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METRO

Agenda

MEETING:	METRO COUNCIL
DATE:	February 28, 2008
DAY:	Thursday
TIME:	2:00 PM
PLACE:	Metro Council Chamber

CALL TO ORDER AND ROLL CALL

1. INTRODUCTIONS

2. CITIZEN COMMUNICATIONS

3. TRAVEL PORTLAND UPDATE: PRESENTATION ON OREGON CONVENTION CENTER SALES EFFORTS AND OTHER INITIATIVES — Miller

4. CONSENT AGENDA

4.1 Consideration of Minutes for the February 14, 2008 Metro Council Regular Meeting.

4.2 **Resolution No. 08-3918**, For the Purpose of Confirming the Reappointment of Eric Johansen to the Investment Advisory Board for 2008 to 2010 term.

4.3 **Resolution No. 08-3911,** For the Purpose of Approving the Air Quality Conformity Determination for the Federal Component of the 2035 Regional Transportation Plan and Reconforming the 2008-2011 Metropolitan Transportation Improvement Program.

5. RESOLUTIONS

5.1 **Resolution No. 08-3901,** For the Purpose of Amending the Joint Policy Advisory Committee on Transportation (JPACT) Bylaws**.** — Burkholder

5.2 **Resolution No. 08-3909,** For the Purpose of Endorsing Formation of a Reserves Steering Committee and a Schedule With Key Milestones to Guide Metro's Participation in the Designation of Urban and Rural Reserves. — Harrington

6. PORTLAND'S WORKING RIVERS — Abbott

7. CHIEF OPERATING OFFICER COMMUNICATION

8. COUNCILOR COMMUNICATION

ADJOURN

Television schedule for February 28, 2008 Metro Council meeting

Clackamas, Multnomah and Washington counties, and Vancouver, Wash. Channel 11 -- Community Access Network www.tvctv.org -- (503) 629-8534 2 p.m. Thursday, Feb. 28 (Live)	**Portland** Channel 30 (CityNet 30) -- Portland Community Media www.pcmtv.org -- (503) 288-1515 8:30 p.m. Sunday, Mar. 2 2 p.m. Monday, Mar. 3
Gresham Channel 30 -- MCTV www.mctv.org -- (503) 491-7636 2 p.m. Monday, Mar. 3	**Washington County** Channel 30 -- TVC-TV www.tvctv.org -- (503) 629-8534 11 p.m. Saturday, Mar. 1 11 p.m. Sunday, Mar. 2 6 a.m. Tuesday, Mar. 4 4 p.m. Wednesday, Mar. 5
Oregon City, Gladstone Channel 28 -- Willamette Falls Television www.wftvaccess.com -- (503) 650-0275 Call or visit website for program times.	**West Linn** Channel 30 -- Willamette Falls Television www.wftvaccess.com -- (503) 650-0275 Call or visit website for program times.

PLEASE NOTE: Show times are tentative and in some cases the entire meeting may not be shown due to length. Call or check your community access station web site to confirm program times.

Agenda items may not be considered in the exact order. For questions about the agenda, call Clerk of the Council, Chris Billington, (503) 797-1542. Public hearings are held on all ordinances second read and on resolutions upon request of the public. Documents for the record must be submitted to the Clerk of the Council to be considered included in the decision record. Documents can be submitted by e-mail, fax or mail or in person to the Clerk of the Council. For additional information about testifying before the Metro Council please go to the Metro website www.metro-region.org and click on public comment opportunities. For assistance per the American Disabilities Act (ADA), dial TDD 797-1804 or 797-1540 (Council Office).

Agenda Item Number 3.0

TRAVEL PORTLAND UPDATE: PRESENTATION ON OREGON CONVENTION CENTER SALES EFFORTS AND OTHER INITIATIVES

Metro Council Meeting
Thursday, February 28, 2008
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Agenda Item Number 4.1

Consideration of Minutes of the February 14, 2008 Metro Council Regular Meeting

Consent Agenda

Metro Council Meeting
Thursday, February 28, 2008
Metro Council Chamber

MINUTES OF THE METRO COUNCIL MEETING

Thursday, February 14, 2008
Metro Council Chamber

Councilors Present: David Bragdon (Council President), Kathryn Harrington, Robert Liberty, Rex Burkholder, Rod Park, Carl Hosticka, Carlotta Collette

Councilors Absent:

Council President Bragdon convened the Regular Council Meeting at 2:01 p.m.

