadia Rail: Wilsburg Junction to Steel Bridge track and signal improvements.
4. Metro staff are authorized to refine programming of the approved funds by phase of work and program year, if needed.

ADOPTED by the Metro Council this _____ day of _____, 2000.

David Bragdon, Presiding Officer

Approved as to Form:

Daniel B. Cooper, General Counsel

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M E M O R A N D U M

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1700 | FAX 503 797 1794



METRO

DATE: November 2, 2000
TO: JPACT
FROM: *UH* Mike Hoglund, Transportation Planning Manager
SUBJECT: 2000 RTP Air Quality Conformity Determination

* * * * *

Attached is a draft of the 2000 Regional Transportation Plan Air Quality Conformity Determination and related staff report and resolution approved by TPAC on October 27, 2000. In summary, Metro's analysis indicates that regional emissions will remain within established budgets in all analysis and budget years. JPACT action will be requested on November 9.

On August 21, 2000 a notice of Metro's intent to conduct an air quality conformity analysis of the 2000 RTP was sent to affected governments and interested residents, businesses and community groups. This notice summarized the conformity process and a timeline for adoption of a conformity determination. On October 6, 2000, a 30-day public comment period began on the results of 2000 RTP air quality conformity analysis and the methodologies. No comments have been received to date. Table 1 summarizes the 2000 RTP conformity process.

Table 1

2000 Regional Transportation Plan Conformity Analysis Timeline

August 10, 2000	Metro Council adopts 2000 RTP
August 21, 2000	Notification of 2000 RTP air quality conformity process to affected governments, interested citizens, community groups
September 29, 2000	Modeling and analysis for air quality conformity complete
October 6, 2000	Begin 30-day public comment period with air quality analysis documents available
October 27, 2000	Review of air quality conformity findings and approval by TPAC
November 7, 2000	Public hearing, close of 30-day public comment period and tentative recommendation by Metro Transportation Planning Committee
November 9, 2000	Review of air quality conformity findings and tentative action by JPACT
November 16, 2000	Public hearing and tentative action by Metro Council
December, 2000	Forward Air Quality Determination to US DOT and EPA for review and acknowledgement

/attachments

STAFF REPORT

FOR THE PURPOSE OF ADOPTING THE PORTLAND AREA AIR QUALITY CONFORMITY DETERMINATION FOR THE 2000 REGIONAL TRANSPORTATION PLAN

Date: October 19, 2000

Presented by: Mike Hoglund

PROPOSED ACTION

Approval of this resolution would adopt a regional air quality conformity determination for the 2000 Regional Transportation Plan. Once approved, the Determination will be forwarded to the US Department of Transportation (USDOT) and Environmental Protection Agency (EPA) for their review and acknowledgement.

EXISTING LAW

State and federal regulations require that no transportation project may interfere with attainment or maintenance of air quality standards. Preparation of a Conformity Determination is required to demonstrate that significant transportation projects will not cause automotive emissions to exceed emissions budgets established in the State Implementation Plan (SIP) for maintenance of air quality standards.

BACKGROUND AND ANALYSIS

On August 10, 2000, the Metro Council adopted the 2000 Regional Transportation Plan (RTP) by Ordinance No. 00-869A and Resolution No. 00-2968B. This Conformity Determination is for the financially constrained system of the 2000 Regional Transportation Plan (RTP). It has been prepared because adoption of the 2000 RTP constitutes a significant amendment of the region's planned transportation system, as described in OAR Chapter 340, Division 252. The region's current Conformity Determination for the 1995 RTP, as amended, will lapse on July 12, 2001.

The 2000 RTP represents five years of extensive planning work and analysis that was guided by input from a 21-member citizen advisory committee, state, regional and local officials and staff and from residents, community groups and businesses throughout the region. The 2000 RTP builds on the 1995 RTP to implement the 2040 Growth Concept, the region's long-range plan for addressing expected growth while preserving the region's livability. The 2000 RTP represents a balanced multi-modal plan that is closely tied to land use and the 2040 Growth Concept.

Defined in Chapter 5 of the 2000 Regional Transportation Plan and Appendix 1 to Exhibit A of the resolution, the financially constrained system responds to federal planning requirements. This system of projects and programs is limited to current funding sources, and those new sources that can be reasonably expected to be available during the 20-year plan period. As the federally recognized system, the financially constrained system is also the source of

transportation projects that may be funded through the Metropolitan Transportation Improvement Program (MTIP). The MTIP allocates federal funds in the region. The 2000 RTP not only provides an updated set of financially constrained projects and programs for future MTIP allocations, but also establishes more formal procedures and objectives for implementing long-range regional transportation policies through incremental funding decisions.

State Air Quality Rule

State and federal regulations require consideration of the project's relationship to SIP for maintenance of air quality standards and thus, Metro has prepared this Conformity Determination. The Determination quantitative analysis (see Exhibit A of the Resolution) shows that the project's potential effects on regional air quality will be consistent with mobile source emissions budgets established in the SIP for Oxides of Nitrogen, Hydrocarbons (i.e., ozone precursor compounds) and Carbon Monoxide.

Interagency Consultation

Metro staff met with representatives of the Oregon Department of Environmental Quality (DEQ) and federal highway and transit administration officials pursuant to state regulations for intergovernmental consultation during preparation of determinations. In addition, TPAC is identified as the Standing Committee for Interagency Consultation. All agencies defined as eligible to participate during interagency consultation for the Determination were participants in development of the 2000 RTP and commented extensively on the Plan's preparation, including development of the financially constrained system. Participation occurred at both the region's technical and policy committee levels (TPAC and JPACT) during the development of the 2000 RTP.

Quantitative Analysis Protocol

For the Oregon portion of the Portland-Vancouver airshed, emission budgets have been set for various sources of pollutants (mobile, point, area) and are included in the SIP and in the region's Ozone and Carbon Monoxide Maintenance Plans. The 2000 RTP must conform to the SIP mandated mobile emission budgets. Mobile emission budgets are set for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NO_x), and hydrocarbons (HC). The region's approved Maintenance Plans identify two sets of analysis years, one set for winter CO and one set for summer ozone precursors (NO_x and HC). The CO budget years are 2001, 2003, 2007, 2010, 2015 and 2020. The ozone analysis years are 1999, 2001, 2003, 2006, 2010, 2015 and 2020. In addition, a plan horizon year must also be evaluated. For the 2000 RTP, the horizon year is 2020.

On October 28, 1999, Metro and DEQ staff met and reviewed the conformity requirements. As permitted by the conformity rule, Metro identified and modeled key analysis years and interpolated between them to establish that regional mobile emissions meet all established emissions budgets. To summarize, a full model analysis was performed for a base year of 1998 and the 2000 RTP horizon year of 2020. Trip tables prepared for these two analysis years were then interpolated to provide inputs for the 2005 and 2010 analysis years. New trip assignments

were prepared for 2005 and 2010. Data for all other budget years were interpolated between these four analysis years. The interpolated results were then compared to actual emission budgets to establish that the 2000 Regional Transportation Plan conforms to the emissions budgets in all years for which they are established in the region's CO and Ozone maintenance plans.

Qualitative Analysis

The State Conformity Rule also requires discussion of numerous other issues that are more concerned with the quality of underlying assumptions used in the quantitative analysis, especially concerning use of most current demographic information and viability of transit system operations and patronage assumptions. Exhibit A to the resolution provides an overview of the 2000 RTP and major changes to road and transit network assumptions and discusses the relevant conformity determination requirements, demonstrating that this Determination complies with each requirement.

Schedule for Adoption

On October 6, 2000, a 30-day public comment period began on the results of 2000 RTP air quality conformity analysis and the methodologies. A newspaper notice of this comment period was published in *The Oregonian* on October 1. The 2000 RTP web page and Metro's transportation hotline also supplied information on the conformity determination and opportunities for public comment. Table 1 describes the 2000 RTP conformity public process.

Table 1

2000 Regional Transportation Plan Conformity Analysis Timeline

August 10, 2000	Metro Council adopts 2000 RTP
August 21, 2000	Notification of 2000 RTP air quality conformity process to affected governments, interested citizens, community groups
September 29, 2000	Modeling and analysis for air quality conformity complete
October 6, 2000	Begin 30-day public comment period with air quality analysis documents available
October 27, 2000	Review of air quality conformity findings and tentative action by TPAC
November 7, 2000	Public hearing, close of 30-day public comment period and tentative recommendation by Metro Transportation Planning Committee
November 9, 2000	Review of air quality conformity findings and tentative action by JPACT
November 16, 2000	Public hearing and tentative action by Metro Council

BUDGET IMPACT

None.

KW:mh:rmb

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BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING THE)	RESOLUTION NO. 00-2999
PORTLAND AREA AIR QUALITY CONFORMITY)	
DETERMINATION FOR THE 2000 REGIONAL)	Introduced by
TRANSPORTATION PLAN)	Councilor Jon Kvistad,
		JPACT Chair

WHEREAS, State and federal regulation require that no transportation project may interfere with attainment or maintenance of air quality standards; and

WHEREAS, Adoption of the 2000 Regional Transportation Plan triggered a need to prepare an Air Quality Conformity Determination, included as Exhibit A of this resolution, demonstrating that the 2000 Regional Transportation Plan conforms with the State Implementation Plan for maintenance of air quality standards; and

WHEREAS, The Financially Constrained System of the 2000 Regional Transportation Plan includes regionally significant projects with respect to its potential effects on regional air quality; and

WHEREAS, Development of the 2000 Regional Transportation Plan occurred during the past five years and was guided by input from a 21-member citizen advisory committee, local officials and staff from the region's cities and counties, residents, community groups and businesses throughout the region; and

WHEREAS, Numerous opportunities for public comment were provided during the five-year process, which concluded with a 45-day public comment period prior to adoption by ordinance; and

WHEREAS, On August 21, 2000, a notice of Metro's intent to conduct an air quality conformity analysis of the 2000 Regional Transportation Plan was sent to affected governments and interested residents, businesses and community groups; and

WHEREAS, Metro convened the Intergovernmental Consultation sub-committee of TPAC to confirm the technical basis for preparation of the Conformity Determination; and

WHEREAS, The results of this consultation have been presented for consideration by TPAC which is the standing body authorized by the State Air Quality Rule to conduct Interagency Consultation; and

WHEREAS, Notice of availability of the Determination for a 30-day public review and comment period was posted in the October 1, 2000, *Sunday Oregonian*; and

WHEREAS, Public comment period began on October 6, 2000, and will end on November 7, 2000; and

WHEREAS, Any comments generated during this period of review will be presented to the Metro Council in a hearing prior to its consideration and/or approval of this resolution; and

WHEREAS, Any significant issues necessitating JPACT's reconsideration of the resolution and/or the Conformity Determination can cause the Council to remand the issue for further JPACT consideration; now therefore,

BE IT RESOLVED,

1. The Conformity Determination shown in Exhibit A of the Resolution is approved for submittal to USDOT and EPA for their review and acknowledgement.

ADOPTED by the Metro Council this _____, day of _____, 2000.

David Bragdon, Presiding Officer

Approved as to Form:

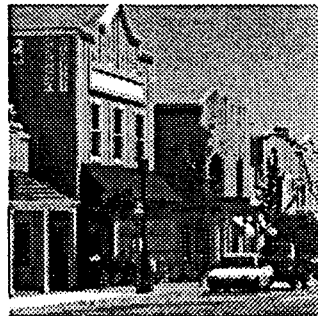
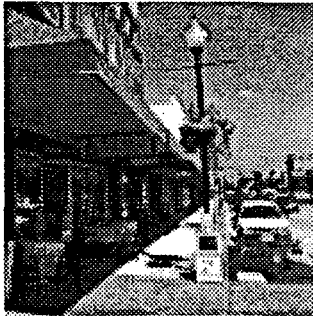
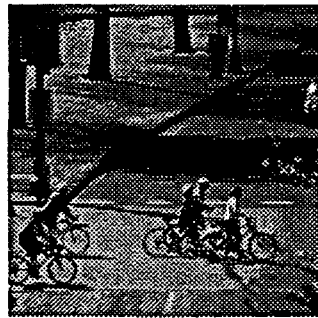
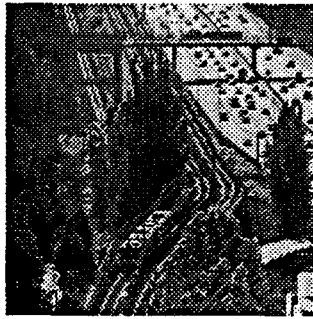
Daniel B. Cooper, General Counsel

KW:mh

Attachment: Exhibit A
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2000 Regional Transportation Plan Air Quality Conformity Determination

October 6, 2000



METRO
Regional Services
*Creating livable
communities*

Metro

Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site: www.metro-region.org

Metro is governed by an executive officer, elected regionwide, and a seven-member council elected by districts. An auditor, also elected regionwide, reviews Metro's operations.

Executive Officer

Mike Burton

Auditor

Alexis Dow, CPA

Council

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District 7

David Bragdon

Deputy Presiding Officer

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District 3

Jon Kvistad

District 4

Susan McLain

District 6

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METRO

2000 Regional Transportation Plan Conformity Determination Report

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METRO

2000 Regional Transportation Plan Conformity Determination

A. Introduction

Background

The federal Clean Air Act provides the main framework for national, state and local efforts to protect air quality. Under the Clean Air Act, the Environmental Protection Agency (EPA) is responsible for setting standards, known as national ambient air quality standards (NAAQS), for pollutants considered harmful to people and the environment. These standards are set at levels that are meant to protect the health of the most sensitive population groups, including the elderly, children and people with respiratory diseases. Air quality planning in this region is focused on meeting the NAAQS and deadlines set by the federal Environmental Protection Agency and state Department of Environmental Quality for meeting the standards. Failure to meet these standards could result in a loss of transportation funding from state and federal sources and increased health risks to the region.

The 2000 Regional Transportation Plan (RTP) is subject to an air quality conformity determination under federal regulation (40 CFR Parts 51 and 93) and state rule (OAR 340 Division 252). Metro, as the federally designated Metropolitan Planning Organization (MPO) for the Oregon portion of the Portland-Vancouver airshed, is the lead agency for the conformity determination. In addition, the Transportation Policy Alternatives Committee (TPAC) is called out under the state rule as the standing committee designated for "interagency consultation" as required by the rule. In order to demonstrate that the 2000 Regional Transportation Plan (RTP) meets federal and state air quality planning requirements, Metro must complete a technical analysis that is known as air quality conformity. The need for this analysis came from the integration of requirements in the Clean Air Act Amendments of 1990 and the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. Conformity is a regulation requiring that all transportation plans and programs in air quality non-attainment or maintenance areas conform to the State's air quality plan, known as the State Implementation Plan (SIP). Transportation plans and programs such as the 2000 RTP must not delay attainment of the NAAQS, result in an area falling out of attainment, or create new air quality violations.

Reason for Determination

On August 10, 2000, the Metro Council adopted the 2000 Regional Transportation Plan (RTP) by Ordinance No. 00-869A and Resolution No. 00-2968B. This Conformity Determination is for the financially constrained system of the 2000 Regional Transportation Plan (RTP).¹ It has been prepared because adoption of the 2000 RTP constitutes a significant amendment of the region's planned transportation system, as described in OAR Chapter 340, Division 252. The region's current Conformity Determination for the 1995 RTP, as amended, will lapse on July 12, 2001.

Section B of this conformity determination provides an overview of the 2000 RTP and major changes to road and transit network assumptions. The State Transportation Conformity Rule requires that the air quality conformity determination comply with several subsections of OAR Chapter 340, Division 252, including:

1. OAR 340-252-0110 – Use of the Latest Planning Assumptions
2. OAR 340-252-0120 – Use of Latest Emissions Model
3. OAR 340-252-0130 – Consultation
4. OAR 340-252-0140 – Timely Implementation of Transportation Control Measures (TCMs)
5. OAR 340-252-0190 – Motor Vehicle Emissions Budget

Section C discusses the relevant conformity determination requirements and demonstrates that this Determination complies with each requirement. Metro's technical analysis indicates that regional emissions will remain within established budgets in all analysis and budget years (i.e., 1998, 1999, 2001, 2003, 2005, 2006, 2007, 2010, 2015, and 2020). The following analysis demonstrates how the conformity determination for the 2000 Regional Transportation Plan complies with applicable requirements of OAR Chapter 340, Division 252. Inapplicable subsections of Division 252 are not cited in this conformity determination.

¹ Defined in Chapter 5 of the 2000 Regional Transportation Plan and in Appendix 1 to this document, the financially constrained system responds to federal planning requirements. This system of projects and programs is limited to current funding sources, and those new sources that can be reasonably expected to be available during the 20-year plan period. As the federally recognized system, the financially constrained system is also the source of transportation projects that may be funded through the Metropolitan Transportation Improvement Program (MTIP). The MTIP allocates federal funds in the region. The 2000 RTP not only provides an updated set of financially constrained projects and programs for future MTIP allocations, but also establishes more formal procedures and objectives for implementing long-range regional transportation policies through incremental funding decisions. These new MTIP provisions are set forth in Chapter 6 of the 2000 RTP.

B. OVERVIEW OF 2000 RTP AND MAJOR CHANGES IN NETWORK ASSUMPTIONS

The 2000 RTP represents five years of extensive planning work and analysis that was guided by input from a 21-member citizen advisory committee, state, regional and local officials and staff and from residents, community groups and businesses throughout the region. The 2000 RTP builds on the 1995 RTP to implement the 2040 Growth Concept, the region's long-range plan for addressing expected growth while preserving the region's livability. The 2000 RTP represents a nearly 20-year evolution from a mostly road-oriented plan to a more balanced multi-modal plan that is closely tied to land use and the 2040 Growth Concept. The plan includes changes to the mix of projects, the specificity of the project lists, greater emphasis on street connectivity, alternative mode performance and a revised 2040-based level of service policy that allows two-hour peak period motor vehicle system congestion in select locations based on availability of other modes of travel such as walking, biking and transit.

The total reasonably expected revenue base assumed in the 2000 RTP for the road system is about \$1.65 billion, approximately 60 percent higher than the \$970 million assumed in the 1995 road system. Virtually all of this increase is related to the higher authorization levels in TEA-21, the current federal transportation funding act. Transit system expansion is estimated at \$1.91 billion. It is difficult to compare this with the 1995 RTP network assumptions because approximately \$1.4 billion is attributable to refined cost estimates of the South/North project phases that were not itemized in the 1995 RTP. However, without a clear comparison of transit system costs, comparative data shown in Section C.1(b) make clear that the 2000 RTP transit system is much more robust than that described in the 1995 RTP. Most of the more significant freeway, arterial and transit system projects remain unchanged from the 1995 RTP. The following section summarizes some of the more important similarities and distinctions between the two networks.

1. Network Assumptions Carried Over the from 1995 RTP:

- ❖ Annual average transit service increase of 1.5 percent through 2006;
- ❖ LRT extended from Milwaukie to Vancouver, Wa. by 2020, including a first phase Interstate Avenue LRT alignment from the Rose Quarter to the Expo Center amended into the 1995 RTP in 1999;
- ❖ Airport LRT extension from Gateway to Portland International Center/Portland International Airport (amendment to 1995 RTP approved in 1998);
- ❖ Wilsonville/Beaverton Commuter Rail (peak period service amended into RTP in 2000);
- ❖ Added freeway lanes:
 - I-5 from Greeley to Interstate Bridge;
 - US 26 from Highway 217 to Murray Boulevard;
 - Highway 217 from Tualatin Valley Highway to 72nd Avenue Interchange.

- ❖ Signal system interconnection on significant regional arterial streets

2. New 2000 RTP Network Assumptions:

- ❖ 1998 Base Year (rather than 1994);
- ❖ 0.5 percent transit service increase in 2007 through 2020 is increased to 1.5 percent.
- ❖ Delay of LRT extension from Milwaukie to Clackamas Town Center until after 2020;
- ❖ Early implementation of an interim "Rapid Bus" system in the 99E corridor on McLoughlin from downtown to Milwaukie
- ❖ Implementation of the central city streetcar from NW Portland to the Macadam district in two phases
- ❖ Improved bus headways and occupancy on numerous priority routes due to implementation of amenities and structural improvements (e.g., "coach-style" buses, dedicated transit lanes, queue jump lanes, signal priority systems, "real-time" on-street bus arrival information displays, etc.)
- ❖ Slightly reduced geographic coverage of bus service to emphasize service on the most productive routes;
- ❖ Phase 1 construction of the Sunrise Highway from I-205 to Rock Creek;
- ❖ Hogan Interchange construction at I-84 to Stark Street.
- ❖ The 2000 RTP plans for construction of 34 additional arterial lane miles and 108 more freeway lane miles than assumed in the 1995 RTP (which froze road construction at 2015 levels).
- ❖ Average weekday trip length decreases to 5.0 miles in 2020 from 5.11 in the comparable 1995 RTP network.
- ❖ The home-based work average trip length decreased to 7.31 miles in 2020 from 7.44 miles in the comparable 1995 RTP network.

The 2000 RTP takes the policy direction established in the 1995 RTP, which was to use transportation investment as a means to implement and reinforce the region's land use goals, and more fully defines the methods and projects that will effect this purpose. Extensive interagency consultation was conducted and multiple iterations of computer modeling were used to develop and refine the current financially constrained system project list. New ground was broken to assess the importance of increasing connectivity of the regional arterial and collector system and of improving street design to encourage transit, pedestrian and bicycle trip making. The resultant network continues to rely extensively on auto trip making (62 percent of daily trips are single-occupant auto trips in 2020) and therefore continues to reflect significant investment in maintenance and expansion of the region's freeway and street facilities.

However, a more refined multi-modal approach is also exhibited in the 2000 RTP's specification of precise pedestrian and bike system improvements, and the identification of "boulevard-design" locations where the intent is to retrofit designated streets for walking, biking and transit. The retrofits of major streets include wider sidewalks, safer street crossings, bike lanes and improved bus stops and shelters along streets that serve the central city, regional centers, town centers and other areas. Finally, the typical peak hour "C/D" congestion level of service standard has been relaxed in select locations to allow two-hour peak period system performance at levels of "E/E" and "F/E", dependent on location and availability of alternate modes such as walking, bicycling and transit. The 2000 RTP's congestion level of service standards reflect a policy that the associated impacts of wider, faster streets and freeways needed to achieve the traditional service level are too often accompanied by unacceptable impacts on costs, surrounding neighborhoods and alternative travel modes. Some funds previously dedicated to attempts to meet the traditional level of service standard have been freed up to pursue more balanced system investment that is more reliant on system and demand management, walking, bicycling and transit to meet regional trip demand. And as the comparative data above, and in Section C.1(b), below, suggest, this approach yields meaningful reductions of auto trip dependency.