1. INTRODUCTIONS

There were none.

2. CITIZEN COMMUNICATIONS

Sharon Nasset, 1113 N Baldwin St., Portland, Oregon 97217, discussed the Columbia River Crossing Sponsor Council. She described what the Council did and different roles of the Council. She listed agencies that were members of the Sponsor Council. She mentioned the Council was not meeting and not aware of meetings. She would appreciated organization of citizen input meetings.

Councilor Liberty explained the plan behind Columbia River Crossing public hearings and said there would be meetings beginning in early April, and meetings would be publicized. President Bragdon thanked Ms. Nasset for her input.

3. CONSENT AGENDA

3.1 Consideration of minutes of the February 7, 2008 Regular Council Meeting.

3.2 **Resolution No. 08-3914**, For the Purpose of Confirming the Appointment of Sarah Adams to the Solid Waste Rate Review Committee (RRC).

3.3 **Resolution No. 08-3908,** For the Purpose of Requesting a Referendum On Federal Old Age, Survivors, and Disability Insurance Coverage.

Motion:	Councilor Harrington moved to adopt the meeting minutes of the February 7, 2008 Regular Metro Council, Resolution No. 08-3914 and Resolution No. 08-3908.
Vote:	Councilors Burkholder, Harrington, Liberty, Park, Collette, Hosticka and Council President Bragdon voted in support of the motion. The vote was 7 aye, the motion passed.

4. RESOLUTIONS

4.1 **Resolution No. 08-3891**, For the Purpose of Approving Portland Regional Transportation Priorities for Federal Fiscal Year 2009 Appropriations.

Motion:	Councilor Burkholder moved to adopt Resolution No. 08-3891.
Seconded:	Councilor Park seconded the motion.

Councilor Burkholder explained specifics of the resolution. He explained changes in the staff report, exhibits, and attachments. He went though monetary and budget specifics including Regional Highway Priorities. Councilor Burkholder explained specific Metro transportation requests. He said they have prioritized and that this was a good regional exercise.

Councilor Collette asked about an unlisted grand total. Councilor Burkholder said they decided not to include a grand total, and instead highlight priorities instead of looking for a concrete total. He said there were issues of presentation. President Bragdon talked about federal funding processes in the region. He asked about the Sellwood Bridge and Councilor Burkholder said it would be addressed in next year's request, as the bridge would require a significant amount of project funding, and the timing to ask for significant funds was not appropriate. He said they would look for a 'big ask' next year. Councilor Liberty talked about investments and money going towards possible responses for future identified needs. President Bragdon had questions about the line-item 'I-5/99W Connector' conjuring pictures of a potential particular facility. He said there has not been any decision about what was needed. He said there does need to be better mobility and access in Tualatin, Sherwood, Wilsonville, etc. He said this does not prejudge any outcome.

Vote:	Councilors Park, Burkholder, Collette, Harrington, Liberty, Hosticka and Council President Bragdon voted in support of the motion. The vote was 7 aye, the motion passed.

4.2 **Resolution No. 08-3917**, For the Purpose of Endorsing Multnomah County's Bridge Safety Funding Ballot Measure.

Motion:	Councilor Liberty moved to adopt Resolution No. 08-3917.
Seconded:	Councilor Harrington seconded the motion.

Councilor Liberty talked about regional bridges and explained the resolution and discussed the need for upgrades. He explained where funds would go specifically. He explained why the resolution was before the Metro Council instead of Multnomah County, and the specifics of the Intergovernmental Agreement (IGA) between Metro and Multnomah County. He gave details on the fee involved.