C. Relevant Conformity Requirements and Findings of Compliance

1. Consistency with the Latest Planning Assumptions (OAR 340-252-0110).

a. **Requirement:** *The State Rule requires that Conformity Determinations be based "on the most recent planning assumptions" derived from Metro's approved "estimates of current and future population, employment, travel and congestion."*

Finding of compliance: The *quantitative* analysis (see Section C.6) employs the transportation system planning assumptions refined over a five-year period during development of the 2000 RTP, and population, employment and development assumptions that reflect Metro adoption of the Regional Framework Plan and its implementing ordinances. The 1998 base year reflects Metro's official estimates of population and employment calibrated to 1990 Census data. Metro has officially adopted a population/employment projection for 2020. The 2020 population/employment projection is the foundation for all analysis years used in this Conformity Determination.

Travel and congestion forecasts in the analysis years of 1998, 2005, 2010 and 2020 are derived from the population/employment data using Metro's regional travel demand model and the EMME/2 transportation planning software. Within subroutines of the regional travel demand model, Metro calculates the transit/bike/walk mode split for calculated travel demand based on a variety of factors, including trip distance, car per worker relationship, transit headways, total employment within one mile, intersection density and a zone-based mixed-use index of the ratio of total

employment to total population (see Appendix 4). Both the population and employment estimates and the methodology employed by the EMME/2 model have been the subject of extensive interagency consultation and agreement (discussed further in Section C.3).

The resulting estimates of future year travel and motor vehicle congestion are then used with the outputs of the EPA approved MOBILE 5a-h emissions model to determine regional emissions. In all respects, the model outputs reflect input of the latest approved planning assumptions and estimates of population, employment, travel and congestion.

- b. **Requirement:** *The State Rule requires that changes in transit policies and ridership estimates assumed in the previous conformity determination must be discussed.*

Finding of compliance: Changes in transit policies and ridership estimates are discussed below for each type of transit service assumed in the 2000 RTP transit network: light rail, commuter rail, rapid bus, frequent bus, regional bus and community bus.

LRT Extension. The *transit policies* which guide modeled implementation of light rail transit (LRT) service in the South/North corridor are consistent with previous Conformity modeling of the Westside and Hillsboro LRT service starts. Bus resources providing downtown radial service are replaced with LRT service. Previous short-haul service between former radial trunk routes is reconfigured to support new LRT stations and surrounding neighborhoods. This represents continuation of *existing transit policy* and its extension to the expanded LRT system. The same principles are further extended to implementation of planned commuter rail in South Washington County.

Previous conformity determinations have reflected policy changes that call for delay of planned LRT service extension from downtown to Milwaukie until the latter part of the 2000 RTP plan period (i.e., by 2020 rather than by 2006). Also previously assumed is more rapid implementation of North Corridor LRT extensions (e.g., LRT service on Interstate Avenue from downtown Portland to the Expo Center).

Changes in planned LRT deployment reflected in the 2000 RTP are limited to deletion of LRT service extension from Milwaukie to Clackamas Town Center within the timeframe of the Plan. A South Corridor Transportation Alternatives Study is funded and underway to examine a number of transportation alternatives for the purpose of evaluating non-light rail high-capacity transportation options in the South Corridor between downtown Portland and Clackamas regional center. The alternatives include bus rapid transit (BRT), high occupancy vehicle (HOV) lanes, high occupancy toll (HOT) lanes, commuter rail, river transit and busway. Intelligent transportation systems (ITS) will be incorporated into several of the alternatives.

Commuter Rail. A previous Determination has assessed introduction of commuter rail into the regional transit service strategy. The 2000 RTP makes no changes to the assumptions previously modeled. Only one alignment and service parameter is identified: Wilsonville to Beaverton in Washington County during the a.m. and p.m. peak periods with supporting park and ride facilities and a slight increase and realignment of supporting feeder bus service. If other alignments should be determined to be feasible, amendment of the regionally defined system would be needed.

Bus Transit. The 2000 RTP further refines the hierarchy of regional bus transit service first elaborated in the 1995 RTP. From a modeling perspective, one of the most significant factors effecting transit ridership is transit service headways. The 1995 RTP relied on a two-tiered division of bus service. Traditional line routes were characterized with stops located every two to three blocks and headways rarely exceeding 15 minutes. Ten-minute headways and occasionally greater spacing of stops characterized the second level of bus service, called Fast Link.

The 2000 RTP identifies four gradations of bus service: Rapid bus, Frequent bus, Regional bus and Community bus. Rapid bus service would most closely emulate LRT in speed, frequency and comfort serving major transit routes with limited stops. Rapid bus service is characterized by some dedicated rights-of-way, signal preemption capability, 15-minute headways and high quality station and passenger amenities. Passenger amenities are concentrated at transit centers such as schedule information, ticket machines, bicycle parking and covered shelters. The RTP envisions deployment of a limited number of Rapid bus lines in high demand commuter corridors.

Frequent bus service more closely approximates the 1995 RTP "fast-link" bus service. Frequent bus service is characterized by 10-minute headways, wider geographic coverage, utilization of some dedicated right-of-way (e.g., queue jumps, dedicated turn lanes, etc.), signal preemption capabilities, and enhanced passenger amenities that include covered bus shelters, special lighting. Some overlap of Rapid and Frequent bus service is conceivable. However, bus stops (rather than stations) would characterize the frequent bus system and much more frequent stops would occur. The vehicles would be typical transit buses.

Regional bus service would represent the majority of planned regional bus service. Radial trunk service would be provided on major arterials. Stops would be located every two to three blocks, and amenities would be prioritized to high ridership locations. Headways would not be more than 15-minutes during regular operating hours. The 2000 RTP envisions expansion of the system to provide not only central city radial service but also to interconnect emerging regional and town centers, main streets and corridors with the central city and with one another.

The Community transit network is an innovation of the 2000 RTP that grew from Tri-Met's Transit Choices for Livability program. In addition to local bus service to neighborhoods and employment areas, community bus service includes decentralization of some transit services to a multitude of community-based transit providers dedicated to providing localized, "shuttle-like" service to destinations within a very limited geography. Vehicle types are expected to vary from traditional buses to van-type shuttles and taxi and car-share programs. The service is focused on more accessibility, frequency along the route and coverage to a wide range of land use options rather than on speed between two points. Community bus service generally is designed to serve travel with one trip end occurring within the 2040 Growth Concept town centers, main streets, station communities and corridors.

Transit Ridership. The broadest measure of ridership assumptions is revenue hours. The previous network, used to conform the 1995 RTP, as amended, reflected changes to the South/North alignment and timing but continued to assume service from Milwaukie to Clackamas regional center. Also, it did not address introduction of Commuter Rail in Washington County. The last air quality conformity determination held the 2015 road network static, but extrapolated travel demand and transit service hour increases to 2020.

The following data points highlight the practical effect of changed system configuration and funding assumed in the 2000 RTP relative to previous assumptions used in the 1995 RTP:

- ❖ Total projected revenue hours assumed in the 2000 RTP is 7,360 hours in 2020 versus the 1995 RTP projection of 6,403 hours in 2020.
 - ❖ The 2000 RTP projects 450,070 Average Weekday (AWD) transit trips in 2020 versus the 1995 RTP projection of 380,073 transit trips in 2020.
 - ❖ The 2000 RTP projects that 4.3 percent of regional daily trips will take transit in 2020 versus 3.63 percent as projected in the 1995 RTP for 2020.
 - ❖ The 2000 RTP projects that, approximately 64.05 percent of households and 78.7 percent of employment will be within 1/4-mile of transit service in 2020, versus the 1995 RTP projection that 54.26 percent of households and 74.4 percent of employment will be within 1/4-mile of transit service in 2020.
 - ❖ AWD originating riders per revenue hour are 61.15 in the 2000 RTP system in 2020, versus 59.36 per hour in 2020 in the 1995 RTP.
- c. **Requirement:** *The State Conformity Regulations require that reasonable assumptions be used regarding transit service, and increases in fares and road and bridge tolls over time.*

Finding of compliance: There are no road or bridge tolls in place in the Portland metropolitan area, and none are assumed in the 2000 RTP. The region is exploring the feasibility of implementation of a Peak Period Pricing pilot project. No decision to deploy such a project has been made and this Determination does not model evaluation of such a program.

Auto operating costs are factored into the mode choice subroutines of the regional travel model. These costs are held constant to 1985 dollars. Parking costs for the Central City and for Tier 1 regional centers are based on the South/North DEIS parking costs developed from survey data to reflect parking control strategies. Parking factors for the remaining regional centers, station communities, town centers and mainstreets are scaled back by 50 percent from these costs. No parking factors are assumed for corridors, neighborhoods, employment areas, industrial areas, greenspaces and areas outside the urban growth boundary. The three-zone transit fare structure adopted in 1992 is held constant through 2020. User costs (for both automobile and transit) are assumed to keep pace with inflation and are calculated in 1985 dollars. Free transit areas are assumed for the central business and Lloyd districts and Tier 1 regional centers and within Wilsonville town center.

Service assumptions (i.e., transit vehicle headways) also affect trip assignment to transit. One major change of transit service assumptions is that the 2000 RTP omits extension of LRT from Milwaukie to Clackamas regional center. This reduces LRT service increases assumed by 2020 in the 1995 RTP. A South Corridor Transportation Alternatives Study is funded and underway to examine a number of transportation alternatives for the purpose of evaluating non-light rail high-capacity transportation options in the South Corridor between downtown Portland and Clackamas regional center. The alternatives include bus rapid transit (BRT), high occupancy vehicle (HOV) lanes, high occupancy toll (HOT) lanes, commuter rail, river transit and busway. Intelligent transportation systems (ITS) will be incorporated into several of the alternatives.

Other aspects of the South/North scope and concept remain unchanged. LRT from downtown Portland to Milwaukie town center, continues to be planned after 2010, LRT along Interstate Avenue from the Rose Quarter to the Expo Center remains on schedule for startup in 2006. These service assumptions were previously modeled in the FY 00 – 03 Metropolitan Transportation Improvement Program (MTIP) Conformity Determination, approved January 20, 2000.

The 1995 RTP assumed a 1.5 percent annual service hour increase for regional bus service through 2006, when IMAX service is scheduled to begin. The bulk of the increase was allocated to building a service base along the Interstate Avenue corridor. At 2007, these bus resources were reallocated throughout the region and feeder service within the LRT Corridor was reinforced. Service increases reduced to 0.5 percent annually thereafter, through 2015.

The 2000 RTP continues these early program assumptions. However, with added regional support in the FY 2000 – 2003 MTIP, earlier attention has been focused on building service in two of four newly identified priority rapid bus corridors: the Barbur/99W and McLoughlin corridors, which link downtown with southeast Washington County and west Clackamas County, respectively. Rather than general reallocation of the Interstate LRT service hours, service in these corridors will be expanded. In addition, rather than reducing the 1.5 percent annual service hour increase in 2007 like the 1995 RTP, the 2000 RTP extends the 1.5 percent increase through 2020. Finally, rapid bus service is extended to the McLoughlin Boulevard/Highway 224 corridor and on Division Street to Gresham regional center in east Multnomah County.

- d. **Requirement:** *The State Conformity Regulations require that the latest existing information be used regarding the effectiveness of TCMs that have already been implemented. It must also be demonstrated that the Plan does not delay or impede the implementation of TCMs*

Finding of compliance: All funding based TCMs are fully supported in the 2000 RTP. This includes:

Increased transit:

- ❖ 1.5 percent annual service increase through 2006; 0.5 percent through 2020.
- ❖ First phase implementation of South/North LRT extension (IMAX) by 2007; additional extensions through 2020 to Vancouver, Washington and Milwaukie town center, with supplemental transportation alternatives under study from Milwaukie town center to Clackamas regional center.
- ❖ Completion of Westside LRT extension to Hillsboro regional center (complete).

Bicycle and Pedestrian System Improvements:

- ❖ An average of five miles of new bike lanes on the regional system each two years.
- ❖ A two year average of 1.5 miles of improvements to regionally significant pedestrian facilities.
- ❖ Continued compliance with ORS 366.514, which requires incorporation of adequate bike and pedestrian facilities on all roadways subject to expansion or reconstruction.

The 2000 RTP does not impede implementation of non-funding based TCMs including:

- ❖ implementation of the 2040 Growth Concept of compact urban form

development centered around transit supportive land use;

- ❖ continued implementation of the Employee Commute Option requirements for 10 percent reduction of drive alone trips encouraged by businesses of 50 or more employees; and
- ❖ DEQ's Voluntary Parking Ratio Program which partly offsets the ECO rule for participating employers.

Finding of compliance: The latest estimates of the effectiveness of transit, bicycle and other TCMs is used.

Transit TCMs. Ridership of the Westside MAX has met its five-year projected ridership levels after only two years of service, which is consistent with experience on the Eastside line. Additionally, the extension of LRT to the Portland International Airport will increase non-auto ridership above previously expected levels. Transit ridership in the Portland-area is growing at a rate faster than general population, which is unique to this region relative to all other equivalent urbanizing regions in the nation.

The effectiveness of Portland's transit system cannot be credited simply to the degree of investment in transit capital though, which is the thrust of the funding-based transit TCMs. Rather it is the interplay of the capital commitment with implementation of the 2040 land use components elaborated in the 2040 Growth Concept (i.e., the Regional Framework Plan), called 2040 Design Types. The 2040 Growth Concept emphasizes transit oriented land development, restricted parking and increased pedestrian accessibility to transit facilities. Metro has calculated that region-wide implementation of these factors will generate an almost 30 percent increase of transit ridership over time relative to more traditional development patterns that would otherwise prevail in the region.²

Bicycle System TCMs. To determine effectiveness of striping projects to induce new bicycle ridership, Metro staff used accumulated ridership counts conducted by the City of Portland between 1995 and 1997 for 16 bike routes within the City. These counts include unimproved routes and routes that have been striped with bike lanes.

Virtually all the routes that were monitored showed noticeable increases of ridership between 1994 and 1997 that are assumed to be attributable to general demographic changes and to the region's bike promotion efforts. This generated an average 30 percent increase of bike ridership across all surveyed routes. Newly striped routes though, showed increases above this average.

To isolate the general effects from those attributable to the striping, the ridership increase of only newly striped facilities was averaged. The average regional increase was then

² Transportation Analysis of the Growth Concept, Metro, July 1994. This analysis includes data sets for myriad performance measures generated from system definitions that include and omit implementation of parking factors and enhanced pedestrian environmental factors.

deducted from that of the newly striped facilities. This yielded an average increase of 25 percent above the citywide increase of 30 percent. *This 25 percent factor represents a predictable ridership effect of bike lane striping.*

Other TCMs. Effectiveness of implemented and planned TCMs is also reflected in emission credits approved by DEQ for use in this Determination's calculation of daily regional emissions. Credits were assumed for compact land form called for in the Region 2040 Growth Concept, expansion of the I/M Boundary; implementation of enhanced I/M; and implementation of the Employee Commute Option (ECO) program. Credit for the region's Voluntary Parking Ratio program was eliminated in 1999 because very few businesses chose to participate in the program. All of these programs are founded in enforceable regulations.

2. Latest Emissions Model (OAR 340-252-0120)

- a. **Requirement:** *The State Conformity Regulations require that the conformity determination must be based on the most current emission estimation model available.*

Finding of compliance: Metro employed EPA's recommended Mobile 5a-h emissions estimation model in preparation of this conformity determination. Additionally, Metro uses EPA's recommended EMME/2 transportation planning software to estimate vehicle flows of individual roadway segments. These model elements are fully consistent with the methodologies specified in OAR 340-252-0120.

3. Consultation (OAR 340-252-0130)

- a. **Requirement:** *The State Conformity Regulations require the MPO to consult with the state air quality agency, local transportation agencies, DOT and EPA regarding enumerated items. TPAC is specifically identified as the standing consultative body in OAR 340-225-0060(1)(b).*

Finding of compliance: Specific topics are identified in the Regulations that require consultation. TPAC is identified as the Standing Committee for Interagency Consultation. All agencies defined as eligible to participate during interagency consultation for the Determination were participants in development of the 2000 RTP and commented extensively on the Plan's preparation, including development of the financially constrained system, at both the region's technical and policy committee levels (TPAC and JPACT) during the development of the 2000 RTP.

- i. *Determination of which Minor Arterial and other transportation projects should be deemed "regionally significant."*

Metro models virtually all proposed enhancements of the regional transportation network proposed in the MTIP, the 2000 RTP and by local and state transportation agencies. This level of detail far exceeds the minimum criteria specified in both the State Rule and the Metropolitan Planning Regulations for determination of a regionally significant facility. This detail is provided to ensure the greatest possible accuracy of the region's transportation system predictive capability. The model captures improvements to all principal, major and minor arterial and most major collectors. Left turn pocket and continuous protection projects are also represented. Professional judgement is used to identify and exclude from the model those proposed intersection and signal modifications, and other miscellaneous proposed system modifications, (including bicycle system improvements) whose effects cannot be meaningfully represented in the model. The results of this consultation were used to construct the analysis year networks identified in Appendix 1 of this Determination.

ii. Determine which projects have undergone significant changes in design concept and scope since the regional emissions analysis was performed.

All agencies defined as eligible to participate during interagency consultation for the Determination were participants in development of the 2000 RTP and commented extensively on the Plan's preparation, including development of the financially constrained system, at both the region's technical and policy committee levels (TPAC and JPACT).

iii. Analysis of projects otherwise exempt from regional analysis.

All projects capable of being modeled have been included in the Conformity Analysis quantitative networks, regardless of funding source or "degree of significance".

iv. Advancement of TCMs.

All past and present TCMs have been implemented on schedule. There exist no obstacles to implementation to overcome. See 1(d) in this section., above.

v. PM10 Issues.

The region is in attainment status for PM10 pollutants.

vi. forecasting vehicle miles traveled and any amendments thereto.

The forecast of vehicle miles is the product of the modeled road and transit network defined in the financially constrained system, which was approved during extensive consultation with all concerned agencies including DEQ as part of TPAC and JPACT.

- vii. *determining whether projects not strictly "included" in the TIP have been included in the regional emission analysis and that their design concept and scope remain unchanged.*

This section is not applicable to Determination of the 2000 RTP's conformity to the SIP.

- viii. *project sponsor satisfaction of CO and PM₁₀ "hot-spot" analyses.*

The MPO defers to ODOT staff expertise regarding project-level compliance with localized CO conformity requirements and potential mitigation measures. There exist no known PM₁₀ hot spot locations of concern.

- ix. *evaluation of events that will trigger new conformity determinations other than those specifically enumerated in the rule.*

This section is not applicable to the 2000 RTP conformity determination.

- x. *evaluation of emissions analysis for transportation activities which cross borders of MPOs or nonattainment or maintenance areas or basins.*

The Portland-Vancouver Interstate Maintenance Area (ozone) boundaries are geographically isolated from all other MPO and nonattainment and maintenance areas and basins. Emissions assumed to originate within the Portland-area (versus the Washington State) component of the Maintenance Area are independently calculated by Metro. The Clark County Regional Transportation Commission (RTC) is the designated MPO for the Washington State portion of the Maintenance area. Metro and RTC coordinate in development of the population, employment and VMT assumptions prepared by Metro for the entire Maintenance Area. RTC then performs an independent Conformity Determination for projects originating in the Washington State portion of the Maintenance Area.

Conformity of projects occurring outside the Metro boundary but within the Portland-area portion of the Interstate Maintenance Area were assessed by Metro under terms of a Memorandum of Understanding between Metro and all potentially affected state and local agencies. No regionally significant projects outside the urban boundary have been declared to Metro for analysis.

- xi. *disclosure to the MPO of regionally significant projects, or changes to design scope and concept of such projects that are not FHWA/FTA projects.*

This section is not applicable to the 2000 RTP conformity determination.

- xii. *the design schedule and funding of research and data collection efforts and regional transportation model development by the MPO.*

This consultation occurs in the course of MPO development and adoption of the annual Unified Planning Work Program.

- xiii. *development of the TIP.*

This section is not applicable to the 2000 RTP conformity determination.

- xiv. *development of RTPs.*

Development of the 2000 RTP was directly managed by TPAC, which is the standing body for interagency consultation.

- xv. *establishing appropriate public participation opportunities for project level conformity determinations.*

In line with other project-level aspects of conformity determinations, it is most appropriate that project management staff of the state and local operating agencies be responsible for any public involvement activities that may be deemed necessary in making project-level conformity determinations.

- b. **Requirement:** *The State Conformity Regulations require a proactive public involvement process that provides opportunity for public review and comment by providing reasonable public access to technical and policy information considered by the agency at the beginning of the public comment period and prior to taking formal action on the conformity determination for all transportation plans.*

Finding: Development of the plan occurred during the past five years and was guided by input from a 21-member citizen advisory committee, local officials and staff from the region's cities and counties, residents, community groups and businesses throughout the region. Numerous opportunities for public comment were provided during the five-year process, which concluded with a 45-day public comment period prior to adoption by ordinance. Appendix 2 contains a timeline that describes key products and opportunities for public comment as part of the update to the 1995 RTP.

On August 10, 2000, the Metro Council adopted the 2000 RTP. On August 21, 2000 a notice of Metro's intent to conduct an air quality conformity analysis of the 2000 RTP was sent to affected governments and interested residents, businesses and community groups. This notice summarized the conformity process and a timeline for adoption of a conformity determination. On October 6, 2000, a 30-day public comment period began on the results of 2000 RTP air quality conformity analysis and the methodologies. A newspaper notice of this comment period was published in the

Oregonian on October 1. The 2000 RTP web page and Metro's transportation hotline also supplied information on the conformity determination and opportunities for public comment. Appendix 2 contains copies of the 45-day kickoff notice and Oregonian notice. Table 1 describes the 2000 RTP conformity process.

Table 1
2000 Regional Transportation Plan Conformity Analysis Timeline

August 10, 2000	Metro Council adopts 2000 RTP
August 21, 2000	Notification of 2000 RTP air quality conformity process to affected governments, interested citizens, community groups
September 29, 2000	Modeling and analysis for air quality conformity complete
October 6, 2000	Begin 30-day public comment period with air quality analysis documents available
October 27, 2000	Review of air quality conformity findings and tentative action by TPAC
November 7, 2000	Public hearing, close of 30-day public comment period and tentative recommendation by Metro Transportation Planning Committee
November 9, 2000	Review of air quality conformity findings and tentative action by JPACT
November 16, 2000	Public hearing and tentative action by Metro Council

4. Timely Implementation of TCMs (OAR 340-252-0140).

- a. Requirement: *The State Conformity Regulations require MPO assurance that "the transportation plan, [and] TIP... must provide for the timely implementation of TCMs from the applicable implementation plan."*

Finding: See C.1(d), above.

5. Support Achievement of NAAQS

- a. **Requirement:** The State Implementation Plan (SIP) requires the 2000 RTP to support achievement of NAAQS.

Finding: The RTP is prepared by Metro. SIP provisions are integrated into the RTP as described below, and by extension into subsequent TIPs, which implement the 2000 RTP.

The scope of the 2000 RTP requires that it possess a guiding vision which recognizes the inter-relationship among (a) encouraging and facilitating economic growth through improved accessibility to services and markets; (b) ensuring that the allocation of increasingly limited fiscal resources is driven by both land use and transportation benefits; and (c) protecting the region's natural environment in all aspects of

transportation planning process. Chapter 1 of the 2000 RTP describes this guiding vision:

- balance transportation and land use plans to protect livability in the region
- reduce reliance on any single mode of travel by expanding transportation choices
- sustain economic health by providing access to jobs and industry
- target transportation investments to leverage the 2040 Growth Concept
- maintain access to the natural areas around the region
- protecting the region's natural environment in all aspects of transportation planning process

In addition, several policies and objectives in Section 1.3.4 of the 2000 RTP directly support achievement of National Ambient Air Quality Standards (NAAQS). These objectives are achieved through a variety of measures affecting transportation system design and operation, also described in Chapter 1 of the 2000 RTP. The plan sets forth goals and objectives for road, transit, freight, bicycle, and pedestrian improvements as well as for implementation of system and demand management strategies.

The highway system is functionally classified to ensure a consistent, integrated, regional highway system of principal routes, arterial and collectors. Acceptable level-of-service standards are set for maintaining an efficient flow of traffic. The RTP also identifies regional bicycle and pedestrian systems for accommodation and encouragement of non-vehicular travel. System performance is emphasized in the RTP and priority is established for implementation of transportation system management (TSM) measures.

The transit system is similarly designed in a hierarchical form of regional transitways, radial trunk routes and feeder bus lines. Standards for service accessibility and system performance are set. Park-and-ride lots are emphasized to increase transit use in suburban areas. The RTP also sets forth an aggressive demand management program to reduce the number of automobile and person trips being made during peak travel periods and to help achieve the region's goals of reducing air pollution and conserving energy.

In conclusion, RTP is in conformance with the SIP in its support for achieving the NAAQS. Moreover, the RTP provides adequate statements of guiding policies and goals with which to determine whether projects not specifically included in the RTP at this time may be found consistent with the RTP in the future. Section 1.3.7 in Chapter 1 of the 2000 RTP identifies key policies that guide the selection of projects and programs to implement the RTP. Conformity of such projects with the SIP would require interagency consultation.

6. Quantitative Analysis (OAR 340-252-0190)

1. Conduct a Quantitative Analysis

Requirement: OAR 340-252-0190 requires that a quantitative analysis be conducted as part of the 2000 RTP conformity determination. The analysis must demonstrate that emissions resulting from the entire transportation system, including all regionally significant projects expected within the time frame of the plan, must fall within budgets established in the maintenance plan for criteria pollutants. In the Portland-Vancouver Air Quality Maintenance Area these include ozone precursors (HC and NO_x) and carbon monoxide (CO). A specified methodology must be used to calculate travel demand, distribution and consequent emissions as required by OAR 340-20-1010. The Portland metropolitan area has the capability to perform such a quantitative analysis.

Finding: For the Oregon portion of the Portland-Vancouver airshed, emission budgets have been set for various sources of pollutants (mobile, point, area) and are included in the SIP and in the region's Ozone and Carbon Monoxide Maintenance Plans. The 2000 RTP must conform to the SIP mandated mobile emission budgets. Mobile emission budgets are set for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NO_x), and hydrocarbons (HC).

The region's approved Maintenance Plans identify two sets of analysis years, one set for winter CO and one set for summer ozone precursors (NO_x and HC). The CO budget years are 2001, 2003, 2007, 2010, 2015 and 2020. The ozone analysis years are 1999, 2001, 2003, 2006, 2010, 2015 and 2020. In addition, a plan horizon year must also be evaluated. For the 2000 RTP, the horizon year is 2020. Table 2 shows the budget years and associated emissions budgets.

Table 2
2000 RTP Mobile Emissions Budgets¹

	Winter CO	Summer HC	Summer NO _x
	(thousand pounds/day)	(tons/day)	(tons/day)
1999	n/a	52	56
2001	864	47	54
2003	814	44	52
2006	n/a	41	51
2007	763	n/a	n/a
2010	760	40	52
2015	788	40	55
2020	842	40	59

¹ Budgets are from the Maintenance Plan adopted in 1996.

Source: Metro

The network that was analyzed is summarized in Appendix 1. The protocol for definition of the Determination's analysis and budget years is summarized in Appendix 3, including discussion of why each analysis year was selected. Appendix 4 contains a summary of the principle model assumptions, including a discussion of assumed transit costs, parking factors, and intersection density and the impact of these factors on travel mode selection by 2040 design type (e.g., central city, regional centers, town centers, station communities, mainstreets, employment areas, corridors, etc.) A detailed description of the network assumptions coded into Metro's regional model is contained in a 2000 RTP Financially Constrained System Atlas, available for review at Metro Headquarters at 600 NE Grand Avenue, Portland, OR 97232. The Atlas includes information about system and individual link capacities in the 1998 base year and capacities assumed after planned improvements as well as the year of expected operation of each planned improvement. The results of the quantitative analysis are shown in Table 3 and Figures 1, 2 and 3. In summary, Metro's analysis indicates that regional emissions will remain within established budgets in all analysis and budget years (i.e., 1998, 1999, 2001, 2003, 2005, 2006, 2007, 2010, 2015, and 2020).

2. Determine Analysis Years.

- a. **Requirement:** *The State Conformity Regulations) require the first analysis year to be no later than 10 years from the base year used to validate the transportation demand planning model (340-252-0070), that subsequent analysis years be no greater than 10 years apart and that the last year of the 2000 RTP must be an analysis year (340-252-0070).*

Finding: See Appendix 3 regarding selection of analysis and budget years, including discussion of why each analysis year was selected.

3. Perform the Emissions Impact Analysis.

- a. **Requirement:** *The State Conformity Regulations) require Metro to conduct the emissions impact analysis.*

Finding: Calculations were prepared, pursuant to the methods specified at OAR 340-20-1010, of CO and Ozone precursor pollutant emissions assuming travel in each analysis year on networks that have been previously described. A technical summary of the regional travel demand model, the EMME/2 planning software and the Mobile 5a methodologies is available from Metro upon request. The methodologies were reviewed by TPAC.

4. **Determine Conformity.**

- a. **Requirement:** *Emissions in each analysis year must be consistent with (i.e., must not exceed) the budgets established in the maintenance plan for the appropriate criteria pollutants (OAR 340-252-0190).*

Finding: Metro's analysis indicates that regional emissions will remain within established budgets in all analysis and budget years (i.e., 1998, 1999, 2001, 2003, 2005, 2006, 2007, 2010, 2015, and 2020). Table 3 provides a summary of these emissions and shows that the 2000 RTP, conforms with the SIP.

Table 3
2000 RTP Conformity Results¹

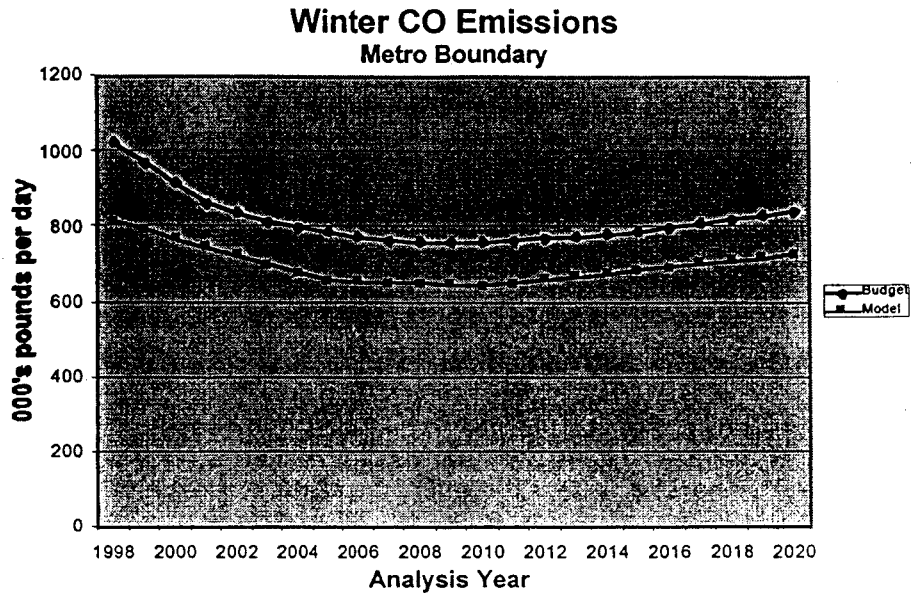
	Winter CO		Summer HC		Summer NOx	
	(thousand pounds/day)		(tons/day)		(tons/day)	
	Budget	Model Result	Budget	Model Result	Budget	Model Result
1999	n/a	n/a	52	39.9	56	52.0
2001	864	747	47	38.0	54	51.4
2003	814	703	44	36.1	52	50.9
2006	n/a	n/a	41	33.8	51	50.4
2007	763	652	n/a	n/a	n/a	n/a
2010	760	644	40	32.1	52	50.9
2015	788	686	40	34.6	55	54.6
2020	842	728	40	37.0	59	58.2

¹ Budgets are from the Maintenance Plan adopted in 1996.

Source: Metro

Figures 1, 2 and 3 show graphs of the conformity results that compare the emissions budgets with the modeled results for each analysis year for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NOx), and hydrocarbons (HC) respectively.

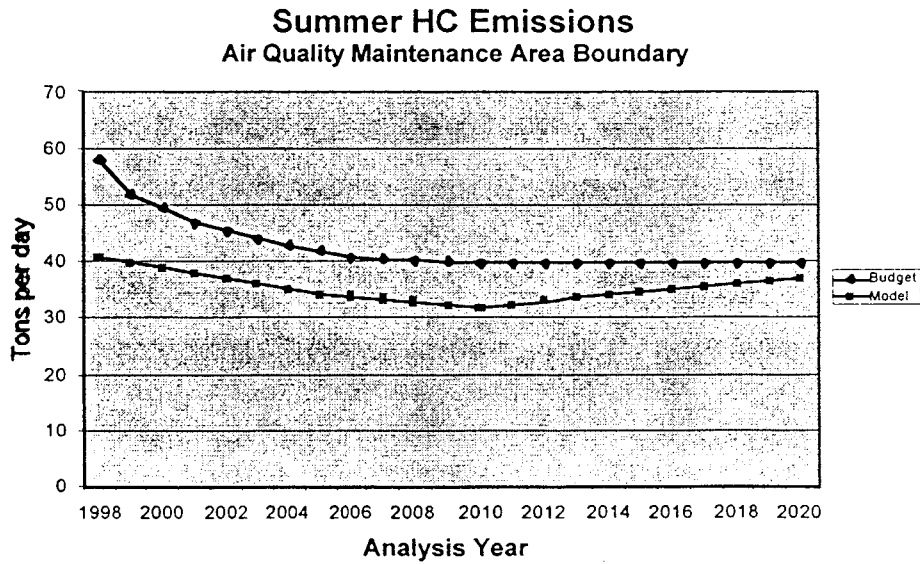
Figure 1



Based on RTP Financially Constrained System.

Source: Metro

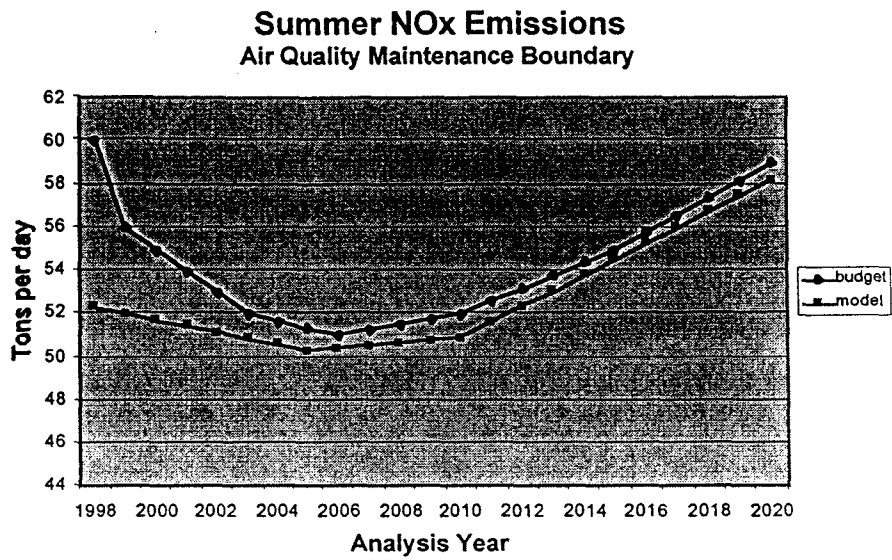
Figure 2



Based on RTP Financially Constrained System.

Source: Metro

Figure 3



Based on RTP Financially Constrained System.

Source: Metro

Appendix 1

Financially Constrained System Project List



2000 RTP
Air Quality
Conformity Analysis
October 6, 2000

Financially Constrained System Projects- August 10, 2000

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1998 dollars (**** indicates phasing in financially constrained system)	RTP Program Years
1000	Region	Tri-Met	Light Rail Extension 1	Rose Quarter to Expo Center	Construct LRT	\$ 350,000,000	2000-20
1002	Region	Tri-Met	Light Rail Extension 2	Expo Center to Vancouver/Clark College	Construct LRT	\$ 300,000,000	2000-20
1003	Region	Tri-Met	Light Rail Extension 3	Rose Quarter to Milwaukie TC	Construct LRT	\$ 750,000,000	2000-20
1007	Region	Multnomah Co.	Broadway and Burnside Bridge Improvements	Broadway and Burnside bridges	Broadway-painting, phase 1 seismic retrofit, sidewalk replacements and resurface bridge deck and approaches; Burnside - deck rehabilitation, mechanical improvements, painting and phase 1 seismic retrofit	\$ 73,800,000	2000-20
1009	Region	Portland	Springwater Trail Access Improvements	Sellwood Bridge to SPRR	Construct multi-use path; improve bicycle/pedestrian access	\$ 2,000,000	2000-05
1014	Central City	Tri-Met/Portland	16TEN - Central City Street Car	NW Portland to PSU	Construct street car	\$ 40,000,000	2000-05
1015	Central City	Tri-Met/Portland	16TEN - Central City Street Car	North Macadam/Bancroft Street to PSU	Construct street car	\$ 40,000,000	2006-10
1020	Region	Various	Red Electric Line Trail	Willamette Park to Oleson Road	Study feasibility of multi-use path	\$ 135,000	2000-05
1021	Region	Various	Peninsula Crossing Trail	Portland Road to Marine Drive	Construct multi-use path	\$ 359,000	2000-05
1027	Central City	Portland/ODOT	South Portland Improvements	South Portland sub-area	Implement South Portland Circulation Study recommendations	\$ 40,000,000	2000-05
1028	Central City	Portland/ODOT	Kerby Street Improvements	Kerby Street at I-5	Improve I-405/Kerby Street interchange to calm traffic and improve local access	\$ 1,624,000	2000-05
1029	Central City	Portland	SE Water Avenue Extension	SE Water Avenue	Extend SE Water Avenue from Canuthers to Division Place	\$ 250,000	2000-05
1032	Central City	Portland	Southern Triangle Circulation Improvements	Between the Ross Island Bridge - Hawthorne Bridge/ Willamette River -		\$ 2,500,000	2000-05
1033	Central City	Portland	Lovejoy Ramp Removal	Lovejoy ramp on Broadway Bridge	NW 9th Avenue to NW 14th Avenue	\$ 10,846,000	2000-05
1034	Central City	Portland	Lower Albina RR Crossing	Interstate Avenue to Russell Street	Provide new roadway to separate truck/rail movements	\$ 4,000,000	2000-05
1035	Central City	Portland	SW Columbia Street Reconstruction	18th Avenue to Front Avenue	Rebuild street	\$ 800,000	2000-05
1036	Central City	Portland	Broadway/Flint Arena Access	Broadway/Flint at Rose Quarter	Intersection realignment	\$ 310,000	2000-05
1037	Central City	Portland	Bybee Boulevard Overcrossing	Bybee Boulevard/McLoughlin Boulevard	Replace substandard 2-lane bridge with 4-lane bridge with standard clearance	\$ 3,500,000	2006-10
1046	Central City	Portland	Transit Mall Restoration	Central City	Reduce maintenance and repair costs	\$ 2,470,000	2000-05
1047	Central City	Portland	SE 7-8th Avenue Connection	Central Eastside Industrial District	Construct new street connection from SE 7th to 8th Avenue at Division Street	\$ 500,000	2006-10
1048	Central City	Portland	North Macadam Pedestrian and Bicycle	city	improvements identified in the North Macadam Framework	\$ 4,300,000	2000-05
1049	Central City	Portland	North Macadam Transit Improvements	North Macadam District of the central city	Implement transit improvements identified in the North Macadam Framework Plan, including central city transit hub, tram and local bus service improvements	\$ 4,100,000	2000-05
1050	Central City	Tri-Met/Portland	North Macadam TMA	North Macadam District of the central city	Implement transportation management area improvements identified in the North Macadam Framework Plan (placeholder TMA)	See Project #8056 cost	2000-05
1051	Central City	Portland	W. Burnside and Inner E. Burnside Street Improvements and ITS	SE 12th to NW 23rd	Boulevard design improvements	\$ 9,365,000	2000-05
1052	Central City	Portland	North Macadam Street Improvements	North Macadam District of the central city	Implement street improvements identified in the North Macadam Framework Plan, including Bancroft, Bond, Curry, River Parkway, Harrison connector, key access intersections and other street improvements	\$ 17,750,000	2000-05
1053	Central City	Portland	Naito Parkway Improvements	NW Davis to SW Market	Complete boulevard design improvements and ITS	\$ 3,027,295	2000-05
1054	Central City	Portland	Broadway/Weidler Improvements, Phase II and III	At Arena and 15th Avenue to 24th Avenue	Complete boulevard design improvements and ITS	\$ 5,590,000	2000-05
1055	Central City	Portland/ODOT	MLK/Grand Improvements	Central Eastside and Lloyd districts	Complete boulevard design improvements	\$ 3,000,000	2011-20
1056	Central City	Tri-Met/Portland	Lloyd District TMA	Lloyd district of the Central City	Implement transportation management area program with area employers	\$ 80,000	2000-05
1058	Central City	Portland	SW Moody Bikeway	SW Moody from SW Bancroft to Gibbs	Retrofit bike lanes to existing street	\$ 10,000	2000-05
1062	Central City	Multnomah Co.	WRBAP Future Phase Project Implement.	Morrison Bridge	Morrison Bicycle Pathway; improve pedestrian access	\$ 1,270,000	2000-05
1063	Central City	Portland	SE Morrison / Belmont Bikeway	Morrison Bridge to SE 12th Avenue	Retrofit bike lanes to existing street	\$ 8,000	2011-20
1064	Central City	Portland	N Interstate Bikeway	N Lombard to N Greeley	Retrofit bike lanes to existing street	\$ 200,000	2000-05
1065	Central City	Portland	SE 17th Avenue Bikeway	SE Powell to Portland City Limits	Retrofit bike lanes to existing street	\$ 100,000	2011-20
1066	Central City	Portland	SE Milwaukie Bikeway	SE Gideon to SE Center	Retrofit bike lanes to existing street	\$ 10,000	2011-20
1068	Central City	Portland	SE Division Place/SE 9th Bikeway	SE 7th Avenue to SE Center Street	Retrofit bike lanes to existing street	\$ 17,000	2011-20
1069	Central City	Portland	East Burnside Bikeway	SE 28th to SE 74th Avenue	Retrofit bike lanes to existing street	\$ 250,000	2000-05
1079	Central City	Portland	Steel Bridge Pedestrian Way (RATS Phase I)	East and west side access to the Steel Bridge and East Bank	Create several linkages between the east and west sides of the Central City via pedestrian and bicycle overcrossings;	\$ 3,562,000	2000-05
1080	Central City	Portland	Hawthorne Boulevard Pedestrian Improvements	20th Avenue to 60th Avenue	Improved lighting, crossings, bus shelters, bike parking, benches and parallel facility bike improvements	\$ 750,000	2000-05
1081	Central City	Portland	Eastbank Esplanade	Steel Bridge to OMSI	Construct multi-use path; improve bicycle/pedestrian access	\$ 3,018,000	2000-05
1084	Central City	Portland	Clay/2nd Pedestrian/Vehicle Signal	SW Clay Street and SW 2nd Avenue	New signal installation	\$ 100,000	2000-05
1100	Central City	ODOT/Portland	Central City TSM improvements	Central City - various locations	Implement Central City TSM improvements to arterials	\$ 2,000,000	2000-05
1101	Central City	Portland	SW Jefferson Street ITS	At SW 18th Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 60,000	2006-10
1102	Central City	Portland	Macadam Avenue ITS	Three signals between the Sellwood Bridge and Hood/Bancroft	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 290,000	2006-10
1103	Central City	Portland	N. Going Street ITS	Two signals at N. Greeley and at Interstate Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 255,000	2006-10
1104	Central City	Portland	NW Yeon/St. Helens	Four signals between I-405/Vaughn/23rd and Nicolai Street	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 192,500	2000-05