Councilor Hosticka said he had concerns about other governments not being willing to enter into the agreement.

Ian Cannon, Multnomah County Bridge Section Director, said that generating momentum with this project would hopefully aid in changing people's minds.

President Bragdon supported the resolution and thanked Chair Wheeler for his leadership. Councilor Harrington said her district supported endorsing the resolution. Councilor Park said he hoped people would realize that even though these are regional issues, these are issues from the past that we must correct. He said it was important to ask what each individual government agency was doing individually. Councilor Park said it could be an array of bridges that could be worked on. He said he hoped people would change their minds and support. He said it should become a regional discussion, and he found it interesting that discussions such as this were not brought up regarding other infrastructure needs. Councilor Park asked if there were not agreement, would it move ahead? Mr. Cannon said they were looking for unanimous consensus to move forward.

Councilor Liberty thanked Chair Wheeler for his leadership. He talked about regional responsibility and fairness.

Vote:	Councilors Park, Burkholder, Collette, Harrington, Liberty, Hosticka and Council President Bragdon voted in support of the motion. The vote was 7 aye, the motion passed.

5. CHIEF OPERATING OFFICER COMMUNICATION

Michael Jordan, COO, talked about business group memberships. Mr. Jordan asked if the Council would want to schedule more time to discuss the topic further. Councilors Park and Burkholder said they would be interested in scheduling ten to fifteen minutes at a work session for this topic.

6. COUNCILOR COMMUNICATION

Councilor Park talked about the report on American's greenest cities in *Popular Science* magazine. He said Portland was ranked the greenest city in the country. He wanted to share the results with Councilors.

Councilor Liberty provided a report on the 'Investing in our Communities' meeting. He introduced the Oliver Jones speaking event on February 25th. Councilor Harrington said it would be of interest to planners in her district to look into the speaking event. Councilor Park discussed his and Mr. Jordan's meeting with school superintendents regarding land-use decisions and issues. He said they talked about maintenance costs. He talked about the status of schools currently, and said there should be a discussion about schools' roles in the region and in different communities.

Councilor Burkholder updated Councilors on the sustainability resolution. He said two important issues need to be addressed: the development of a regional climate change action plan and a mechanism for sharing information between jurisdictions on sustainability issues. He said any climate change action plan would have to rely on transportation. Councilor Burkholder talked about important items on the Joint Policy Advisory Committee on Transportation's (JPACT) meeting list. He said one was a set of principles for guiding the state plan, and another set of principles for the federal plan. He talked about the Metropolitan Transportation Improvement

Program (MTIP) and scheduled meetings for review. He said there was a tight timeframe because of deadlines to request money.

Councilor Harrington made an announcement about a Greatest Place workshop. Councilor Collette talked about presentations she has given recently. She said she attended the Clackamas County Business Association board member meeting and said she was glad she could attend.

7. EXECUTIVE SESSION

ADJOURN

There being no further business to come before the Metro Council, Council President Bragdon adjourned the meeting at 5:20 p.m.

Prepared by

Tony Andersen
Deputy Clerk

ATTACHMENTS TO THE PUBLIC RECORD FOR THE MEETING OF FEBRUARY 14, 2008

Item	Topic	Doc. Date	Document Description	Doc. Number
3.1	Minutes	2/7/08	Minutes of the Metro Council Meeting of February 7, 2008.	021408c-01
4.1	Resolution	2/7/08	Revised Exhibit A of Resolution No. 08-3891, February 7, 2008.	021408c-02
2	Statement	2/7/08	Statement: 'Who is Involved' RE Columbia River Crossing Project Sponsors Council and Columbia River Crossing Stakeholder participation, February 7, 2008	021408c-03

Agenda Item Number 4.2

Resolution No. 08-3918, For the Purpose of Confirming the Reappointment of Eric Johansen to the Investment Advisory Board for 2008 to 2010 term.