2000 RTP
Financially Constrained System Projects-
August 10, 2000

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1998 dollars ("—" indicates phasing in financially constrained system)	RTP Program Years
1105	Central City	Portland	SW-NW 14/18th - SW 13th/14th Avenue ITS	Six signals between SW Clay and NW Glisan	Communications infrastructure; closed circuit TV cameras; variable message signs for remote monitoring and control of traffic flow	\$ 175,000	2006-10
1109	Swan Island IA	Portland	Going Street Rail Overcrossing	North Going Street at Swan Island	Widen intersection and add additional EB lane on structure	\$ 3,099,000	2000-05
1113	Swan Island IA	Portland	Going Street Bikeway	N Interstate Avenue to N Basin Street and N. Lagoon to Channel	Retrofit bike lanes to existing street	\$ 78,000	2000-05
1120	Hollywood TC	Portland	Sandy Boulevard Multi-Modal Improvements, Phase I	12th Avenue to 57th Avenue	Multi-modal street improvements, redesign selected intersections to add turn lanes and improve pedestrian crossings, selected street closures and streetscape improvements, add on-street parking, ITS and safety improvements	\$ 15,000,000	2000-05
1122	Hollywood TC	Portland	Sandy Boulevard Multi-Modal Improvements, Phase II	57th Avenue to 102nd Avenue	Multi-modal street improvements, redesign selected intersections to improve pedestrian crossings, streetscape improvements and safety improvements	\$ 4,000,000	2006-10
1126	Hollywood TC	Portland	NE/SE 50s Bikeway	NE Tillamook to SE Woodstock	Retrofit streets to add bike boulevard	\$ 500,000	2000-05
1130	Hollywood TC	Portland	Hollywood TC Pedestrian District Improvements	NE Halsey Street, NE 37th to 47th, Tillamook Street to I-84	Multi-modal street improvements, traffic signals, restriping, improved pedestrian crossings and connections to transit center	\$ 6,650,000	2000-05
1144	St. Johns TC	Portland	N Portland Road Bikeway	Martin Luther King to Willamette Boulevard	Retrofit bike lanes to existing street	\$ 400,000	2011-20
1145	St. Johns TC	Portland	N St. Louis/Fessenden Bikeway	N Columbia Way to N Willamette Boulevard	Retrofit bike lanes to existing street	\$ 8,000	2000-05
1146	St. Johns TC	Portland	N Greeley/Interstate Bikeway	Edgewater Drive to Cathedral Park	Retrofit bike lanes to existing street	\$ 145,000	2000-05
1147	St. Johns TC	Portland	Willamette Cove Segment Trail	Willamette Cove to St. Johns Bridge	Study feasibility of multi-use path	n/a	2000-05
1150	St. Johns TC	Portland/ODOT	St. Johns TC Pedestrian District	Lombard Street: MLK Jr. Boulevard to St. Johns TC	Plan and construct improvements to the pedestrian environment within the Pedestrian District such as improved lighting and crossings	\$ 500,000	2000-05
1156	Lents TC	Portland	SE Ellis Bikeway	SE Foster Road to SE 92nd Avenue	Retrofit bike lanes to existing street	\$ 400,000	2011-20
1157	Lents TC	Portland	SE 92nd Avenue Bikeway	SE Stark to Lincoln; SE Powell to Foster	Retrofit bike lanes to existing street	\$ 21,000	2000-05
1158	Lents TC	Portland	Lents TC Pedestrian District	Lents Town Center Pedestrian District	Pedestrian facility improvements to key links accessing the Foster-Woodstock couplet	\$ 720,000	2006-10
1159	Lents TC	Portland	Foster Pedestrian Access to Transit Improvements	Powell Boulevard to Lents TC	Improve sidewalks, lighting, crossings, bus shelters & benches	\$ 2,000,000	2000-05
1160	Lents TC	Portland	Foster-Woodstock, Phase I	87th-94th Avenues and 92nd Avenue within the Foster-Woodstock couplet	Implement Lent Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting, increased on-street parking	\$ 6,000,000	2000-05
1161	Lents TC	Portland	Foster-Woodstock, Phase II	87th-94th Avenues and 92nd Avenue within the Foster-Woodstock couplet	Implement Lent Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting	\$ 5,000,000	2006-10
1162	Lents TC	Portland	Foster Road Improvements	79th to 87th Avenues	Implement Lent Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting, increased on-street parking, as appropriate	\$ 2,000,000	2011-20
1168	Hillsdale TC	Portland	Hillsdale Intersection Improvements	BH Highway/Capitol Highway/Bertha Boulevard	Redesign the intersection with "boulevard design"	\$ 845,000	2000-05
1169	Hillsdale TC	Portland	SW Vermont Bikeway, Phase I and II	SW Oleson to 45th Avenue; SW 45th Avenue to SW Terwilliger	Retrofit bike lanes to existing street	\$ 3,000,000	2011-20
1171	Hillsdale TC	Portland	SW 30th Avenue Bikeway	BH Highway to SW Vermont Street	Retrofit bike lanes to existing street	\$ 931,000	2011-20
1172	Hillsdale TC	Portland	SW Bertha Bikeway Improvements	SW Vermont to BH Highway	Widen street to add bike lanes	\$ 400,000	2000-05
1176	Hillsdale TC	Portland	SW Beaverton-Hillsdale Highway Pedestrian and Bicycle Improvements	Capitol Highway to 65th Avenue	Construct sidewalks, crossing improvements for access to transit and bike improvements	\$ 2,200,000	2011-20
1181			Beaverton-Hillsdale Highway ITS	Three signals: at Terwilliger, Bertha Boulevard and Shattuck Road	Communications infrastructure; closed circuit TV cameras; variable message signs for remote monitoring and control of traffic flow	\$ 90,000	2006-10
1184	Raleigh Hills TC	ODOT/WashCo	BH Highway/Scholls Redesign	BH Highway/Scholls/Oleson intersection	Redesign intersection to improve safety	\$ 13,000,000	2006-10
1185	Raleigh Hills TC	Washington Co.	Oleson Road Improvements	Fanno Creek to Hall Boulevard	Improve to urban standard with bike lanes, sidewalks, lighting, crossings, bus shelters & benches; signal at 80th	\$ 14,000,000	2006-10
1189	Raleigh Hills TC	Portland	SW 62nd Avenue at Beaverton-Hillsdale Highway	SW 62nd Avenue at Beaverton-Hillsdale Highway	Install median refuge to improve pedestrian crossing	\$ 100,000	2000-05
1193	West Portland TC	Portland/ODOT	West Portland TC Safety Improvements	Barbur/Capitol/Taylor's Ferry intersection	Safety improvements, incl. signalization at Capitol Hwy/Taylor's Ferry and Huber/Barbur and sidewalks and crossing improvements	\$ 610,000	2000-05
1195	West Portland TC	Portland/ODOT	Barbur Boulevard Design Treatment	Portland city limits	Complete boulevard design improvements	\$ 13,000,000	2000-05
1198	West Portland TC	Portland	SW Taylor's Ferry Bikeway	SW Capitol Highway to Portland City Limits	Retrofit bike lanes to existing street; shoulder widening, drainage	\$ 1,800,000	2000-05
1202	West Portland TC	Portland	SW Capitol Highway Pedestrian and Bicycle Improvements	Multnomah Boulevard to Taylor's Ferry Road	Construct sidewalks, improve crossings and bike facilities	\$ 1,200,000	2000-05
1207	West Portland TC	Portland	Barbur Boulevard ITS	Barbur Boulevard/I-5 Corridor	Install intelligent transportation system infrastructure to improve safety and enhance traffic flow	\$ 550,000	2000-05
1211	Portland Mainstreet	Portland	Garden Home/Oleson/Multnomah Improvements	Multnomah Boulevard to 71st Avenue	Reconstruct intersection, sidewalks, crossings	\$ 875,000	2000-05
1212	Portland Mainstreet	Portland	SE Division Bikeway	SE 52nd to SE 82nd; SE 122nd to Portland city limit	Retrofit bike lanes to existing street	\$ 41,000	2011-20
1213	Portland Mainstreet	Portland	NE/SE 122nd Avenue Bikeway	Marine Drive to Reedway	Stripe bike lanes where missing	\$ 120,000	2011-20
1214	Portland Mainstreet	Portland	Division Street Transit Improvements, Phase I	SE Grand Avenue to 136th Avenue	Improve sidewalks, lighting, crossings, bus shelters & benches	\$ 5,900,000	2000-05
1217	Portland Mainstreet	Portland	Multnomah Pedestrian District	SW Capitol Highway & SW Multnomah	Improve sidewalks, lighting, crossings	\$ 500,000	2000-05
1219	Portland Mainstreet	Portland	Belmont Pedestrian Improvements	12th Avenue to 43rd Avenue	Plan and develop streetscape and transportation improvements	\$ 2,000,000	2000-05
1220	Portland Mainstreet	Portland	Fremont Pedestrian Improvements	NE 42nd Avenue to 52nd Avenue	Plan and develop streetscape and transportation improvements	\$ 250,000	2000-05
1221	Portland Mainstreet	Portland	Killingsworth Pedestrian Improvements	NE Killingsworth, Williams to 33rd, 42nd to Cully	Plan and develop streetscape and transportation improvements	\$ 1,320,000	2000-05
1222	Portland Mainstreet	Portland	SE Milwaukie Pedestrian Improvements	SE Milwaukie and Yukon to Tacoma	Plan and develop streetscape and transportation improvements	\$ 860,000	2011-20

Financially Constrained System Projects- August 10, 2000

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1998 dollars (*** indicates phasing in financially constrained system)	RTP Program Years
		Portland	NE Alberta Pedestrian Improvements	NE Alberta - MLK Boulevard to 33rd Avenue	Construct streetscape and transportation improvements		
1223	Portland Mainstreet					\$ 2,600,000	2000-05
		Portland	NE Cully/57th Pedestrian and Bicycle Improvements	NE Fremont to Killingsworth	Construct sidewalks and crossing improvements for pedestrian travel and access to transit and schools.		
1224	Portland Mainstreet					\$ 2,835,000	2000-05
		Portland	SE Tacoma Main Street Improvements	Sellwood Bridge to McLoughlin Boulevard	Implement boulevard design based on Tacoma Main Street study recommendations and incorporate McLoughlin Neighborhoods Project recommendations	\$ 4,000,000	2000-05
1227	Portland Mainstreet					\$ 200,000	2000-05
1229	Portland Mainstreet		SE Woodstock Main Street	39th Avenue to 49th Avenue	Plan and develop streetscape and transportation improvements	\$ 200,000	2000-05
1230	Portland Mainstreet		NE/SE 122nd Avenue ITS	Seven signals between Powell Boulevard and Airport Way	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 200,000	2006-10
1231	Portland Mainstreet		SE Tacoma Street ITS	Four signals between Sellwood	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 100,000	2006-10
		Portland	NE Sandy Boulevard ITS	Burnside to 82nd Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 340,000	2000-05
1239	Portland Mainstreet					\$ 350,000	2000-05
		Portland	82nd Avenue ITS Corridor	82nd Avenue: entire corridor within city limits	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 550,000	2000-05
1240	Portland Mainstreet					\$ 2,240,250	2000-05
1242	Portland Mainstreet		MLK/Interstate ITS	MLK/Interstate Avenue Intersection	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 65,000	2000-05
1245	Portland Corridor		Capitol Highway, Phase II	Capitol Highway, south of West Portland TC	Complete study recommendations	\$ 60,000	2000-05
1246	Portland Corridor		NE Klickitat/Siskiyou Bikeway	NE 14th Avenue to Rocky Butte Road	Retrofit streets to add bike boulevard	\$ 17,000	2011-20
1247	Portland Corridor		SE Holgate Bikeway, Phase I	42nd Avenue to 136th Avenue	Stripe bike lanes	\$ 300,000	2000-05
1248	Portland Corridor		SE Holgate Bikeway, Phase II	SE McLoughlin Boulevard to SE 42nd Avenue	Stripe bike lanes	\$ 1,000	2011-20
1253	Portland Corridor		NE Prescott Pedestrian and Bicycle Improvements	NE Prescott, Cully to I-205; sidewalks from Sandy to I-205	Retrofit bike lanes to existing street; improve sidewalks, lighting and crossings	\$ 65,000	2000-05
1257	South/North SC		NE Russell Bikeway	N Interstate to MLK Boulevard	Stripe bike lanes	\$ 2,250,000	2006-10
1259	South/North SC		N/NE Skidmore Bikeway	N Interstate to NE Cully	Retrofit streets to add bike boulevard	\$ 520,000	2000-05
1263	Banfield SC		Banfield SC Pedestrian Improvements	60th, 82nd, 148th, 162nd & intersecting streets	Improve sidewalks, lighting, crossings, bus shelters & benches	\$ 3,500,000	2006-10
	Banfield SC		Ventura Park Pedestrian District	Eastside MAX Station Corridor at 122nd Avenue	Improve sidewalks, lighting, crossings, bus shelters & benches to improve ease of crossing and install curb extensions at transit stops.	\$ 24,000,000	2000-05
1264	Gateway RC					\$ 2,800,000	2000-05
		Portland	NE/SE 99th Avenue Phases II and III	NE Glisan Street to SE Washington Street and SE Washington Street to SE Market Street	Reconstruct primary local main street in Gateway regional center	\$ 2,000,000	2006-10
1266	Region		Hogan Corridor Improvements	I-84 to Stark Street	Construct new I-84 interchange	\$ 3,800,000	2006-10
2001	Gateway RC		102nd Avenue Boulevard and ITS/Safety Improvements, Phase 1	within regional center between I-205 and NE 106th Avenue	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting, bicycle lanes and multi-modal safety improvements	\$ 140,000	2000-05
2008	Gateway RC					\$ 6,140,000	2006-10
		Portland	SE Stark/Washington Boulevard and ITS/Safety Improvements	92nd Avenue to 111th Avenue	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting and new bicycle facilities	\$ 100,000	2000-05
2011	Gateway RC					\$ 300,000	2000-05
2012	Gateway RC		NE Halsey Bikeway	162nd Avenue to 181st Avenue	Retrofit bike lanes to existing street	\$ 1,175,500	2011-20
2013	Gateway RC		Glisan Street Bikeway	162nd Avenue to 202nd Avenue	Retrofit bike lanes to existing street	\$ 100,000	2000-05
2014	Gateway RC		102nd Avenue Boulevard and ITS/Safety Improvements, Phase II	NE Glisan Street to SE Market Street	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting and new bicycle facilities	\$ 3,000,000	2000-05
2015	Gateway RC		NE Halsey Bikeway	NE 39th Avenue to NE 102nd Avenue	Retrofit bike lanes to existing street	\$ 6,000,000	2006-10
2016	Gateway RC		SE Stark/Washington Bikeway	NE 75th Avenue to Portland city limits	Retrofit bike lanes to existing street	\$ 1,700,000	2000-05
2017	Gateway RC		SE 111th/112th Avenue Bikeway	SE Mt. Scott Boulevard to SE Market	Retrofit bike lanes to existing street	\$ 900,000	2011-20
2018	Gateway RC		NE Glisan Bikeway	NE 47th Avenue to NE 162nd Avenue (excluding segment of I-205 to NE 106th Avenue)	Retrofit bike lanes to existing street	\$ 100,000	2000-05
2019			Gateway Regional Center Pedestrian District Improvements, Phase 1	Gateway Regional Center	High priority local street and pedestrian improvements in regional center	\$ 3,000,000	2000-05
2020	Gateway RC		Gateway Regional Center Pedestrian District Improvements, Phase II	Gateway Regional Center	High priority local street and pedestrian improvements in regional center	\$ 6,000,000	2006-10
2021	Gateway RC		Gateway Traffic Management	Gateway Regional Center	Manage traffic infiltration in residential areas east and west of Gateway & necessary street and utility work; improve connectivity	\$ 1,200,000	2006-10
2022	Gateway RC		Gateway TMA Startup	Gateway Regional Center	Implements a transportation management association program with employers (placeholder TMA)	See RTP #8056	2006-10
2023	Gateway RC		Gateway Regional Center Pedestrian District Improvements, Phase III	Gateway Regional Center	High priority local street and pedestrian improvements in regional center	\$ 6,000,000	2011-20
2024	Gresham RC		Division Street Frequent Bus Capital Improvements	Gresham to PCBD	Construct improvements that enhance Frequent Bus service	see Tri-Met total	2000-05
2025	Gateway RC		NE/SE 99th Avenue Phase I/NE Pacific Avenue	NE 99th from NE Weidier to Glisan Street and NE Pacific Avenue from 97th to 102nd Avenue	Reconstruct primary local main street in Gateway regional center	\$ 3,500,000	2006-10
2026	Gresham RC		257th Avenue Corridor Improvements	Division Street to Powell Valley Road	Reconstruct street to arterials standards, including bike lanes, sidewalks, drainage, lighting and traffic signals	\$ 4,000,000	2000-05
2041	Gresham RC		Division Street Improvements	NE Wallula Street to Hogan Road	Complete boulevard design improvements	\$ 4,000,000	2000-05
2047	Gresham RC		Powell Boulevard Improvements - Gresham RC	Birdsdales to Hogan	Complete boulevard design improvements	\$ 4,000,000	2000-05
2049	Gresham RC		Gresham/Fairview Trail	Springwater Trail to Marine Drive	Springwater Trail connection	\$ 1,700,000	2000-05
2053	Gresham RC		Springwater Trail Connections	Springwater Trail at 182nd Avenue and Pleasant View/190th Ave	Provide bike access to regional trail	\$ 900,000	2011-20
2054	Gresham RC		Division Street Bikeway	174th Avenue to Wallula Avenue	Retrofit street to add bike lanes	\$ 160,000	2006-10
2055	Gresham RC		Gresham RC Pedestrian and Ped-to-MAX Improvements	Burnside, Division, Powell, Civic Way, Eastman Pkwy, Main Street, Cleveland and intersecting streets and LRT stations areas	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 6,100,000	2000-05
2057	Gresham RC		Springwater Trail Pedestrian Access	Hogan	Improve sidewalks and lighting	\$ 500,000	2011-20
2058	Gresham RC		Division Street Pedestrian to Transit Access Improvements	175th to Wallula Avenue	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 1,000,000	2011-20
2059	Gresham RC		Gresham regional center TMA startup	Gresham Regional Center	Implements a transportation management association program with employers	\$ 174,500	2006-10
2062	Gresham RC						

Financially Constrained System Projects- August 10, 2000

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1998 dollars (* indicates phasing in financially constrained system)	RTP Program Years
2065	Gresham RC	Gresham	Phase 3 Signal Optimization	System-wide	Optimize signals	\$ 2,000,000	2000-05
2066	PDX IA	Port	I-205 Direct Ramp	I-205 to Airport Way	Restripe flyover off ramp; widen at touchdown as needed	\$ 2,700,000	2006-10
2079	South Shore IA	Multnomah Co.	185th Railroad Crossing Improvement	185th Avenue/railroad bridge	Replacing railroad bridge to allow for road widening	\$ 1,200,000	2011-20
2081	South Shore IA	Multnomah Co.	223rd Railroad Crossing Improvement	223rd Avenue/railroad bridge	Replacing railroad bridge to allow for road widening and two crossings; one north of Sandy and one south of I-84	\$ 6,000,000	2000-05
2084	South Shore IA	Multnomah Co.	181st Avenue Intersection Improvement	181st Avenue/Glisan Street Intersection	Improve intersection	\$ 540,000	2011-20
2085	South Shore IA	Multnomah Co.	181st Avenue Intersection Improvement	181st Avenue/Burnside Road Intersection	Improve intersection	\$ 300,000	2011-20
2086	South Shore IA	Portland	NE 138th Avenue Improvements	Sandy Boulevard - Marine Drive - Columbia Boulevard	Remove and replace deteriorating timber bridge to meet ODOT and FHWA requirements.	\$ 1,400,000	2000-05
2087	South Shore IA	Portland	NE 158th Avenue Improvements	Sandy Boulevard to Marine Drive	Reconstruct street to industrial standards, add sidewalks, stripe bike lanes, curb and storm drainage, construct bridge to replace culverts at main slough crossing and build fill to reduce grade at Marine Drive Intersection	\$ 1,000,000	2000-05
2088	South Shore IA	Portland	NE Marine Drive/122nd Avenue Improvements	NE Marine Drive/122nd Avenue Intersection	Signalization, widen dike to install left turn lane on Marine Drive	\$ 1,683,000	2000-05
2091	South Shore IA	Portland	NE/SE 148th Avenue Bikeway	NE Marine Drive to Knott and NE Glisan to SE Division	Retrofit bike lanes to existing street	\$ 31,000	2006-10
2101	Rockwood TC	Gresham	Stark Street Improvements	190th to 197th	Complete boulevard design improvements	\$ 3,000,000	2006-10
2102	Rockwood TC	Gresham	Stark Street Improvements	181st to 190th	Complete boulevard design improvements	\$ 3,000,000	2000-05
2105	Rockwood TC	Gresham	Rockwood TC Pedestrian and Ped-to-MAX Improvements	181st, 188th, Stark and intersecting streets and LRT station areas	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 3,000,000	2011-20
2111	Fairview/VW TC	Multnomah Co.	207th Connector	Halsey Street to Glisan Street	Complete reconstruction of 207th Avenue	\$ 1,500,000	2000-05
2116	Fairview/VW TC	Multnomah Co.	NE 223rd Avenue Bikeway and Pedestrian Improvements	NE Halsey Street to Marine Drive	Retrofit bike lanes and sidewalks on existing street	\$ 500,200	2006-10
2123	Troutdale TC	Multnomah Co.	Stark Street Improvements	257th Avenue to Troutdale Road	Widens street to five lanes	\$ 3,000,000	2000-05
2126	Troutdale TC	Troutdale	257th Avenue Pedestrian Improvements	Cherry Park Road to Stark Street	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 1,000,000	2000-05
3001	Region	ODOT	Highway 217 Improvements	NB - TV Highway/Canyon Road to US 26	Widen NB to three lanes; ramp improvements	\$ 21,000,000	2006-10
3007	Region	ODOT	US 26 Improvements	EB from Highway 217 to Camelet Court	Widen EB US 26 to three lanes	\$ 12,000,000	2006-10
3012	Region	Hillsboro	Rock Creek Greenway Multi-use Path	TV Highway to Evergreen Parkway	Completes multi-use path along Rock Creek from Tualatin Valley Highway to Evergreen Parkway	\$ 3,300,000	2000-05
3013	Region	Various	Bronson Creek Greenway Multi-Use Path	Beaverton Creek to Powerline Trail	Study feasibility of corridor	n/a	2000-05
3014	Region	Various	Powerline Beaverton Trail Corridor Trail	Bronson Creek Greenway to Farmington Road	Plan, design and construct multi-use path	\$ 2,700,000	2000-05
3015	Region	Various	Beaverton Creek Greenway Corridor Study	Rock Creek to Fanno Creek	Study feasibility of corridor	n/a	2000-05
3016	Region	Washington Co.	Washington County ATMS	Washington County	Acquire hardware for new traffic operations center and conduct needs analysis	\$ 1,000,000	2000-05
3019	Beaverton RC	Beaverton	Beaverton Connectivity Improvements	(2) Dawson/Westgate; Karl Braun to Hall; (3) Rose Bigg; Canyon to	Complete central Beaverton street connections	\$ 13,200,000	2000-05
3020	Beaverton RC	Beaverton	Beaverton Connectivity Improvements II	(5) Electric to Whitney to Carousel to 144th; (6) new conn.: Henry & 114; (7) new conn.: Hall and Cedar Hill (8) Griffith to 114th	Complete central Beaverton street connections	\$ 13,300,000	2006-10
3026	Beaverton RC	Beaverton	Milikan Extension	Hocken to Cedar Hills	Three lane extension to connect with Cedar Hills at Henry Street	\$ 4,300,000	2000-05
3027	Beaverton RC	Beaverton/WashCo	Davis Improvements	160th Avenue to 170th Avenue	Three lane improvement to add bike and pedestrian facilities	\$ 1,600,000	2000-05
3028	Beaverton RC	Beaverton	Hart Improvements	Murray to 165th	Three lane improvement with sidewalks, bikeways and signal at 155th Avenue	\$ 7,100,000	2000-05
3029	Beaverton RC	Beaverton	Lombard Improvements	Broadway to Farmington	Three lane improvement to realign road with segment to the north with pedestrian facilities	\$ 1,600,000	2000-05
3030	Beaverton RC	Beaverton	Farmington Road Improvements	Hocken Avenue to Murray Boulevard	Widen to five lanes; improve intersections at Murray Boulevard and Hocken Avenue	\$ 9,300,000	2000-05
3032	Beaverton RC	Beaverton	Cedar Hills Boulevard Improvements	Farmington Road to Walker Road	Widen to five lanes with sidewalks and bike lanes	\$ 3,700,000	2006-10
3033	Beaverton RC	Beaverton	125th Avenue Extension	Brockman Street to Hall Boulevard	Construct two-lane extension with turn lanes from Brockman Street to Hall Boulevard	\$ 9,800,000	2000-05
3034	Beaverton RC	Beaverton	Hall Boulevard Extension	Cedar Hills Boulevard to Terman/Hocken	Construct three-lane extension with bikeways and sidewalks	\$ 4,600,000	2000-05
3038	Beaverton RC	Beaverton	Center Street Improvements	Hall Boulevard to 113th Avenue	Widen to three lanes with bikeways and sidewalks (only bike lanes and sidewalks in financially constrained system)	\$ 3,200,000	2011-20
3041	Beaverton RC	Beaverton	Hall/Watson Improvements	Allen Boulevard to Cedar Hills Boulevard	Complete boulevard design improvements	\$ 445,000	2000-05
3042	Beaverton RC	ODOT/Beaverton/Tr-Met	TV Highway Pedestrian Access to Transit Improvements	Murray to Highway 217	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 8,000,000	2006-10
3045	Beaverton RC	Beaverton	Farmington Road Bikeway	Hocken to Highway 217	Retrofit to include bike lanes	\$ 2,800,000	2006-10
3046	Beaverton RC	Beaverton	Hall Boulevard Bikeway	BH Highway to Cedar Hills Boulevard	Retrofit to include bike lanes	\$ 68,000	2000-05
3047	Beaverton RC	Beaverton	Watson Avenue Bikeway	BH Highway to Hall Boulevard	Retrofit to include bike lanes	\$ 59,000	2000-05
3049	Beaverton RC	Beaverton	Downtown Beaverton Pedestrian/Bike Improvements	Hocken Avenue/TV Highway/113th Avenue/110th Avenue/Cabot Street	Improve sidewalks, bike lanes, lighting, crossings, bus shelters and benches	\$ 1,120,000	2000-05
3051	Beaverton RC	WashCo/Beaverton/Tr-Met	Hall Boulevard/Watson Pedestrian-to-Transit Improvements	Cedar Hills Boulevard to Tigard TC	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 1,600,000	2006-10
3052	Beaverton RC	Beaverton	110th Avenue Pedestrian Improvements	B-H Highway to Canyon Road	Fill in missing sidewalks	\$ 30,000	2000-05
3053	Beaverton RC	Beaverton	117th Avenue Pedestrian Improvements	light rail transit to Center Street	Improve sidewalks, lighting, crossings	\$ 30,000	2000-05
3058	Beaverton RC	Tr-Met/Beaverton	Beaverton Regional Center TMA	Beaverton Regional Center	Implements a transportation management association program with employers	See RTP #8056 total	2000-05
3061	Beaverton RC	ODOT/WashCo	TV Highway System Management	TV Highway from Highway 217 to 209th	Interconnected signals on TV Highway from 209th Avenue to Highway 217	\$ 1,500,000	2006-10
3063	Beaverton RC	Washington Co.	Murray Boulevard Improvements	TV Highway to Allen Boulevard	Signal coordination	\$ 50,000	2000-05
3067	Beaverton Corridor	Washington Co.	185th Avenue Improvements	West View High School to Springville Road	Widen to five lanes with bike lanes and sidewalks	\$ 5,000,000	2006-10

Financially Constrained System Projects- August 10, 2000

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1994 dollars ("—" indicates phasing in financially constrained system)	RTP Program Years
3071	Region	Beaverton/WashCo/T HPRD	Fanno Creek Greenway Multi-Use Path	Allen Boulevard to Denney Road east of Highway 217 and from Highway 217 to Allen Boulevard near Scholls Ferry Road	Completes Fanno Creek Greenway multi-use path	\$ 1,500,000	2000-05
3072	Beaverton Corridor	Tualatin Hills PRD	Beaverton Powerline Multi-use Trail	Road	Construct multi-use trail within powerline easement	\$ 2,000,000	2000-05
3074	Beaverton Corridor	Beaverton	Hall Boulevard Bikeway	12th Street to south of Allen Boulevard	Retrofit to include bike lanes; intersection turn lanes at Allen Boulevard	\$ 1,438,000	2000-05
3075	Beaverton Corridor	Beaverton/WashCo	Cedar Hills Boulevard Improvements	Butner Road to Walker Road	Improve sidewalks, lighting, crossings, bike lanes, bus shelters and benches	\$ 1,100,000	2000-05
3079	Beaverton Corridor	Beaverton	Allen Boulevard Bike/Ped Improvements	Western Avenue to Scholls Ferry Road	Retrofit to include bike lanes and fill in missing sidewalks	\$ 253,000	2006-10
3085	Westside SC	Washington Co.	170th Improvement	Rigot to Alexander	Three lanes from Rigot to Blanton; five lanes from Blanton to Alexander	\$ 26,700,000	2000-05
3091	Westside SC	Hillsboro	Qualama Street Improvements	205th Avenue to 227th Avenue; 227th at Baseline	Widen to three lanes and extend to Baseline with sidewalks and bike lanes	\$ 6,400,000	2006-10
3092	Westside SC	Washington Co.	Powerline/Rock Creek Trail	Bethany/Kaiser Road to Evergreen Road/Rock Creek Greenway	Construct multi-use path for bicyclists and pedestrians just north of US 26	\$ 1,000,000	2000-05
3094	Westside SC	Hillsboro	Cornell Road Bikeway	Elam Young Parkway (W) to Ray Circle	Retrofit to include bike lanes	\$ 600,000	2000-05
3095	Westside SC	Washington Co.	170th Avenue Pedestrian Improvements	Merle Drive to Elmonica light rail station	Fill in sidewalk gaps and extend to light rail eastside only	\$ 270,000	2000-05
		Washington Co.	Pedestrian Access to MAX	Westside LRT station areas	Provide pedestrian connections to light rail stations	\$ 1,000,000	
3096	Westside SC						2000-05
3098	Westside SC	Washington Co.	Walker Road Bike/Ped Improvements	Canyon Road to Cedar Hills Boulevard	Retrofit to include bike lanes and sidewalks	\$ 750,000	2011-20
3102	Hillsboro RC	Washington Co.	Baseline Road Improvements	201st to 231st Avenue	Widen to three lanes with bike lanes and sidewalks	\$ 21,000,000	2000-05
3104	Hillsboro RC	Hillsboro	NW Alcock Drive Extension	NW Amberwood Drive to Cornelius Pass Road	New three-lane facility with sidewalks and bike lanes	\$ 2,000,000	2000-05
3105	Hillsboro RC	Hillsboro	E/W Collector	185th Avenue to 231st Avenue	New 3-lane facility	\$ 4,600,000	2000-05
3106	Hillsboro RC	Washington Co.	229th/231st/234th Connector	Bonwick Road to Baseline and Century High School to Bonwick Road; Baseline to LRT	New 3-lane facility and bridge; widen 231st Avenue to three lanes (Century High to LRT in financially constrained system)	\$ 23,200,000	2000-05
3107	Westside SC	Hillsboro/WashCo	SW 205th Avenue Improvements	LRT to Baseline Road	Widen to five lanes, including bridge, sidewalks and bike lanes (sidewalk on eastside and bike lanes only in financially constrained system)	\$ 4,800,000	2006-10
3108	Hillsboro RC	Washington Co.	Baseline Road Improvements	Lisa to 201st Avenue	Widen to 3 lanes with bike lanes and sidewalks	\$ 7,500,000	2000-05
3110	Hillsboro RC	ODOT/WashCo	Jackson School Road Improvements	Jackson School Road at US 26	Improve Jackson School Road intersection with channelization	\$ 500,000	2000-05
3111	Hillsboro RC	Washington Co.	First Avenue Improvements	Grant Street to Glencoe High School	Improve sidewalks and pedestrian crossings and make transit improvements	\$ 700,000	2000-05
3112	Hillsboro RC	ODOT	First Avenue Improvements	Oak Street to Baseline Street	Rechannelize NB and SB to provide protected left turn lanes and signal phasing at 1st/Oak and 1st/Baseline	\$ 165,000	2000-05
3113	Hillsboro RC	Hillsboro	10th Avenue Improvements	Main Street to Baseline Road	Add right turn lane and widen sidewalk	\$ 1,500,000	2000-05
3114	Hillsboro RC	Hillsboro	NE 28th Avenue Improvements	Grant Street to East Main Street	Widen to three lanes with sidewalks, bike lanes, street lighting and landscaping	\$ 2,500,000	2000-05
3123	Hillsboro RC	Tri-Met/Hillsboro	Hillsboro Regional Center TMA Startup	Hillsboro Regional Center	Implements a transportation management association program with employers	See RTP #8056 total	2000-05
3126	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	TV Highway to Baseline Road	Widen to five lanes including sidewalks and bike lanes	\$ 5,000,000	2006-10
3127	Hillsboro Corridor	ODOT/Hillsboro/WashCo	Hillsboro RC Pedestrian Improvements	18th, 21st, Oak, Maple and Walnut streets	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 1,500,000	2000-05
3128	Hillsboro RC	Washington Co.	Cornell Road Improvements	Arrington Road to Main Street	Widen to five lanes	\$ 6,000,000	2011-20
3130	Sunset IA	WashCo/Hillsboro	Evergreen Road Improvements	Glencoe Road to 15th Avenue	Widen to three lanes to include bikeways and sidewalks	\$ 12,800,000	2000-05
3131	Sunset IA	Hillsboro/Port	Evergreen Road Improvements	15th Avenue to 253rd Avenue	Widen to five lanes to include bikeways and sidewalks	\$ 8,900,000	2006-10
3132	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	US 26 to West Union Road	Widen to five lanes, including sidewalks and bike lanes	\$ 3,500,000	2000-05
3133	Sunset IA	Washington Co./ODOT	Cornelius Pass Road Interchange Improvement	US 26/Cornelius Pass Road	Construct full diamond interchange and southbound auxiliary lane to facilitate traffic flows on and off US 26	\$ 5,000,000	2000-05
3134	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	TV Highway to Baseline Road	Widen to three lanes including sidewalks, bike lanes and signals at Johnson and Francis	\$ 9,000,000	2000-05
3135	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	Baseline Road to Alcock Drive	Widen to five lanes including sidewalks and bike lanes	\$ 15,000,000	2000-05
3136	Sunset IA	Washington Co.	Brookwood/Parkway Avenue Improvements	Baseline Road to Airport Road	Widen to 3 lanes from Baseline to Cornell Road and to 5 lanes from Cornell Road to Airport Road	\$ 10,900,000	2000-05
3137	Sunset IA	Washington Co.	Brookwood Avenue Improvements	TV Highway to Baseline Road	Widen to three lanes including sidewalks and bike lanes	\$ 7,500,000	2000-05
3138	Sunset IA	Washington Co.	Murray LRT Overcrossing and Pedestrian Improvements	Terman Road to Millikan Way	Expand LRT bridge from 2 to 4 lanes and improve sidewalks, lighting crossings, bus shelters, benches and landscaped buffers on bridge approach	\$ 1,000,000	2000-05
3140	Sunset IA	Hillsboro	229th Avenue Extension	NW Wagon Way to West Union Road	New three-lane facility with sidewalks and bike lanes	\$ 2,300,000	2006-10
3141	Sunset IA	Washington Co.	170th/173rd Improvements	Baseline to Walker	Improve to 3 lanes	\$ 5,500,000	2006-10
3143	Sunset IA	Washington Co.	Walker Road Improvements	Cedar Hills to 158th Avenue	Widen to five lanes including sidewalks and bike lanes (three lanes in the financially constrained system)	\$ 20,000,000	2006-10
3144	Sunset IA	Washington Co.	Walker Road Improvements	158th Avenue to Amberglen Parkway	Widen to five lanes including sidewalks and bike lanes (three lanes in the financially constrained system)	\$ 10,000,000	2006-10
3147	Sunset IA	Hillsboro	25th Avenue Improvements	Cornell Road to Evergreen	Widen street to three lanes with bike lanes	\$ 2,000,000	2006-10
3148	Beaverton RC	Washington Co.	Walker Road Improvements	Highway 217 to Cedar Hills Boulevard	Widen to three lanes including sidewalks and bike lanes (only Lynnfield to Cedar Hills in financially constrained)	\$ 8,000,000	2006-10
3150	Sunset IA	Washington Co.	Cornell Road System Management	185th Avenue to 25th Avenue	Implement signal timing at Tannasboume/185th to 25th Avenue	\$ 300,000	2000-05
3152	Sunset IA	Tri-Met	Westside TMA	Western Washington County	Implements a transportation management association program with employers	\$ 80,000	2000-05
3154	Forest Grove TC	Washington Co.	Forest Grove Northern Arterial	Quince to Highway 47	New 2-lane facility with sidewalks and bike lanes	\$ 2,000,000	2000-05
3157	Forest Grove TC	Washington Co.	Sunset Drive Improvements	University Avenue to Beal Road	Widen to three lanes including bike lanes, signals and sidewalks	\$ 4,500,000	2000-05
3158	Forest Grove TC	Washington Co.	Martin Road/Cornelius-Schefflin Road Improvements	Forest Grove northern UGB to Roy Road	Realign with widened paved shoulders Martin Road and Cornelius Schefflin Road	\$ 12,300,000	2000-05
3160	Forest Grove TC	Forest Grove	Verboort Road Intersection Improvement	at Highway 47	Intersection safety improvement	\$ 200,000	2006-10
3162	Forest Grove TC	ODOT	TV Highway (Pacific/19th) Bikeway	Hawthorne to "E" Street	Retrofit to include bike lanes	\$ 100,000	2000-05
3163	Forest Grove TC	ODOT/Forest Grove	Forest Grove TC Pedestrian Improvements	TV Highway, Pacific, 19th, College, Sunset, "B" and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 2,132,670	2000-05
3166	Cornelius	Cornelius/ODOT	Highway 8 Intersection Improvement - 10th	Intersection of 10th Avenue and Highway 8 couplet	Widen OR 8/10th Avenue intersection to support freight access	\$ 720,000	2006-10
3167	Cornelius	Cornelius/ODOT	Highway 8 Intersection Improvement - 19th/20th Avenue	Intersection of 19th/20th Avenue and Highway 8 couplet	Install traffic signals on OR 8 at 19th Avenue/20th Avenue; reconfigure intersection	\$ 2,000,000	2000-05
3168	Cornelius	Cornelius/ODOT	Baseline Street/Adair Street Couplet Intersection Improvements	Intersection of 14th Avenue and couplet	Intersection improvement with signal	\$ 350,000	2006-10
3169	Cornelius	Cornelius/ODOT	Main Street Couplet Improvements	Avenue	Complete boulevard design improvements	\$ 6,000,000	2000-05