Consent Agenda

Metro Council Meeting
Thursday, February 28, 2008
Metro Council Chamber

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF CONFIRMING THE RE-APPOINTMENT OF ERIC JOHANSEN TO THE INVESTMENT ADVISORY BOARD FOR 2008 TO 2010 TERM	)))	RESOLUTION NO. 08- 3918 Introduced by Michael Jordan, Chief Operating Officer, in concurrence with David Bragdon, Council President

WHEREAS, The Metro Code, Section 7.03.030, provides that the Council confirm the names of persons for appointment to the Investment Advisory Board, and,

WHEREAS, Eric Johansen, having ably served as an Investment Board member, is qualified to continue to perform these duties, and

WHEREAS, The Council President, upon the recommendation of the Investment Officer, has appointed Eric Johansen for the term ending October 31, 2010, now, therefore, and

BE IT RESOLVED that the Metro Council confirms the appointment of Eric Johansen as a member of the Investment Advisory Board for the term ending October 31, 2010.

ADOPTED by the Metro Council this 28th day of February 2008.

David Bragdon, Council President

Approved as to Form:

Daniel B. Cooper, Metro Attorney

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 08-3918, FOR THE PURPOSE OF CONFIRMING THE RE-APPOINTMENT OF ERIC JOHANSEN TO THE INVESTMENT ADVISORY BOARD

Date: February 4, 2008 Prepared by: Calvin J. Smith

BACKGROUND

Metro Code, Section 7.03.030, includes the creation of the Investment Advisory Board. One provision of this Code requires the Chief Operating Officer acting the in capacity of the Investment Officer to recommend to the Council for confirmation those persons who shall serve on the Board to discuss and advise on investment strategies, banking relationships, the legality and probity of investment activities, and the establishment of written procedures of the investment operation. The Metro Charter requires appointments to be made by the Council President subject to Council Confirmation. Metro Council President David Bragdon, upon the recommendation of the Investment Officer, has appointed Eric Johansen to the board subject to Council confirmation.

Eric Johansen is the Debt Manager for the City of Portland. Eric was first appointed in December 1998 and we are fortunate he still is willing to devote his time and energy serving on the Metro Investment Advisory Board. During his time on the board Eric has become familiar with Oregon Revised Statutes relating to investments by municipalities and with Metro's Investment Policy. His experience and knowledge have proven to be a valuable resource for the Investment Advisory Board.

ANALYSIS/INFORMATION

1. **Known Opposition** None.

2. **Legal Antecedents** Metro code 2.19.150 and 7.03.030c.

3. **Anticipated Effects** Confirmation of the re-appointment of Eric Johansen will provide continuity of experience of Investment Advisory Board members.

4. **Budget Impacts** There is no out-of-pocket expense created by the re-appointment of Johansen to the volunteer position.

RECOMMENDED ACTION

Michael Jordan, Chief Operating Officer, in concurrence with Council President David Bragdon, recommends the confirmation of Eric Johansen for the term expiring October 31, 2010.

Agenda Item Number 4.3

Resolution No. 08-3911, For the Purpose of Approving the Air Quality Conformity Determination for the Federal Component of the 2035 Regional Transportation Plan and Reconforming the 2008-2011 Metropolitan Transportation Improvement Program.

Consent Agenda

Metro Council Meeting
Thursday, February 28, 2008
Metro Council Chamber

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING THE AIR QUALITY CONFORMITY DETERMINATION FOR THE FEDERAL COMPONENT OF THE 2035 REGIONAL TRANSPORTATION PLAN AND RECONFORMING THE 2008-2011 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM.	)))))))	RESOLUTION NO. 08- 3911 Introduced by Councilor Burkholder

WHEREAS, clean air contributes to the health of residents and the quality of life of a region; and

WHEREAS, clean air is a significant interest and concern of the people of the Metro area; and

WHEREAS, the federal Clean Air Act and other federal laws include air quality standards designed to ensure that federally supported activities meet air quality standards and these federal standards apply to the Metro area with regard to on-road transportation activities; and

WHEREAS, Chapter 340, Division 252, Transportation Conformity, of the Oregon Administrative Rules was adopted to implement section 176(c) of the federal Clean Air Act, as amended, and these state rules also apply to Metro area on-road transportation activities; and