2000 RTP
Financially Constrained System Projects-
August 10, 2000

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1998 dollars (*** indicates phasing in financially constrained system)	RTP Program Years
3170	Cornelius	Cornelius/ODOT	West Couplet Enhancement	1st Avenue to 10th Avenue	Complete boulevard design improvements	\$ 3,000,000	2006-10
3171	Cornelius	Cornelius/Wash Co.	Highway 8/4th Avenue Intersection Improvements	Intersection of 4th Avenue and Couplet	Intersection improvement with signal	\$ 950,000	2006-10
3175	Sunset TC	Washington Co.	Barnes Road Improvements	Highway 217 to 119th Avenue	Widen to five lanes with bike lanes and sidewalks	\$ 6,200,000	2006-10
3178	Sunset TC	Washington Co.	Westhaven Road Pathways	Morrison to Springcrest	Constructs off-road pathway to improve bicycle and pedestrian access to Sunset transit center	\$ 500,000	2006-10
3183	Cedar Mill TC	Washington Co.	Cornell Road Improvements	143rd Avenue to Saltzman	Widen to three lanes with bikeways and sidewalks	\$ 4,600,000	2000-05
3185	Cedar Mill TC	Washington Co.	Barnes Road Improvement	Saltzman Road to 119th Avenue	Widen to five lanes with intersection improvement at Saltzman	\$ 5,300,000	2000-05
3186	Cedar Mill TC	Washington Co.	Murray Boulevard Improvements - Cedar Mill	Science Park Drive to Cornell	Widen Murray Boulevard to five lanes	\$ 3,100,000	2000-05
3182	Cedar Mill TC	Washington Co.	Cedar Mill Town Center Local Connectivity, Phase 1	Various locations in the town center	Construct additional local road connections to improve traffic circulations	\$ 1,000,000	2000-05
3193	Cedar Mill TC	Washington Co.	Cornell Road Boulevard Treatment	Trail Avenue to Saltzman	Add bike lanes, sidewalks, median, landscaping	\$ 2,000,000	2000-05
3194	Cedar Mill TC	Washington Co.	Cedar Mill Multi-Use Path	North of Cornell Road from 113th Avenue to 119th Avenue	Construct multi-use path along north side of Cornell Road	\$ 1,000,000	2000-05
3195	Cedar Mill TC	Washington Co.	Saltzman Pedestrian Improvements	Marshall Road to Dogwood Road	Construct sidewalks on west side of road	\$ 485,000	2000-05
3197	Bethany TC	Washington Co.	Bethany Boulevard Improvements, Phase 1	Bronson Road to West Union Road	Widen to three lanes with bike lanes and sidewalks	\$ 5,000,000	2000-05
3204	Tanasbourne TC	Washington Co.	Cornell Road Improvements - East Tanasbourne	179th Avenue to Bethany Boulevard	Widen to five lanes with sidewalks and bike lanes	\$ 4,000,000	2006-10
3206	Tanasbourne TC	Washington Co.	Tanasbourne TC Pedestrian Improvements	Cornell, Evergreen Pkwy and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 200,000	2011-20
3216	Farmington TC	Washington Co.	185th Avenue Improvements	TV Highway to Bany Road	Widen to three lanes	\$ 8,000,000	2006-10
3217	Farmington TC	Washington Co.	Farmington Road Improvements	185th Avenue to 209th Avenue	Widen to three lanes	\$ 5,000,000	2006-10
3218	Farmington TC	Washington Co.	Cornelius Pass Road Extension	South of TV Highway to Kinnamon Road	Realign intersection @ TV Highway and construct new two-lane road south of TV Highway to Kinnamon Road	\$ 1,700,000	2011-20
4000	Region	Tri-Met	O1PDX -Airport Light Rail	Gateway to Portland International Airport	Construct LRT	\$ 154,000,000	2000-05
4004	Region	ODOT	I-5 Reconstruction and Widening	Greeley Street to I-84	Modernize freeway and ramps to improve access to the Lloyd District and Rose Quarter	\$ 92,000,000	2000-05
4005	Region	ODOT	I-5 North Improvements	Lombard Street to Expo Center	Widen to six lanes	\$ 25,000,000	2000-05
4011	Columbia Corridor	Portland	NE Marine Drive Bikeway	I-5 to 122nd Avenue	Retrofit bike lanes to existing street; off-street paths in missing locations	\$ 450,000	2000-05
4012	Columbia Corridor	Portland	N/NE Lombard/Killingsworth ITS	Six signals: at junction, MLK, Interstate, Greeley, Portsmouth and Philadelphia/Vanhook	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 210,000	2006-10
4017	PDX IA	Port	SW Quad Access	33rd Avenue	Provide street access from 33rd Avenue into SW Quad	\$ 1,500,000	2011-20
4019	PDX IA	Port	Lightrail station/Track realignment	Portland International Center	Construction of light rail station	\$ 14,000,000	2000-05
4020	PDX IA	Port	Airport Way Improvements, East	82nd Avenue to I-205	Widen to three lanes in both directions	\$ 8,000,000	2000-05
4021	PDX IA	Port	Airport Way Improvements, West	82nd Avenue to PDX terminal	Widen to three lanes in both directions	\$ 10,000,000	2006-10
4022	PDX IA	Portland/Port	East End Connector	Columbia/US 30 Bypass: NE 82nd Avenue to I-205	Provide free-flow connection from Columbia Boulevard/82nd Avenue to US 30 Bypass/I-205	\$ 29,000,000	2000-05
4023	PDX IA	Port	Marx Drive Extension	Marx Drive to 82nd Avenue	Extend Marx to 82nd Avenue	\$ 315,000	2006-10
4024	PDX IA	Port	Alderwood Road Extension	Alderwood Road to Clark Road	Three lane extension	\$ 8,600,000	2000-05
4025	PDX IA	Port	Cascades Parkway	International Parkway to Cascades	New east/west three lane connection between International Parkway and PIC	\$ 14,500,000	2000-05
4027	PDX IA	Port/Portland	Airport Way/Cascades grade separation	Cascades Avenue	Construct overcrossing at Airport Way/Cascades Avenue; widen Airport Way to 4 lanes from new overcrossing to I-205	\$ 10,500,000	2000-05
4028	PDX IA	Port	Airport Way/82nd grade separation	82nd Avenue/Airport Way	Construct grade separated overcrossing	\$ 11,000,000	2011-20
4030	PDX IA	Portland	NE 11-13th Avenue Connector	NE 11/13th Avenue at Columbia Boulevard	New three-lane roadway and bridge	\$ 8,075,000	2000-05
4031	PDX IA	Port	Airport Way return and Exit Roadways	Airport Way	Relocate Airport Way exit roadway and construct new return roadway	\$ 14,000,000	2011-20
4032	PDX IA	Port	Airport Way terminal entrance roadway relocation	PDX terminal	Relocate and widen Airport Way northerly at terminal entrance to maintain access and circulation	\$ 4,000,000	2000-05
4033	PDX IA	Port	Airport Way east terminal access roadway	PDX east terminal	Construct Airport Way east terminal access roadway	\$ 8,000,000	2011-20
4037	PDX IA	Portland	Columbia and Lombard Intersection Improvements	Columbia Boulevard and Lombard Street at MLK	Improve left turn/right turn capacity at MLK/Columbia and MLK/Lombard	\$ 700,000	2000-05
4038	PDX IA	Port	82nd Avenue/Alderwood Road Improvement	82nd Avenue/Alderwood Road intersection	Construct right turn lane on SB 82nd Avenue; modify traffic signal and construct second right turn lane on Alderwood WB	\$ 195,000	2000-05
4039	PDX IA	Port	NE 92nd Avenue	NE 92nd/Columbia Boulevard/Alderwood	Improvement to be defined	\$ 1,500,000	2011-20
4040	PDX IA	Portland	47th Avenue Intersection and Roadway Improvements	Columbia Boulevard to Comfoot Road	Widen and channelize NE 47th Avenue/Comfoot Road intersection and NE Columbia Boulevard to facilitate truck turning movements; add sidewalks and bike facilities	\$ 3,132,162	2000-05
4041	PDX IA	Portland	Columbia Boulevard/Alderwood Improvements	at Alderwood Road intersection	Widen and signalize intersection	\$ 350,000	2000-05
4042	PDX IA	Port	Comfoot Road Intersection Improvement	Alderwood/Comfoot intersection	Add signal, improve turn lanes at intersection	\$ 350,000	2000-05
4043	PDX IA	Portland	33rd/Marine Drive Intersection Improvement	NE 33rd and Marine Drive	Signalize 33rd/Marine Drive intersection for freight movement	\$ 250,000	2006-10
4046	PDX IA	Portland	NE Alderwood Bikeway	NE Columbia Boulevard to Alderwood Trail	Retrofit bike lanes to existing street	\$ 400,000	2006-10
4047	PDX IA	Portland	NE 33rd Avenue Bikeway	Columbia Slough to NE Lombard	Retrofit bike lanes to existing street	\$ 7,000	2011-20
4047	PDX IA	Portland	NE 82nd Avenue Bikeway	Columbia Boulevard to Airport Way	Retrofit bike lanes to existing street		
4049	PDX IA	Portland	N/NE Columbia Boulevard Bikeway	N Lombard to MLK Boulevard	Retrofit bike lanes to existing street	\$ 10,000	2000-05
4050	PDX IA	Portland	NE Comfoot Bikeway	NE Alderwood to NE 47th Avenue	Retrofit bike lanes to existing street	\$ 95,000	2006-10
4051	PDX IA	Portland	N Columbia Pedestrian Improvements, Phase I and Phase II	Swift to Portland Road; Argyle Way to Albina	Construct sidewalk and crossing improvements	\$ 1,392,000	2011-20
4054	PDX IA	Portland	Columbia Boulevard ITS	Six signals between N Burgard and I-205	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 2,600,000	2000-05
4056						\$ 310,000	2006-10

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RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1998 dollars (*** indicates phasing in financially constrained system)	RTP Program Years
4057	PDX IA	Portland	N/NE Marine Drive ITS	Three signals between N. Portland Road and NE 185th Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 750,000	2000-05
4058	PDX IA	Portland	NE Airport Way ITS	Three signals between I-205 and NE 158th Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	\$ 3,000,000	2000-05
4059	PDX IA	Port	82nd Avenue Pedestrian Access Improvements	Airport Way to Alderwood Road	Provide pedestrian improvements	\$ 500,000	2000-05
4061	Rivergate IA	Port/Portland	West Hayden Island Bridge and Access Road	Marine Drive to West Hayden Island	New four-lane connection from Rivergate to W. Hayden Island terminals	\$ 40,800,000	2006-10
4062	Rivergate IA	Port	Marine Drive Improvement, Phase 1	Rivergate West and T-6 Intersection	Widen to five lanes from T-6 intersection to 2.5 miles east	\$ 15,700,000	2000-05
4063	Rivergate IA	ODOT/Portland	N. Lombard Improvements	Lombard Street from Rivergate Boulevard (Purdy) to south of Columbia Slough bridge	Improve access and mobility of freight to Rivergate intermodal facilities and industrial areas	\$ 3,610,000	2000-05
4065	Rivergate IA	Port/Portland	South Rivergate Entry Overpass	South Rivergate	Construct overpass from Columbia/Lombard intersection to South Rivergate	\$ 21,172,000	2000-05
4067	Rivergate IA	Port	Columbia River Channel Deepening - Regional Share	Deepen Columbia River Channel from Astoria to Portland	State-wide issue, project is outside Metro region	statewide project	2011-20
4068	Rivergate IA	Port/RR	Rivergate Rail expansion	Includes 4 separate improvements in Rivergate	Expand rail capacity in and to the Rivergate area	\$ 12,500,000	2000-05
4069	Rivergate IA	Port/RR	Hayden Island rail access	Rivergate to Hayden Island	Rail access to Hayden Island development	\$ 2,800,000	2006-10
4070	Rivergate IA	Port/RR	Additional tracks - Kenton Line	TBD	Construct three additional tracks for staging unit trains	\$ 9,000,000	2006-10
4071	Rivergate IA	Port/RR	Barnes Yard Expansion	Bonneville Yard to Barnes Yard	Construct additional unit train trackage between Bonneville and Barnes Yard for storage	\$ 4,500,000	2006-10
4073	Rivergate IA	Portland/Metro	Kelley Point Park Access Trail/40 Mile Loop Trail	Vicinity of Kelley Point Park	Construct multi-use path	\$ 115,000	2000-05
4074	Rivergate IA	Port	Rivergate Bicycle and Pedestrian Trail	North side of Columbia Slough	Construct multi-use path connecting to 40-mile loop trail	\$ 300,000	2000-05
4077	Rivergate IA	Port/RR	Penn Junction Realignment	UP/BNSF Main line	Realign track configuration and signaling	\$ 3,500,000	2006-10
4078	Rivergate IA	Port/RR	WHI Rail Yard	West Hayden Island	Construct 7 track rail yard	\$ 9,000,000	2006-10
4079	Rivergate IA	Port/RR	Additional tracks - North Rivergate	Rivergate	Additional mainline track between BN Ford facility and B Yard	\$ 500,000	2011-20
4080	Swan Island	Tri-Met/Portland	Swan Island TMA	Swan Island industrial area	Implements a transportation management association program with employers	\$ 142,500	2000-05
4081	Columbia Corridor	Tri-Met/Portland	Columbia Corridor TMA	Columbia Corridor industrial area	Implements a transportation management association program with employers	\$ 142,500	2000-05
5001	Region	Tri-Met	Transit center and park-and-ride upgrades	Various locations in subarea	Construct, expand and/or upgrade transit stations and park-and-rides throughout subarea	See Tri-Met Total	2000-20
5003	Region	ODOT	Sunrise Highway	I-205 to Rock Creek	Construct new 4-lane facility and construct interchanges at 122nd, 135th and Rock Creek junction, and modify I-205 interchange	\$ 180,000,000	2000-05
5007	Region	ODOT	Highway 212	Rock Creek to Damascus	Construct climbing lanes to 172nd Avenue	\$ 1,300,000	2000-05
5016	Region	ODOT	Highway 213 Grade Separation	Washington Street at Highway 213	Grade separate southbound Highway 213 at Washington Street and add a northbound lane to Highway 213 from just south of Washington Street to the I-205 on-ramp	\$ 9,000,000	2006-10
5017	Region	ODOT	Highway 213 Intersection Improvements	Abemethy at Highway 213	Intersection improvements	\$ 3,000,000	2006-10
5018	Region	ODOT	Highway 213 Intersection Improvements	Beavercreek/Highway 213	Intersection improvements	\$ 6,000,000	2000-05
5022	Region	ODOT	Highway 213 Widening	I-205 to Redland Road	Add southbound lane	\$ 750,000	2000-05
5023	Region	ODOT	I-205/Highway 213 Interchange Improvement	I-205 at Highway 213	Reconstruct I-205 southbound off-ramp to Highway 213 to provide more storage and enhance freeway operations and safety	\$ 1,000,000	2000-05
5026	Region	Metro	Portland Traction Co. Multi-Use Trail	Milwaukie to Gladstone	Planning, PE and construction of multi-use trail	\$ 1,200,000	2000-05
5027	Region	Metro/ODOT	I-205 South Corridor Study	I-5 to I-84	Develop traffic management plan	n/a	2000-05
5033	Region	Various	Willamette River Greenway Study	Seilwood Bridge to Lake Oswego	Study feasibility of corridor	n/a	2000-05
5035	Milwaukie TC	Tri-Met	McLoughlin Boulevard Rapid Bus	Milwaukie TC to Oregon City TC	Construct improvements that enhance Rapid Bus service	see Tri-Met total	2000-05
5037	Milwaukie TC	Milwaukie/ClackCo Milwaukie/Portland	Lake Road Improvements	Oatfield Road to Highway 224	Reconstruct street to narrow travel lanes and bike lanes and add sidewalks, landscaped median, curbs, storm drainage and left turn refuges at some intersections	\$ 1,890,637	2000-05
5038	Milwaukie TC	Milwaukie	Johnson Creek Boulevard Phase 2 Improvements	SE 32nd Avenue to SE 45th Avenue	Reconstruct, add bike lanes and sidewalks	\$ 1,200,000	2000-05
5040	Milwaukie TC	Milwaukie	Railroad Avenue Bike/Ped Improvement	37th Avenue to Linwood Road	Retrofit bike lanes and sidewalks	\$ 1,075,000	2006-10
5045	Milwaukie TC	Milwaukie	Linwood/Harmony/Lake Road Improvements	Linwood/Harmony/Lake Road intersection	Add NB right turn lane, add EB right turn lane, add WB left turn lane and grade separate UPRR	\$ 7,000,000	2000-05
5046	Milwaukie TC	Milwaukie	Railroad Crossing Improvements	Harrison Street, 37th Avenue and Oak Streets	Improve railroad crossings for all modes	\$ 75,000	2011-20
5049	Milwaukie TC	ODOT	McLoughlin Boulevard Improvements - Milwaukie	Highway 224 to River Road	Complete boulevard design improvements	\$ 2,000,000	2000-05
5050	Milwaukie TC	Milwaukie	Harrison Street Bikeway	Highway 99E to King Road via 42nd Avenue	Retrofit bike lanes to existing street	\$ 485,098	2000-05
5051	Milwaukie TC	Milwaukie	Lake Road Bikeway	SE 21st to Oatfield Road	Construct bike lanes	\$ 840,000	2000-05
5059	Milwaukie TC	Milwaukie	King Road Boulevard Improvements	42nd Avenue to Linwood Avenue	Boulevard design, including wider sidewalks, bikeway, median treatment and access management	\$ 1,100,000	2006-2010
5062	Milwaukie TC	Tri-Met/Milwaukie	Milwaukie TMA Startup	Milwaukie town center area	Implements a transportation management association program with employers	see RTP# 8056 cost	2011-20
5064	Clackamas RC	Tri-Met	I-205 Frequent Bus	Clackamas RC to Oregon City via I-205	Construct improvements that enhance Frequent Bus service	see Tri-Met total	2000-05
5065	Clackamas RC	Tri-Met/ClackCo	Clackamas Regional Center TMA Startup	Clackamas Regional Center	Implements a transportation management association program with employers	\$ 174,500	2000-05
5066	Clackamas RC	Clackamas Co	East Sunnyside Road Improvements	122nd Avenue to 172nd Avenue	Widen to five lanes to improve safety and accessibility to Damascus	\$ 39,000,000	2006-10
5067	Clackamas RC	Clackamas Co	Johnson Creek Boulevard Interchange Improvements	Johnson Creek Boulevard at I-205	Add loop ramp and NB on-ramp, realign SB off-ramp	\$ 3,400,000	2011-20
5069	Clackamas RC	Clackamas Co	Harmony Road Improvements	Sunnyside Road to Highway 224	Widen to five lanes to improve safety and accessibility	\$ 6,400,000	2006-10
5071	Clackamas RC	Clackamas Co	William City Road Extension	I-205 frontage road to Valley View Terrace	Extend William City Road as two-lane collector to improve east-west connectivity	\$ 4,600,000	2011-20
5072	Clackamas RC	Clackamas Co	West Monterey Extension	82nd Avenue to Price Fuller Road	Two-lane extension to improve east-west connectivity	\$ 1,530,000	2006-10

2000 RTP
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RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1994 dollars (* indicates phasing in financially constrained system)	RTP Program Years
5073	Clackamas RC	Clackamas Co.	Monterey Improvements	82nd to new overcrossing of I-205	Widen to five lanes from 82nd to I-205	\$ 4,500,000	2000-05
5074	Clackamas RC	Clackamas Co.	Causey Avenue Extension	Causey - over I-205 to new east frontage road	Extend new three-lane crossing over I-205 to improve east-west connectivity	\$ 5,450,000	2011-20
5077	Clackamas RC	Clackamas Co.	Summers Lane Extension	122nd Avenue to 142nd Avenue	New three-lane extension to provide alternative a/w route to	\$ 7,250,000	2011-20
5080	Clackamas RC	Clackamas Co.	Fuller Road Improvements	Harmony Road to Monroe Street	Widen to three lanes with sidewalks and bike lanes; includes disconnecting auto access to King Road	\$ 4,117,000	2011-20
5081	Clackamas RC	Clackamas Co.	Boyer Drive Extension	82nd Avenue to Fuller Road	New two-lane extension	\$ 1,700,000	2011-20
5082	Clackamas RC	Clackamas Co.	82nd Avenue Multi-Modal Improvements	Cleisop Road to Monterey Avenue	Widen to add sidewalks, lighting, crossings, bike lanes and traffic signals	\$ 10,000,000	2006-10
5085	Clackamas RC	Clackamas Co.	Clackamas RC Bike/Pedestrian Corridors	Clackamas RC existing and new developments	Provide bike and pedestrian connections in the RC	\$ 5,000,000	2011-20
5086	Clackamas RC	Clackamas Co.	82nd Avenue Boulevard Design Improvements	Monterey Avenue to Sunnybrook Street	Complete boulevard design improvements	\$ 4,000,000	2000-05
5089	Clackamas RC	Clackamas Co.	Sunnyside Road Bikeway	SE 82nd Avenue to I-205	Restripe to include bike lanes	\$ 200,000	2006-10
5090	Clackamas RC	Clackamas Co.	Lawnfield Road Bikeway	SE 82nd Dr. to SE 97th Avenue	Widen to include bike lanes	\$ 100,000	2011-20
5091	Clackamas RC	Clackamas Co.	Causey Avenue Bikeway	I-205 path to SE Fuller	Restripe to include bike lanes	\$ 20,000	2006-10
5092	Clackamas RC	Clackamas Co.	SE 90th Avenue Bikeway	SE Causey to SE Monterey	Construct bike lanes	\$ 80,000	2011-20
5093	Clackamas RC	Clackamas Co.	SE 97th Avenue Bikeway	SE Lawnfield to SE Mather	Construct bike lanes	\$ 20,000	2011-20
5094	Clackamas RC	Clackamas Co.	CRC Trail	Clackamas Regional Park to Phillips Creek	N Clackamas multi-use path	\$ 310,000	2006-10
5100	Clackamas RC	Clackamas Co.	Fuller Road Pedestrian Improvements	Harmony Road to King Road	Improve sidewalks	\$ 550,000	2000-05
5101	Clackamas RC	Clack. Co./ODOT	Clackamas RC Pedestrian Improvements	82nd Avenue, Sunnyside, Sunnybrook, Monterey and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 1,500,000	2011-20
5103	Clackamas RC	Clackamas Co.	Clackamas County ITS Plan	County-wide	Advanced transportation system management and intelligent transportation system program	\$ 5,640,000	2000-05
5106	Clackamas IA	Clackamas Co.	SE 82nd Drive Improvements	Highway 212 to Lawnfield Road	Widen to five lanes to accommodate truck movement	\$ 6,000,000	2011-20
5108	Clackamas IA	Clackamas Co.	Jennifer Street/135th Avenue Extension	130th Avenue to Highway 212	Two-lane extension to 135th Avenue and widen 135th Avenue	\$ 1,500,000	2000-05
5109	Clackamas IA	Clackamas Co.	82nd Drive Bicycle Improvements	SE Jennifer Street to Fred Meyer	Widen to include bike lanes	\$ 120,000	2006-10
5110	Clackamas IA	Clackamas Co.	Jennifer Street Bicycle Improvements	SE 106th to 120th Avenue	Widen to include bike lanes	\$ 250,000	2000-05
5117	Clackamas Corridor	Clackamas Co.	Linwood Road Bike Lanes	SE Monroe Street to SE Johnson Creek Boulevard	Widen to include bike lanes	\$ 280,000	2000-05
5128	Oregon City RC	Tri-Met	Oregon City Rapid Bus	Tigard to Tualatin P&R to Oregon City TC	Construct improvements that enhance Rapid Bus service	see Tri-Met total	2006-10
5129	Oregon City RC	Tri-Met	90VMO-C-Rapid bus	Vancouver Mall to Oregon City via I-205	Construct improvements that enhance Rapid Bus service	see Tri-Met total	2011-20
5130	Oregon City RC	ODOT	99E/2nd Avenue Realignment	99E at South 2nd Avenue	Realignment and signalization of intersection	\$ 900,000	2000-05
5132	Oregon City RC	Oregon City	Main Street Extension	Highway 99E to Main Street	Widen to include bike lanes	\$ 46,300	2011-20
5133	Oregon City RC	Oregon City	Washington/Abemethy Connection	Abemethy Road to Washington Street	Construct new two lane minor arterial with sidewalks and bike lanes	\$ 2,033,000	2006-10
5135	Oregon City RC	ODOT/ClackCo	McLoughlin Boulevard Improvements - Oregon City	River Road south of Milwaukee to SP Tunnel	Complete boulevard design improvements	\$ 6,500,000	2006-10
5136	OC Corridor	Clackamas Co.	7th Street Improvements	High Street to Division Street	Complete boulevard design improvements	\$ 3,300,000	2011-20
5137	Oregon City RC	Oregon City	Washington Street Improvements	Abemethy to 5th Street	Complete boulevard design improvements	\$ 885,000	2006-10
5138	Oregon City RC	Oregon City	Washington Street Improvements	Abemethy to Highway 213	Complete boulevard design improvements	\$ 1,320,000	2011-20
5143	Oregon City RC	Oregon City/ODOT/Tri-Met	Oregon City RC Pedestrian Improvements	McLoughlin, Main, Washington, 7th, 5th and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 1,000,000	2011-20
5144	Oregon City RC	Oregon City/ODOT	Oregon City RC River Access Improvements	McLoughlin Boulevard	Improve pedestrian access to the Willamette River from downtown Oregon City	\$ 750,000	2011-20
5149	Oregon City RC	Oregon City	Oregon City Bridge Study	7th Street in Oregon City	Evaluate long-term capacity of Oregon City bridge	n/a	2011-20
5150	Oregon City RC	Tri-Met/Oregon City	Oregon City TMA Startup Program	Oregon City Regional Center	Implements a transportation management association program with employers	see RTP# 8056 cost	2011-20
5154	OC Corridor	Clackamas Co.	Beavercreek Road Improvements Phase 3	Clackamas Community College to Henrici Road	Widen to 4 lanes with sidewalks and bike lanes	\$ 2,000,000	2006-10
5156	OC Corridor	Clackamas Co.	Beavercreek Road Improvements, Phase 1	Highway 213 to Molalla Avenue	Boulevard design, widen to five lanes, improve access management to provide sidewalks and bike lanes to connect multi-family and commercial/employment areas	\$ 3,500,000	2006-10
5157	OC Corridor	Oregon City	Molalla Avenue Bikeway	7th Street to Highway 213 (9 segments)	Stripe and sign for bike lanes	\$ 69,300	2006-10
5161	Lake Oswego TC	Tri-Met	Macadam Frequent Bus	Lake Oswego to PCBD	Construct improvements that enhance Frequent Bus service	see Tri-Met total	2000-05
5163	Lake Oswego TC	Lake Oswego	"A" Avenue Reconstruction	State Street to 3rd Avenue	Improve failing road system; rebuild sidewalks	\$ 3,000,000	2006-10
5165	Lake Oswego TC	Lake Oswego	Willamette Greenway Path	Roehr Park to George Rogers Park	Multi-use path	\$ 110,000	2006-10
5169	Lake Oswego TC	Lake Oswego	Trolley Trestle Repairs	Lake Oswego to Portland	Repair trestles along rail line	\$ 1,000,000	2000-05
5172	Lake Oswego TC	TBD	Lake Oswego Trolley Study	Study phasing of future trolley commuter service between Lake Oswego and Portland	Study phasing of future trolley commuter service between Lake Oswego and Portland	n/a	2000-05
5185	West Linn TC	ODOT	Highway 43 Improvements	West A Street to existing Oregon City bridge (Willamette River)	Complete boulevard design improvements	\$ 8,000,000	2000-05
5204	Stafford UR	Clackamas Co.	Stafford Road	Stafford Road/Rosemont intersection	Realign intersection, add signal and right turn lanes	\$ 750,000	2006-10
5209	Happy Valley TC	Clackamas Co.	122nd/129th Improvements	Sunnyside Road to King Road	Widen to three lanes, smooth curves	\$ 3,000,000	2011-20
5211	Happy Valley TC	Happy Valley	Scott Creek Lane Pedestrian Improvements	SE 129th Avenue to Mountain Gate Road	Construct pedestrian path and bridge crossing	\$ 90,000	2000-05
6000	Region	Metro/ODOT	Beaverton-Wilsonville Commuter Rail	Wilsonville to Beaverton	Peak-hour service only with 30-minute frequency	\$ 71,500,000	2000-05
6004	Region	ODOT	Tualatin-Sherwood Highway MIS	I-5 to 99W	Conduct major investment study and complete environmental design work for I-5 to 99W Connector	\$ 5,000,000	2000-05
6014	Washington Sq. RC	Tigard/WashCo	Greenburg Road Improvements	Washington Square Road to Shady Lane	Widen to 5 lanes with boulevard design; NB Highway 217 off-ramp improvement	\$ 2,500,000	2000-05
6015	Washington Sq. RC	Tigard/WashCo	Greenburg Road Improvements, North	Hall Boulevard to Washington Square Road	Widen to five lanes with bikeways and sidewalks	\$ 2,500,000	2000-05
6016	Washington Sq. RC	Tigard/WashCo	Greenburg Road Improvements, South	Shady Lane to North Dakota	Widen to five lanes with bikeways and sidewalks	\$ 2,000,000	2000-05
6018	Washington Sq. RC	Washington Co.	Scholls Ferry/Allen Intersection Improvement	Scholls Ferry Road/Allen Boulevard intersection	Realign intersection	\$ 2,000,000	2006-10
6019	Washington Sq. RC	Washington Co.	Oak Street Improvements	Hall Boulevard to 80th Avenue	Signal improvement, bikeway and sidewalks	\$ 600,000	2000-05
6020	Region	Various	Powerline Trail Corridor	Scholls Ferry Road to Lower Tualatin Greenway	Plan, design and construct multi-use path	n/a	2000-05

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RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1998 dollars (* indicates phasing in financially constrained system)	RTP Program Years
6025	Washington Sq. RC	Washington Co.	Scholls Ferry Road TSM Improvements	Highway 217 to 125th Avenue	Implement appropriate TSM strategies such as signal interconnects, signal re-timing and channelization to improve traffic flows	\$ 500,000	2000-05
6026	Washington Sq. RC	Tri-Met/WashCo	Washington Square Regional Center TMA Startup Program	Washington Square Regional Center	Implements a transportation management association program with employers	See RTP# 8056 cost	2000-05
6027	Tigard TC	ODOT	I-5/217 Interchange Phase 2	Highway 217 and I-5 at 121st Avenue	Complete interchange reconstruction	\$ 39,000,000	2006-10
6033	Tigard TC	Tigard	Walnut Street Improvements, Phase 1	Walnut Street	Install traffic signal at 121st Avenue	\$ 1,750,000	2000-05
6034	Tigard TC	Tigard	Walnut Street Improvements, Phase 3	Gaarde Street to 121st Avenue	Widen to three lanes with bikeways and sidewalks	\$ 5,715,460	2006-10
6040	Tigard TC	Tigard	72nd Avenue Improvements	99W to Hunziker Road	Widen to five lanes	\$ 3,000,000	2000-05
6041	Tigard TC	Tigard	72nd Avenue Improvements	Hunziker Road to Bonita Road	Widen to five lanes	\$ 5,000,000	2006-10
6042	Tigard TC	Tigard	72nd Avenue Improvements	Bonita Road to Durham Road	Widen to five lanes with bikeways and sidewalks	\$ 5,000,000	2006-10
6045	Tigard TC	Tigard	Dartmouth Street Improvements	72nd Avenue to 68th Avenue	Widen to four lanes with turn lanes	\$ 500,000	2006-10
6046	Tigard TC	Tigard	Walnut Street Improvements, Phase 2	Walnut Street at Gaarde Street	Intersection improvement	\$ 1,358,000	2000-05
6056	Tigard TC	ODOT	Highway 99W/Hall Boulevard Intersection Improvements	99W/Hall Boulevard	Add turn signals and modify signal	\$ 3,700,000	2006-10
6059	King City TC	Washington Co.	Beef Bend Improvements	King Arthur to 131st	Improve to three lanes with sidewalks	\$ 5,000,000	2000-05
6066	Tualatin TC	ODOT/Tualatin	I-5 Interchange Improvement - Nyberg Road	Nyberg Road/I-5 interchange	Widen Nyberg Road/I-5 interchange	\$ 4,000,000	2000-05
6070	Tualatin TC	ODOT/WashCo	Lower Boones Ferry	Boones to Bridgeport	Sidewalk, bikeway, interconnect signals	\$ 4,000,000	2000-05
6071	Tualatin TC	Washington Co.	Tualatin-Sherwood Road Improvements	99W to Teton Avenue	Widen to five lanes with bike lanes and sidewalks, intertie signals at Oregon and Clipse streets	\$ 25,000,000	2006-10
6072	Tualatin TC	Tualatin	Tualatin Road Improvements	115th Avenue to Boones Ferry Road	Widen to 3 lanes with bike lanes, sidewalks, RR crossings	\$ 8,500,000	2000-05
6073	Tualatin TC	Tualatin	124th Avenue Improvements	Tualatin Road to Tualatin-Sherwood Road	Construct new 3 lane arterial with bikeways and sidewalks	\$ 6,800,000	2006-10
6079	Tualatin TC	WashCo/Tualatin/ODOT	Tualatin TC Pedestrian Improvements	Nyberg, Boones Ferry, Tualatin, Tualatin-Sherwood, Sagert and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches	\$ 500,000	2000-05
6080	Tualatin TC	Tualatin/Durham	Tualatin River Pedestrian Bridge	Durham City Park to Tualatin Community Park	Construct cantilevered pedestrian/bike path on railroad trestle across Tualatin River to Tualatin town center	\$ 1,000,000	2000-05
6081	Tualatin TC	WashCo/Tualatin	Nyberg Road Pedestrian and Bike Improvements	65th Avenue to I-5	Complete sidewalks and bike facilities	\$ 1,000,000	2000-05
6083	Tualatin TC	Tri-Met /WashCo	Tualatin Town Center TMA Startup	Tualatin Town Center	Implements a transportation management association program with employers	\$ 90,000	2000-05
6090	Wilsonville TC	Wilsonville	Boeckman Road Extension	Boeckman Road to Grahams Ferry Road	Extend 3 lanes to connect to Grahams Ferry Road w/ sidewalks and bike lanes	\$ 13,065,000	2006-10
6091	Wilsonville TC	Wilsonville	Boeckman Road I-5 Overcrossing	Parkway Avenue to 100th Avenue	bike lanes	\$ 802,000	2006-10
6105	Wilsonville TC	Wilsonville	Town Center Loop Bike and Pedestrian	Parkway to Wilsonville Road	Retrofit street to add bike lanes and sidewalks	\$ 251,000	2006-10
6109	Sherwood TC	Washington Co.	Beef Bend/175th Avenue Realignment	Beef Bend at 175th Avenue	Realign intersection to eliminate offset of Been Bend road with 175th Avenue	\$ 800,000	2011-20
6111	Sherwood TC	Washington Co.	Beef Bend/Elsner Road Extension	Scholls Ferry Road to 99W	Complete street realignment from Scholls Ferry Road to 99W	\$ 24,000,000	2000-05
6113	Sherwood TC	Washington Co.	Oregon Street Improvements	Tualatin-Sherwood to Murdock	Widen to 3 lanes with a signal at Tualatin-Sherwood Road	\$ 5,500,000	2000-05
6121	Murray/Scholls TC	Beaverton/WashCo/Tigard	Murray Boulevard Extension	Scholls Ferry Road to Barrows Road at Walnut Street	Four lane extension with bikeways and sidewalks	\$ 7,120,000	2000-05
6122	Murray/Scholls TC	Beaverton	Davies Road Connection	Scholls Ferry Road to Barrows Road	Three lane connection with bikeways and sidewalks	\$ 1,500,000	2006-10
6125	LO Corridor	Lake Oswego	Bangy Road Improvements	Bonita Road to Kruse Way	Widen to four lanes with left turn lanes at major intersections	\$ 1,000,000	2006-10
6127	LO Corridor	Lake Oswego	Boones Ferry Road Improvements	Kruse Way to Washington Court	Widen to five lanes with sidewalks and bike lanes	\$ 2,657,000	2006-10
6128	LO Corridor	Clackamas Co.	Carmen Drive Intersection Improvements	Carmen Drive/Meadows Road intersection	Add traffic signal, turn lanes, realign intersection	\$ 1,065,000	2006-10
6129	LO Corridor	Clackamas Co.	Bangy Road Intersection Improvements	Bangy Road/Bonita Road intersection	Add traffic signal and turn lanes	\$ 325,000	2006-10
6130	LO Corridor	Clackamas Co.	Bangy Road Intersection Improvements	Bangy Road/Meadows Road intersection	Add traffic signal and turn lanes	\$ 325,000	2006-10
6131	LO Corridor	Lake Oswego	Willamette River Greenway	Roehr Park to Tryon Creek	Multi-use path	\$ 300,000	2006-10
6135	Lake Grove TC	Clackamas Co.	Boones Ferry Road Bike Lanes	Kruse Way to Multnomah County line	Construct bike lanes	\$ 550,000	2000-05
7000	Damascus TC	Clackamas Co.	172nd Avenue Improvements	Foster Road to Highway 212	Widen to five lanes	\$ 7,000,000	2011-20
7001	Damascus TC	Clackamas Co.	Sunnyside Road Improvements	172nd Avenue to Highway 212	Widen to five lanes in preferred/3 lanes in strategic and constrained	\$ 3,600,000	2006-10
7006	Pleasant Valley TC	Portland	SE Foster Improvements	SE 136th Avenue to Jenne Road	Widen to five lanes in preferred/3 lanes in strategic and constrained	\$ 8,300,000	2006-10
7007	Pleasant Valley TC	Portland	SE Jenne Road Improvements	SE Foster to Powell Boulevard	Widen to five lanes in preferred/3 lanes in strategic and constrained	\$ 5,100,000	2006-10
7008	Pleasant Valley TC	Clackamas Co.	147th Avenue Improvements	Sunnyside Road to 142nd Avenue	Realign 147th Avenue to 142nd Avenue	\$ 3,000,000	2006-10
7009	Pleasant Valley TC	Clackamas Co.	SE 145th/147th Bike Lanes	SE Clatsop to SE Monner	Widen to construct bike lanes	\$ 900,000	2006-10
7010	Pleasant Valley TC	Clackamas Co.	SE 162nd Avenue Bike Lanes	SE Monner to SE Sunnyside	Widen to construct bike lanes	\$ 340,000	2011-20
7011	Pleasant Valley TC	Clackamas Co.	SE Monner Bike Lanes	SE 147th to 162nd Avenue	Widen to construct bike lanes	\$ 340,000	2011-20
7019	Sunshine Valley RR	Clackamas Co.	242nd Avenue Improvements	Multnomah County line to Highway 212	Reconstruct and widen to three lanes	\$ 4,000,000	2011-20
8000	Region	Metro	Bicycle Travel Demand Forecasting Model	Region-wide	Develop regional bicycle travel demand forecasting model	\$ 100,000	2000-05
8001	Region	Metro	Bike Safety, Educ & Encouragement Pilot Project	Region-wide	Encourage bicyclist, pedestrian and motorist safety	\$ 100,000	2000-05
8002	Region	Metro	Expand "Bike Central" Program	Selected Regional Centers and Town Centers	Provide shower, locker and storage facilities for bike commuters	\$ 300,000	2006-10
8003	Region	Metro	LRT Station Area "Free Bike" Pilot Project	LRT Station Areas throughout the region	Administer free bike program in station areas	\$ 50,000	2011-20
8004	Region	Tri-Met Metro	LRT and Transit Station Bike Parking Regional TOD Projects	Selected LRT Station Areas and Transit centers	Administer and maintain bicycle lockers	\$ 50,000	2006-10
8005	Region	Tri-Met	Vehicle Purchases	1.5% per year expansion	Flexible funding program to leverage transit-oriented development	\$20,000,000	2000-20
8028	Region	Tri-Met	Bus Operating Facilities	Region-wide	Vehicle purchases to provide for expanded service	\$147,000,000	2000-20
8032	Region	Tri-Met/SMART	Bus Operating Facilities	Region-wide	Bus operating facilities	\$105,258,594	2000-20
8035	Region	Tri-Met/SMART	Frequent/Rapid Bus Improvements	Baseline Network	Transit stations, improved passenger amenities, bus priority and reliability improvements	\$ 69,316,200	2000-20
8038	Region	Tri-Met	Tri-Met Park and Ride Lots	Baseline Network	Park-and-ride facilities to serve bus and light rail stops and stations	\$ 5,006,900	2000-20
8042	Region	SMART	SMART Park and Ride Lots	SMART district	Park-and-ride facilities to serve bus and commuter rail station	\$ 3,400,000	2000-20

Financially Constrained System Projects-

August 10, 2000

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Est. Project Cost in 1994 dollars (* indicates phasing in financially constrained system)	RTP Program Years
8043	Region	Tri-Met/SMART	Bus Stop Improvements	Region-wide	Bus stop improvements region-wide	\$ 6,873,750	2000-20
8046	Region	Tri-Met/SMART	Bus Priority Treatments	Region-wide	Bus Priority Treatments	\$ 17,222,500	2000-20
8052	Region	Metro/Tri-Met	Tri-Met TDM Program	Financially Constrained	Regional employer outreach, transit marketing, vanpool and carpool, station cars and car sharing programs	\$ 14,700,000	2000-20
8053	Region	Metro/Tri-Met	Region 2040 Initiatives	Region-wide	Implementation of innovative transit solutions in locations with high regional significance	\$ 5,250,000	2000-05
8054	Region	Metro/DEQ	ECO Clearinghouse	Region-wide	Continue provision of ECO information clearinghouse services	\$ 1,050,000	2000-05
8055	Region	Metro/Tri-Met	Exploratory Transportation Management Associations	Region-wide	Exploratory phase for potential TMAs in downtown Portland, Rivergate, Troutdale and Lake Oswego	\$ 113,500	2000-05
8056	Region	Metro/Tri-Met	Future Transportation Management Associations Start-Up	Region-wide	Future implementation of TMA's with employers	\$ 3,028,000	2000-05

Appendix 2

2000 RTP Public Involvement

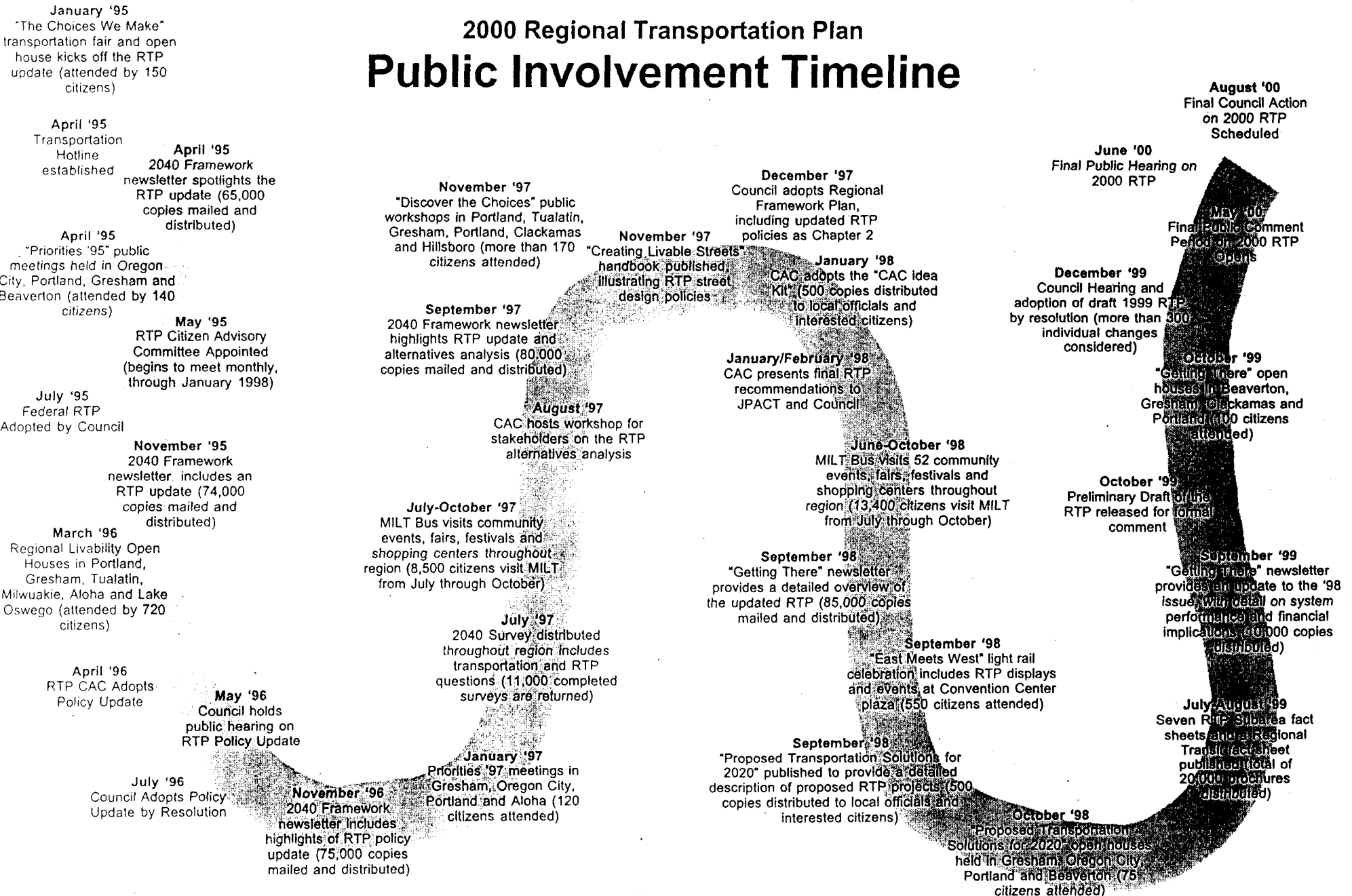


**2000 RTP
Air Quality
Conformity Analysis
October 6, 2000**



METRO

2000 Regional Transportation Plan Public Involvement Timeline



PUBLIC NOTICES

CLASS 8

Public Notices

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All ads are subject to the approval of The Oregonian, which reserves the right to edit, reject or properly classify any ad. Submission of an advertisement does not guarantee publication. Publication of an advertisement does not guarantee continued publication.

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Metro Public Notice

2000 Regional Transportation Plan Conformity Determination Metro has prepared a Draft Air Quality Conformity Determination as required by state and federal regulations. This document contains the assumptions and methods used by Metro to demonstrate that the transportation projects identified in the recently approved 2000 Regional Transportation Plan will help the region continue to meet federal air quality standards.

The document will be available for a 30-day public review period beginning October 4, 2000. Copies may be obtained upon request from Metro's Regional Transportation Planning Department, located at Metro Regional Center, 400 N.E. Grand Avenue, Portland, OR 97232. (phone 503-797-1900, option 2). Comments should be addressed to Marilyn Matheson at the above address.

The factors discussed in the Draft Conformity Determination are used to model regional automobile emissions to the year 2020. The estimated emissions must fall within "budgets" established in air quality maintenance plans approved for the Portland region by the Oregon Department of Environmental Quality and the Federal Environmental Protection Agency. The emissions estimates form the basis for public comment that concludes with a hearing before the Metro Council to consider approval of the Determination. The hearing is tentatively scheduled for November 16, 2000 at Metro Regional Center. Call Metro's transportation hotline, 503-797-1900, option 2, to confirm meeting date, time and location. The hearing impaired may call TDD 503-797-1804.

NOTICE OF PUBLIC HEARING STATE OF OREGON FIVE-YEAR CONSOLIDATED PLAN

The U.S. Department of Housing and Urban Development (HUD) requires that the State of Oregon, through the Oregon Housing and Community Services Department (OHCS), develop and submit a five-year Consolidated Plan (CP) by November 15, 2000. The CP discusses and analyzes housing and community development needs for the non-entitlement (or rural) portions of the State. The Plan also outlines the State's priorities and strategies for housing and community development. The CP is the document by which the State of Oregon receives federal funds through HUD. As a part of the CP development process, OHCS is making available a draft copy of the Plan and will hold Public Hearings to collect input on the five-year Plan.

A draft document is available at Official State Repositories, Community Action Agencies, and local congressional delegates' offices. The Plan is also available for downloading or review at the Department's Web Site <http://www.hcs.state.or.us>

Hearings will be held in accessible locations and auxiliary aids for persons with communication disabilities will be provided upon advance request. Please notify OHCS if such aids are required.