WHEREAS, these federal and state regulations require an air quality conformity determination whenever the transportation plan is updated and, that the transportation improvement program be re-conformed with air quality regulations consistent with the new transportation plan; and

WHEREAS, in August 2007 the 2008 - 2011 Metropolitan Transportation Improvement Program (MTIP) was approved by the Metro Council by Resolution No. 07-3824: For the Purpose of Approving an Air Quality Conformity Determination For the 2008-2011 Metropolitan Transportation Improvement, assuming the 2004 Regional Transportation Plan financially constrained system; and

WHEREAS, in December 2007 the financially constrained system was updated when the 2035 Regional Transportation Plan was approved, subject to demonstration of conformance to air quality standards, or air quality conformity, as documented by Resolution No. 07-3831B: For the Purpose of Approving the Federal Component of the 2035 Regional Transportation Plan (RTP) Update, Pending Air Quality Conformity Analysis; and

WHEREAS, the Air Quality Conformity Determination February 2008 included in Exhibit "A" attached hereto demonstrates that the financially constrained system of the 2035 Regional Transportation Plan and the timing and design of the projects included in the 2006-2009 MTIP could be built and the resulting total air quality emissions, to the year 2035, are forecast to be substantially less than the motor vehicle emission budgets, or maximum transportation source emission levels; now therefore,

BE IT RESOLVED that the Metro Council hereby:

1. Approves the air quality conformity determination as documented in Exhibit "A".

2. Directs the Chief Operating Officer to forward the Air Quality Conformity Determination February 2008 to the Federal Highway Administration and Federal Transit Administration for approval.

ADOPTED by the Metro Council this _____ day of February 2008.

David Bragdon, Council President

Approved as to Form:

Daniel B. Cooper, Metro Attorney

Exhibit "A" to Resolution No. 08-3911

www.metro-region.org

Air Quality Conformity Determination

February 2008

2035 REGIONAL TRANSPORTATION PLAN and 2008-11 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM

Metro | *Joint Policy Advisory Committee on Transportation*

Metro
People places • open spaces

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy and good transportation choices for people and businesses in our region. Voters have asked Metro to help with the challenges that cross those lines and affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to protecting open space, caring for parks, planning for the best use of land, managing garbage disposal and increasing recycling. Metro oversees world-class facilities such as the Oregon Zoo, which contributes to conservation and education, and the Oregon Convention Center, which benefits the region's economy.

Your Metro representatives
Metro Council President – David Bragdon
Metro Councilors – Rod Park, District 1; Carlotta Collette, District 2; Carl Hosticka, District 3; Kathryn Harrington, District 4; Rex Burkholder, District 5; Robert Liberty, District 6.
Auditor – Suzanne Flynn

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

Project web site: www.metro-region.org/rtp

Metro is the federally mandated metropolitan planning organization designated by the governor to develop an overall transportation plan and to allocate federal funds for the region.

The Joint Policy Advisory Committee on Transportation (JPACT) is a 17-member committee that provides a forum for elected officials and representatives of agencies involved in transportation to evaluate transportation needs in the region and to make recommendations to the Metro Council.

The established decision-making process assures a well-balanced regional transportation system and involves local elected officials directly in decisions that help the Metro Council develop regional transportation policies, including allocating transportation funds.

The preparation of this report was financed in part by the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration. The opinions, findings and conclusions expressed in this report are not necessarily those of the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration.

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Appendices

1.0 Overview

1.1 What is Transportation Conformity/Report Purpose

Transportation Conformity is described by the US Department of Transportation (USDOT) as "*…a way to ensure that Federal funding and approval are given to those transportation activities that are consistent with air quality goals. It ensures that these transportation activities do not worsen air quality or interfere with the 'purpose' of the State Implementation Plan (SIP), which is to meet the National Ambient Air Quality Standards (NAAQS*)."

This report analyses the 2035 Regional Transportation Plan (RTP) Financially Constrained System and reanalyzes the 2008-2011 Metropolitan Transportation Improvement Program (MTIP), estimating the future air quality conditions and comparing those with the motor vehicle emission budgets, or maximum amounts of regulated pollutants generated by on road vehicles. This analysis, using best available information and Environmental Protection Agency (EPA), USDOT and Oregon Department of Environmental Quality (DEQ) approved methods, determines whether proposed transportation improvements conform with federal and state air quality laws.

1.2 Results/Conclusions

The 2035 RTP and 2008-2011 MTIP, using the MOBILE6.2 air quality model, have been analyzed for compliance with air quality standards for Carbon Monoxide as established by the EPA, USDOT and Oregon DEQ as follows:

Table 1. Comparison of Motor Vehicle Emission Budgets and Forecast Carbon Monoxide Emissions from Surface Transportation Sources

Year	**Carbon Monoxide Motor Vehicle Emission Budgets** **(Budgets are Maximum Allowed Emissions)** (pounds/ winter day)	**Forecast Carbon Monoxide Motor Vehicle Emissions** (pounds/ winter day)
2007	N/A	935,394
2010	1,033,578	856,054
2017	1,181,341	670,926
2025	1,181,341	801,203
2035	1,181,341	822,596

The above data show that for the years 2010, 2017, 2025 and 2035, Carbon Monoxide emissions from on-road transportation sources are less than the maximum allowed levels (motor vehicle emission budgets).

From these data, and the fact that the region is in compliance with all other air pollutant regulations, we conclude that the 2035 RTP and 2008-2011 MTIP, and the proposed transportation improvements contained within them, meet federal and state air quality standards.

1.3 Regulatory and Process Background

The federal Clean Air Act is the primary regulatory framework for national, state and local efforts to protect air quality. Under the Clean Air Act, the 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 is focused on meeting the NAAQS and deadlines set by the federal EPA and DEQ for meeting the standards. Further, the United States Department of Transportation has established regulations. Failing to conform restricts an area's ability to receive federal transportation funds during any period for which the air quality approval has lapsed.

More specifically, federal air quality conformity requirements come from the integration of requirements in the Clean Air Act Amendments of 1990 and the *Intermodal Surface Transportation Efficiency Act* (ISTEA) of 1991 and are codified at 40 CFR Part 93. These requirements were also included in the *Transportation Equity Act for the 21st Century* (TEA21) and most recently in the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU). SAFETEA-LU has made changes and additions to the previous air quality requirements for transportation planning and these are reflected in this document.

Oregon's air quality regulations, adopted by the Oregon Environmental Quality Commission under OAR 340-200-0040 and approved by EPA, establishes rules and standards for determining air quality conformity of transportation plans, programs and projects within Oregon (specifically, OAR 340 Division 252). These regulations contain all federal requirements plus a few additional state standards. The Department of Environmental Quality is responsible for writing the air quality plan for the Metro region. By meeting the Oregon standards for purposes of demonstrating air quality conformity, the federal standards are also met.

Metro is the Portland area's designated Metropolitan Planning Organization (MPO). As the MPO, Metro is the lead agency for development of regional transportation plans and the scheduling of federal transportation funds in the Portland urban area. The Metro Council, after receiving recommendations from the Joint Policy Advisory Committee on Transportation (JPACT), approves regional transportation plans and implementation programs and air quality conformity determinations. In addition, the Transportation Policy Alternatives Committee (TPAC) is specifically named in the state rule as the standing committee designated for "interagency consultation", a technical review process.

The 2004 Regional Transportation Plan (RTP) and 2004-2007 Metropolitan Transportation Improvement Plan (MTIP) were conformed and, after consultation with the USEPA, received approval of USDOT on March 5, 2004. As Metro and the region have proposed a new 2035 RTP and 2008-2011 MTIP, an air quality conformity determination has been prepared for the transportation improvements proposed in this latest region-wide transportation plan and the implementing transportation improvement program.