HEARING SCHEDULE
Tuesday, October 3, 2000
3:00-5:00 PM
Eugene Hilton, Studio A, Eugene, Oregon

Thursday, October 5, 2000
10:00-12:00 AM
Housing Authority of Umatilla County, Hermiston Community Center, Hermiston, Oregon

Thursday, October 5, 2000
4:00-5:00 PM
Central Oregon Housing Authority, 7445 SW Canal Blvd, Redmond Oregon

Monday, October 9, 2000
10:00-12:00 AM
Coos-Curry Housing Authority, 1700 Monroe, North Bend, Oregon

The Consolidated Plan is a legally binding document that outlines the State's priorities and strategies for housing and community development. It is a key document in the federal funding process. The Plan is available for public review and comment. For more information, contact the Oregon Housing and Community Services Department at 503-797-1900.

NOTICE OF SEIZURE AND INTENT TO FORFEIT

Notice is hereby given that 5,000 pieces "dream catches" were seized August 17, 2000, in Portland, Oregon for violation of 18 USC 1596c and 19 CFR 1304, case 2000-2904-00106-01. Any person who asserts a legal interest in the above merchandise and wishes to file a written claim thereto must appear at the office of the Area Port Director of Customs, Portland, OR within 30 days from the first publication of this notice, to-wit: September 24, 2000, and post bond in the sum of \$3,900.00. Otherwise, said property will become forfeited to the Government on October 14, 2000, and will be disposed of in accordance with the law.

LEWELLYN ROBISON
Area Port Director of Customs
Portland, Oregon

Oregon Department of Environmental Quality Proposed Approval of Remedial Action at Strub Property 7911 NE MLK Blvd Portland, Oregon

PUBLICATION: The Oregonian
PUBLISHING DATE: October 1, 2000
COMMENTS DUE: October 31, 2000
PROJECT LOCATION: 7911 NE Martin Luther King, Jr. Boulevard, Portland, Oregon

PROPOSAL: As required by ORS 465.320, the Department of Environmental Quality (DEQ) invites public comment on the proposed approval of a remedial action (i.e. deed restriction) at the Strub property in Portland, Oregon.

HIGHLIGHTS: Mr. Randy Strub directed the performance of an independent investigation of petroleum-contaminated soil at the referenced property, which has been a gas service station from the 1930s - 1970s. Petroleum-contaminated soils were discovered during this investigation. The contamination should not pose an environmental concern except at one location where concentrations exceed acceptable risk levels. This petroleum contamination may pose a risk if vapors migrate to air inside a building. Mr. Strub has agreed to a restriction that would prohibit construction of a building over the contaminated area. An independent investigation report is available for public review beginning October 1, 2000.

HOW TO COMMENT: To schedule an appointment at DEQ, contact Deborah Curtiss at 503-229-6361. The DEQ project number is 503-229-5011. Written comments should be sent to the project manager at DEQ, Northwest Region, 2020 SW 4th Avenue, Suite 400, Portland, OR 97201 by October 31, 2000. A public meeting will be held to receive verbal comments if requested by 10 or more people or by a group with membership of 10 or more.

THE NEXT STEP: DEQ will consider all public comments and the Regional Administrator will make a final decision after consideration of these public comments.

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Oregon Department of Environmental Quality Notice of Extension of Public Comment Period On Proposed Air Quality Rule Adoption on Air Quality Nuisance Control

The Department of Environmental Quality is proposing that the Environmental Quality Commission amend its rules regarding air quality nuisance controls. Public hearings have been held on these matters, but the public comment period is being extended to allow further on the rules. The public comment period is being extended until November 1, 2000, at 5:00 PM. A public workshop on the nuisance rule and other proposed changes to rules in Division 208 will be held on October 26, 2000 beginning at 1:30 PM at the Oregon State Office Building, Room 140, 800 NE Oregon, Portland. Some of these rules will be submitted, if adopted, to the U.S. EPA as a revision to the Oregon Clean Air Act State Implementation Plan (OAR 340-200-0040), as required by the Clean Air Act. Written comments may be submitted to DEQ, Air Quality Division, 811 SW 6th Avenue, Portland, Oregon 97204 or faxed to 503-229-5675 or e-mailed to downing.kevin@deq.state.or.us anytime before the close of the comment period. Copies of the complete proposed rule package may be obtained from the DEQ, Air Quality Division, 811 SW 6th Ave., Portland, Oregon, or by calling 503-229-6549.

PUBLIC NOTICE

In accordance with the oil pollution act of 1990 (33 USC 2714 (c)), the Tug Coal Creek and The Tug La Camas have been named as the owners of a discharge of less than 100 gallons of diesel fuel into the Multnomah Channel on or about 7 September, 2000. This spill impacted Portland, Oregon, and as owners of the Tugs, Ark Marine Service, Inc. is accepting claims for certain uncompensated damages and removal costs.

Removal costs and damages which may be compensated include: Removal costs; damage to natural resources; damage to or loss of real or personal property; loss of subsistence use of natural resources; loss of government revenues; loss of profits and earnings capacity; and increased cost of public services.

Claims should be in writing signed by the claimant. For specified amount, and should include all evidence to support the damages. Claims presented may include claims for interim short-term damages representing less than the full amount to which the claimant ultimately may be entitled. It should be noted that payment of such claim shall not preclude recovery for damages not reflected in the paid or settled partial claims. Claims should be mailed to the following address:

MARK MARINE SERVICE, INC.
PO Box 574
Washougal, WA 98671

Other parties may wish to file a claim with the Tug La Camas and Tug Coal Creek. For more information, call 1-800-274-MARK (6275) or 503-229-6549.

★
The National Pollution Fund Center for Environmental Justice

POLICE IMPOUNDED SEIZED VEHICLE AUCTION See ad in Classification #567

REQUEST FOR PROPOSAL

NOTICE IS HEREBY GIVEN that the Board of County Commissioners of Lewis County, Washington will receive sealed requests for qualifications and publicly open them at 10:30 a.m. on October 16, 2000, at the Lewis County Courthouse Annex Meeting Room One (1), 345 West Main Street, Chehalis, Washington, for furnishing to Lewis County the following:

PRE-DESIGN STUDY FOR FUTURE COUNTY JAIL FACILITY

Sealed requests for qualification must be delivered to the Lewis County Commissioner's Office (351 NW North Street, Chehalis, WA 98532) before 9:30 a.m. on the date specified for opening and in an envelope clearly marked "REQUEST FOR PROPOSAL".

QUALIFICATIONS FOR PRE-DESIGN STUDY FOR FUTURE COUNTY JAIL FACILITY - TO BE OPENED OCTOBER 16, 2000, at 10:30 A.M.

Project information packets may be obtained at www.co.lewis.wa.us, from Marlene Leonard at the office of General Administration Department, or by calling 360-740-1408.

The Board of County Commissioners reserves the right to reject any or all statements of qualifications, waive informalities, and to contract as the best interests of the County may appear. In making awards, consideration will be given to factors of prices quoted, delivery, quality of product, and suitability for County purposes.

DATED this 25th day of September, 2000.

KARISA DUFFEY
Clerk of the Board
of County Commissioners
Lewis County, Washington

STATE OF OREGON - Bike Auction!!! Saturday - Oct. 7th - 9 am. Info: 1-800-378-4714 ext 721 www.oregon surplus.com Markus & Markus Auctioneers

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Metro is governed by an executive officer, elected regionwide, and a seven-member council elected by districts. An auditor, also elected regionwide, reviews Metro's operations.

Executive Officer – Mike Burton; Auditor – Alexis Dow, CPA; Council: Presiding Officer – David Bragdon, District 7; Deputy Presiding Officer – Ed Washington, District 5; Rod Park, District 1; Bill Atherton, District 2; Jon Kvistad, District 3; Susan McLean, District 4; Rodroe, District 6.

Metro's web site:
www.metro-region.org

2000 Regional Transportation Plan (RTP) moving toward completion

Metro's 2000 RTP Gets Adopted

On August 10, 2000 the Metro Council unanimously adopted a new 20-year transportation plan for the Portland metropolitan region. This plan is a "living" document, subject to continual review, and is updated periodically to reflect changing conditions and new planning priorities. The new plan represents a nearly 20-year evolution from a mostly road-oriented plan to a more balanced multi-modal plan that is closely tied to land use and the 2040 Growth Concept.

Development of this plan occurred during the past five years and was guided by input from a 21-member citizen advisory committee, from local officials and staff of the region's cities and counties, and from residents, community groups and businesses throughout the region. Of the more than 700 projects proposed, more than half are new to the plan, and many were generated from citizen input.

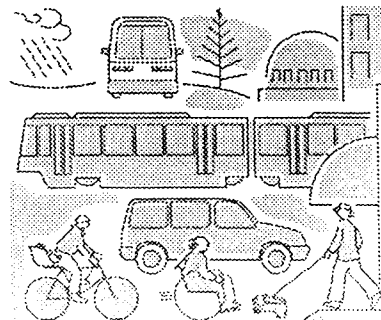
The plan lays out the priority projects for roads and freight movement as well as alternative transportation options such as bicycling, transit and walking and a funding strategy to guide implementation of the plan. The plan is based on forecasts of growth in population, households and employment as well as future travel patterns and analysis of travel conditions. It also considers estimates of federal, state and local funding which will be available for transportation improvements.

2000 RTP Compliance with Air Quality Conformity

Metro must demonstrate that the 2000 Regional Transportation Plan (RTP) meets federal and state air quality planning requirements. The federal Clean Air Act provides the main framework for national, state, regional and local efforts to protect air quality.

During September 2000, Metro will complete a technical analysis that is known as "air quality conformity." The analysis looks at vehicle miles traveled (VMT), travel speeds and vehicle trips and their corresponding vehicle emissions as a result of expected travel demand for specific years within the 20-year plan period.

When the analysis is complete, a 30-day public comment period will be held and the results will be presented to Metro's Transportation Policy Advisory Committee (TPAC), Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council for approval.



2000 Regional Transportation Plan Conformity Analysis Timeline*

August 21, 2000

Notification of 2000 RTP air quality conformity process to affected governments, businesses and community groups

September 29, 2000

Complete modeling and analysis for air quality conformity

October 6, 2000

Begin 30-day public comment period with air quality analysis documents available

October 27, 2000

Review of air quality conformity findings and tentative action by TPAC

November 7, 2000

Public hearing, close of 30-day public comment period and recommendation by Metro Transportation Planning Committee

November 9, 2000

Review of air quality conformity findings and tentative action by JPACT

November 16, 2000

Public hearing and tentative final action by Metro Council

* Please note that the dates in this timeline are tentative.

What is the purpose of a public comment period?

The purpose of a 30-day public comment period is to allow public review of:

- the methods and analysis procedures leading to a conformity determination
- the final results of the 2000 RTP air quality conformity analysis

Given previous experience with the conformity process, it is anticipated that the 2000 RTP will meet air quality conformity requirements for all model years. If, for some reason, this does not occur, then the air quality conformity process would be extended and expanded to determine how to revise the 2000 RTP to comply with the federal Clean Air Act.

The public comment period will be advertised and another notice will be sent prior to the start of the comment period.

For more information

Confirm the dates, times and locations for meetings by calling Metro's Transportation Hotline at (503) 797-1900 closer to the scheduled meeting day. Information will also be available on Metro's web site at www.metro-region.org. For more information, call Jeanna Cernazanu at (503) 797-1865.

Appendix 3

2000 RTP Conformity Analysis Protocol



METRO

2000 RTP
Air Quality
Conformity Analysis
October 6, 2000



METRO

2000 RTP Air Quality Conformity Analysis Protocol

Mobile Source Emissions Budget Years

For the Oregon portion of the Portland-Vancouver airshed, emission budgets have been set for various sources of pollutants (mobile, point, and area) and are included in the SIP and in the region's Ozone and Carbon Monoxide Maintenance Plans. The 2000 RTP must conform to the SIP mandated mobile emissions budgets. Mobile emissions budgets are set for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NO_x), and hydrocarbons (HC).

The region's approved Maintenance Plans identify two sets of budget years, one set for winter CO and one set for summer ozone precursors (NO_x and HC). The CO budget years are 2001, 2003, 2007, 2010, 2015 and 2020. The ozone budget years are 1999, 2001, 2003, 2006, 2010, 2015 and 2020. In addition, a plan horizon year must also be evaluated. For the 2000 RTP, the horizon year is 2020. Table 1 shows the budget years and associated emissions budgets.

Table 1
2000 RTP Mobile Emissions Budgets¹

	Winter CO	Summer HC	Summer NO_x
	(thousand pounds/day)	(tons/day)	(tons/day)
1999	<i>n/a</i>	52	56
2001	864	47	54
2003	814	44	52
2006	<i>n/a</i>	41	51
2007	763	<i>n/a</i>	<i>n/a</i>
2010	760	40	52
2015	788	40	55
2020	842	40	59

Relationship of Budget Years to Analysis Years

On October 28, 1999, Metro and DEQ staff met and reviewed the conformity requirements. The process is technically complex and requires extensive staff and computer time and is, therefore, expensive. Metro fully models as few analysis years as possible to the degree the rules allow. As permitted by the conformity rule, Metro identifies and models key analysis years and interpolates between them to establish that regional mobile emissions meet all established emissions budgets.

¹ Budgets are from the Maintenance Plan adopted in 1996.

This approach is acceptable under the federal rule and is called out in its preamble as follows: “A full regional emissions analysis must be performed for each pollutant and precursor for the last year of the transportation plan’s forecast period (i.e., 2020) and the attainment year (i.e. 1998²). For the other years for which the *budget test* is required to be demonstrated, the estimate of regional emissions does not necessarily need to be based on a full regional emissions analysis performed for the specific year; the estimate of regional emissions may be based on an interpolation between the years for which the full regional emissions analysis was performed.” The rules go on to note that analysis years must be no more than ten years apart and must include the transportation plan’s horizon year (i.e. 2020).

Table 2 identifies the years for which a full conformity analysis was performed and the years for which interpolation was performed for both summer ozone precursors and winter carbon monoxide. A full model analysis was performed for a base year of 1998 and the 2000 RTP horizon year of 2020. Trip tables prepared for these two analysis years were then interpolated to provide inputs for the 2005 and 2010 analysis years. New trip assignments were prepared for 2005 and 2010. Data for all other budget years were interpolated between these four full analysis years. As a result, the full analysis years include a 1998 base year, and 2005, 2010, and 2020. Interpolation years include 1999, 2001, 2003, 2006, 2007, and 2015.

Table 2
2000 Regional Transportation Plan Conformity Analysis Years

Year	Carbon Monoxide (winter)		Ozone Precursors (HC and NOx) (summer)	
	Full Analysis	Interpolate	Full Analysis	Interpolate
1998 ³	X		X	
1999		X		X
2001		X		X
2003		X		X
2005 ⁴	X		X	
2006				X
2007		X		
2010	X		X	
2015		X		X
2020	X		X	

Regional Travel Demand Model Inputs, Assumptions and Methodology

For a full analysis, air quality conformity requires demand model outputs such as vehicle miles traveled, trip ends, and network speeds. Emissions calculations are performed on a link-by-link and matrix basis for stabilized emissions and trip end emissions, respectively. As noted, a full demand model analysis is

² As approved by the Department of Environmental Quality.

³ The base year will be 1998.

⁴ While not a budget year, 2005 was selected for full modeling to take advantage of the existing 2005 network used in previous air quality conformity determinations. The network was revised to reflect the 2000 RTP financially constrained system.

both computer- and labor-intensive. Metro's model requires the following inputs to be assembled or created, if not already available (for a given year):

- Population and employment forecasts
- Transit fare and parking cost data
- Transit network assumptions (PM peak, Midday; including bus routes and park & ride sheds)
- Highway network definitions (PM peak, Midday)
- Vehicle emission factors

The model run consists of the following steps:

- Trip generation (e.g., how many total trips are expected in the region)
- Destination choice (e.g., determination of where each of the approximately 5 million daily trips are coming from and going to)
- Mode choice
- Time of day identifications (AM peak, PM peak, midday, rest of the day)
- Assignment of trips to the network (path choice)

In addition, air quality conformity model runs require stratification of the trips by inspection maintenance area (Oregon I/M, Washington State I/M, and Non-inspected). Once the data are assembled and the demand model steps are completed, the results are used for the calculation of emissions. Ozone and CO gases are computed, and then reported in various geographies depending on the project requirements.

To summarize, a full model analysis was performed for a base year of 1998 and the 2000 RTP horizon year of 2020. Trip tables prepared for these two analysis years were then interpolated to provide inputs for the 2005 and 2010 analysis years. New trip assignments were prepared for 2005 and 2010. Data for all other budget years were interpolated between these four analysis years. The interpolated results were then compared to actual emission budgets to establish that the 2000 Regional Transportation Plan conforms to the emissions budgets in all years for which they are established in the region's CO and Ozone maintenance plans.

Appendix 4

Transportation Analysis Zone (TAZ) Assumptions



2000 RTP
Air Quality
Conformity Analysis
October 6, 2000



2000 Regional Transportation Plan Transportation Analysis Zone Assumptions

2040 Grouping	2040 Group Characteristics	2020 Intersection Density (connections per mile)	2020 Parking Factors (indexed to CBD in '94 dollars)	2020 Transit Pass Factor (% of Full Fare)	2020 Fareless Areas (for internal trips)
		FC	FC	FC	FC
Central City 1 Downtown Business District	Highest planned employment and housing density in the region, with highest level of access by all modes. LRT exists and current land uses reflect planned mix and densities.	20	6.08	60%	X
Central City 2 Lloyd District	Highest planned employment and housing density in the region, with highest level of access by all modes. LRT exists and current land uses reflect planned mix and densities.	20	3.94	60%	X
Central City 3 Central Eastside Industrial District	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses do not reflect planned mix and densities.	20	2.96	65%	
Central City 4 River District and Northwest	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses approach planned mix and densities.	20	3.94	65%	
Central City 5 North Macadam District	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses do not reflect planned mix and densities.	18	3.04	65%	
Regional Centers - Tier 1 Gresham Gateway Beaverton Hillsboro	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses approach planned mix and densities.	>14	0.80	80%	X
Regional Centers - Tier 2 Washington Square Milwaukie Clackamas Oregon City	Planned high employment and housing density, with highest level of access by all modes; planned LRT. Current land uses do not reflect planned mix and densities.	>10	0.60	95%	

2040 Grouping	Group Characteristics	2020 Intersection Density (connections per mile)	2020 Parking Factors (indexed to CBD in '94 dollars)	2020 Transit Pass Factor (% of Full Fare)	2020 Fareless Areas (for internal trips)
		FC	FC	FC	FC
Station Communities Tier 1 Banfield Corridor Westside Corridor	High housing density mixed with commercial services; highest level of access for transit, bike and walk; existing LRT.	>12	0.80	80%	
Station Communities Tier 2 South/North Corridor	Planned high housing density mixed with commercial services, with high level of transit, bike and walk; planned LRT. Current land uses do not reflect planned mix and densities.	>10	0.60	95%	
Town Centers - Tier 1 St. Johns Hollywood Lents Rockwood Lake Oswego Tualatin Forest Grove	Moderate housing and employment density planned, with high level of access by all modes. Currently has good mix of uses, well connected street system and good transit.	>16	0.45	85%	
Town Centers - Tier 2 West Portland Raleigh Hills Hillsdale Gladstone West Linn Sherwood Sunset Wilsonville Cornelius Orencia	Moderate housing and employment density planned, with high level of access by all modes. Currently has some mix of uses, moderately connected street system and some transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>10	0.36	100%	
Town Centers - Tier 3 Fairview/Wood Village Troutdale Happy Valley Lake Grove Farmington Cedar Mill Tannasbourne	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, poorly connected street system and poor transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>8	0.28	100%	
Town Centers - Tier 4 Pleasant Valley Damascus Bethany Murrayhill	Moderate housing and employment density planned, with high level of access by all modes. Currently undeveloped or developing urban uses, with skeletal street system and poor transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>8	0.18	100%	
Mainstreets - Tier 1 Eastside Portland to 60th	Moderate housing and employment density planned, with high level of access by all modes. Currently has good mix of uses, well connected street system and good transit.	>14	0.45	100%	
Mainstreets - Tier 2 Remaining Region	Moderate housing and employment density planned, with high level of access by all modes. Currently has some mix of uses, moderate connectivity and some transit.	>8	0.36	100%	

2040 Grouping	Group Characteristics			Factor	Areas
		FC	FC	FC	FC
Corridors Full Region	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, moderate connectivity and some transit.	>10	None	100%	
Inner Neighborhoods Full Region	Low density housing planned, with moderate level of access by all modes. Currently has moderate connectivity and some transit.	>10	None	100%	
Outer Neighborhoods - Tier 1 Current Urban Areas	Low density housing planned, with moderate level of access by all modes. Currently has poorly connected street system and little transit.	>8	None	100%	
Outer Neighborhoods - Tier 2 Urban Reserve Areas	Low density housing planned, with moderate level of access by all modes. Currently has skeletal street system and no transit.	>6	None	100%	
Employment Areas Full Region	Low density employment planned, with moderate level of access by all modes. Currently has poorly connected street system and limited transit.	>8	None	100%	
Industrial Areas - Tier 1 Rivergate Swan Island Airport	Low density employment planned, with high level of access by rail and truck freight, and moderate access by other modes. Currently has somewhat connected street system and some transit.	>10	None	100%	
Industrial Areas - Tier 2 South Shore Clackamas Tualatin Beaverton Sunset	Low density employment planned, with high level of access by rail and truck freight, and moderate access by other modes. Currently has developing street system and poor transit.	>8	None	100%	
Greenspaces Same as Tier 2 Outer Neighborhoods.	Recreational uses are planned, with moderate level of access by all modes	>6	None	100%	
Rural Reserves Same as Tier 2 Outer Neighborhoods.	Urban uses are not planned in the foreseeable future. Currently has skeletal street system and no transit.	>6	None	100%	
Special Area 1 Portland International Airport	<i>These places are relatively small geographic areas with special characteristics.</i>	*	6.14	60%	
Special Area 2 Oregon Health Sciences University		*	1.86	60%	
Special Area 3 Oregon Zoo		*	1.86	100%	
Special Area 4 SMART (Wilsonville)		*	*	*	X

* Use parent zone values.

8/10/00