In order to demonstrate that the proposed 2035 RTP and 2008-2011 MTIP meet federal and state air quality planning requirements, Metro must complete a technical analysis, consult with relevant agencies and provide for public comment. The draft conformity determination report is then brought to the Joint Policy Advisory Committee on Transportation (JPACT – see http://www.metro-region.org/index.cfm/go/by.web/id=305 for more information about this committee) for consideration and then the Metro Council.

A Metro Council (http://www.metro-region.org/index.cfm/go/by.web/id=28) approved air quality conformity determination is submitted to the United States Department of Transportation (USDOT). In practice, this means review by the Federal Highway Administration and Federal Transit Administration. These USDOT agencies make a conformity determination after consultation with the Environmental Protection Agency. Upon USDOT approval, federal funding of transportation projects may commence.

1.4 Status of Pollutants in the Region

The National Ambient Air Quality Standards adopted by both the EPA and DEQ identify seven air pollutants for which standards are established and regulations in place to address areas which exceed or exceeded the standards in the past. (Other air pollutants, such as benzene, have been identified, but standards and procedures for addressing them have not been approved.) These seven air pollutants are:

- Carbon Monoxide;
- Lead;
- Nitrogen Dioxide;
- Ozone;
- Particulate Matter (2.5 micrometers and smaller diameter);
- Particulate Matter (10 micrometers and smaller diameter); and,
- Sulfur Dioxide.

The Portland/Vancouver area has one interconnected airshed. However, given the State boundary along the Columbia River and the differing jurisdictions and state laws, the Federal government approved each side of the airshed taking responsibility for its area. For the Oregon side, a Metro area airshed was established.

The Metro region has not exceeded the standards for five of these air pollutants – Lead, Nitrogen Dioxide, PM10, PM2.5 and Sulfur Dioxide. However, in the past, the Metro region has exceeded Carbon Monoxide and Ozone standards. Charts showing the historic record for the Metro area for Carbon Monoxide are included below. The region no longer needs to address air quality conformity for ozone, though past and present ozone levels for the reigon are shown in the appendix.

The current status, as determined by the US EPA as of January 16, 2008, is that the Metro area has a maintenance status for Carbon Monoxide. (For the region's Carbon Monoxide status, see the EPA's Green Book located at:
http://www.epa.gov/oar/oaqps/greenbk/cmcs.html#OREGON

Further, the region is in attainment for both 1 hour and 8 hour Ozone, with the region having a Maintenance status. However, the region no longer has a requirement to complete air quality conformity for ozone . For the region's Ozone status see: http://www.epa.gov/oar/oaqps/greenbk/gncl3.html).

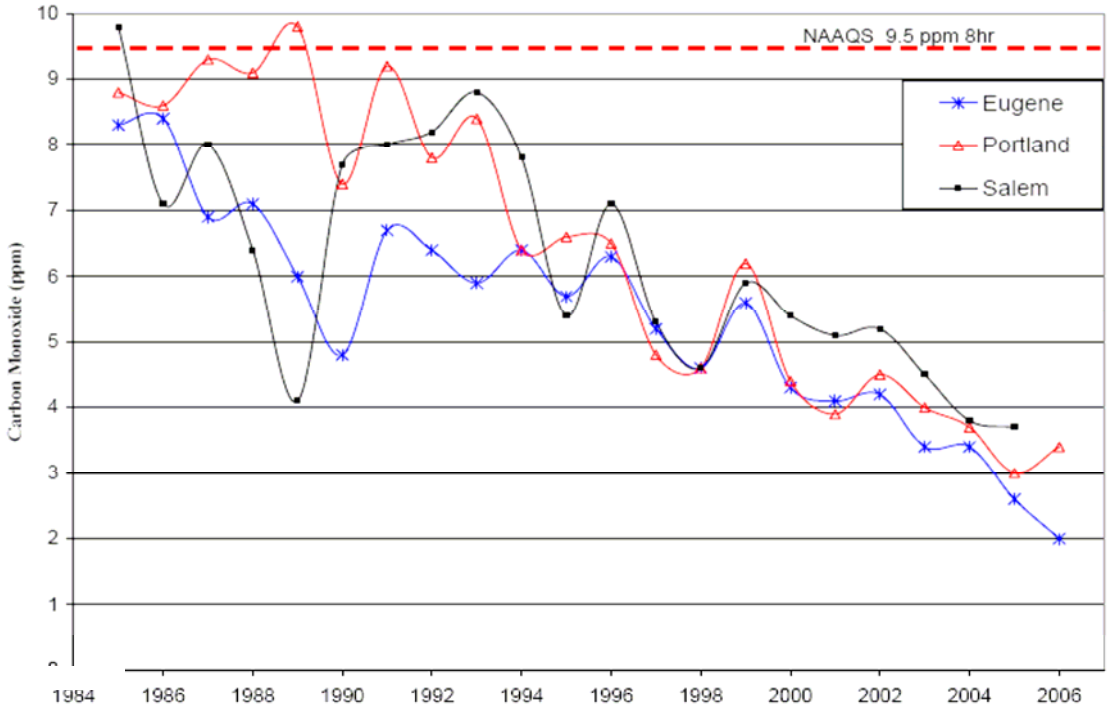
Carbon Monoxide

The Oregon DEQ describes carbon monoxide as follows:

> "*Carbon monoxide is a colorless, odorless gas. In the body, CO binds tightly to hemoglobin (the red pigment in blood which transports oxygen from the lungs to the rest of the body). Once hemoglobin is bound to CO, it can no longer carry oxygen. In this way, CO reduces the oxygen-carrying capacity of the blood and can result in adverse health effects. High concentrations of CO strongly impair the functions of oxygen-dependent tissues, including brain, heart, and muscle. Prolonged exposure to low levels of CO aggravates existing conditions in people with heart disease or circulatory disorders. There is a correlation between CO exposure and increased hospitalization and death among such patients. Even in otherwise healthy adults, carbon monoxide has been linked to increased heart disease, decreased athletic performance, and diminished mental capacity. Carbon monoxide also affects newborn and unborn children. High CO levels have been associated with low birth weights and increased infant mortality*.
>
> *A major natural source of CO is spontaneous oxidation of naturally occurring methane (swamp gas). The major human-caused source is incomplete combustion of carbon-based fuels, primarily from gasoline-powered motor vehicles. Other important sources are wood stoves and slash burns. How a motor vehicle is operated has an effect on the amount of CO emitted. In stop-and-go driving conditions, CO emissions are high. Emissions are also increased when the outside temperature is low. Oregon's most serious CO problems occur during the winter in urban areas when CO emitted by slow-moving traffic is trapped near the ground where people can inhale them*."

As shown by the figure below, the Portland Metro area has not exceeded the 8 hour Carbon Monoxide standards since 1989 and total emissions have been trending downward.

Figure 1. Carbon Monoxide Trends – Total Emissions, All Sources



Source: 2006 Oregon Air Quality Data Summaries, Oregon Department of Environmental Quality see http://www.deq.state.or.us/aq/forms/2006ar/2006ar.pdf

As of January 2008, the Metro area is a maintenance area for carbon monoxide (CO), meaning that while the region meets federal CO standards, it must continue to monitor CO levels through a air quality conformity determination comparing forecast levels of air quality assuming proposed transportation investments with motor vehicle emission budgets, or maximum allowed levels of the pollutant from the on-road and transit elements of the region's transportation system. In 2006, the EPA approved a new CO State Implementation Plan (SIP) finding new CO motor vehicle emission budgets adequate for transportation conformity purposes in the Second Portland Area Carbon Monoxide Maintenance Plan. This second CO maintenance plan is effective through 2017, after which time conformity demonstration will no longer be necessary, if the area continues to not violate the CO NAAQS.

For Carbon Monoxide, the Metro jurisdictional boundary was established as the geographic extent of concern for which emission budgets (maximum pollutant levels) were created. Below is a map of the metro jurisdictional boundary used for the air quality analysis.

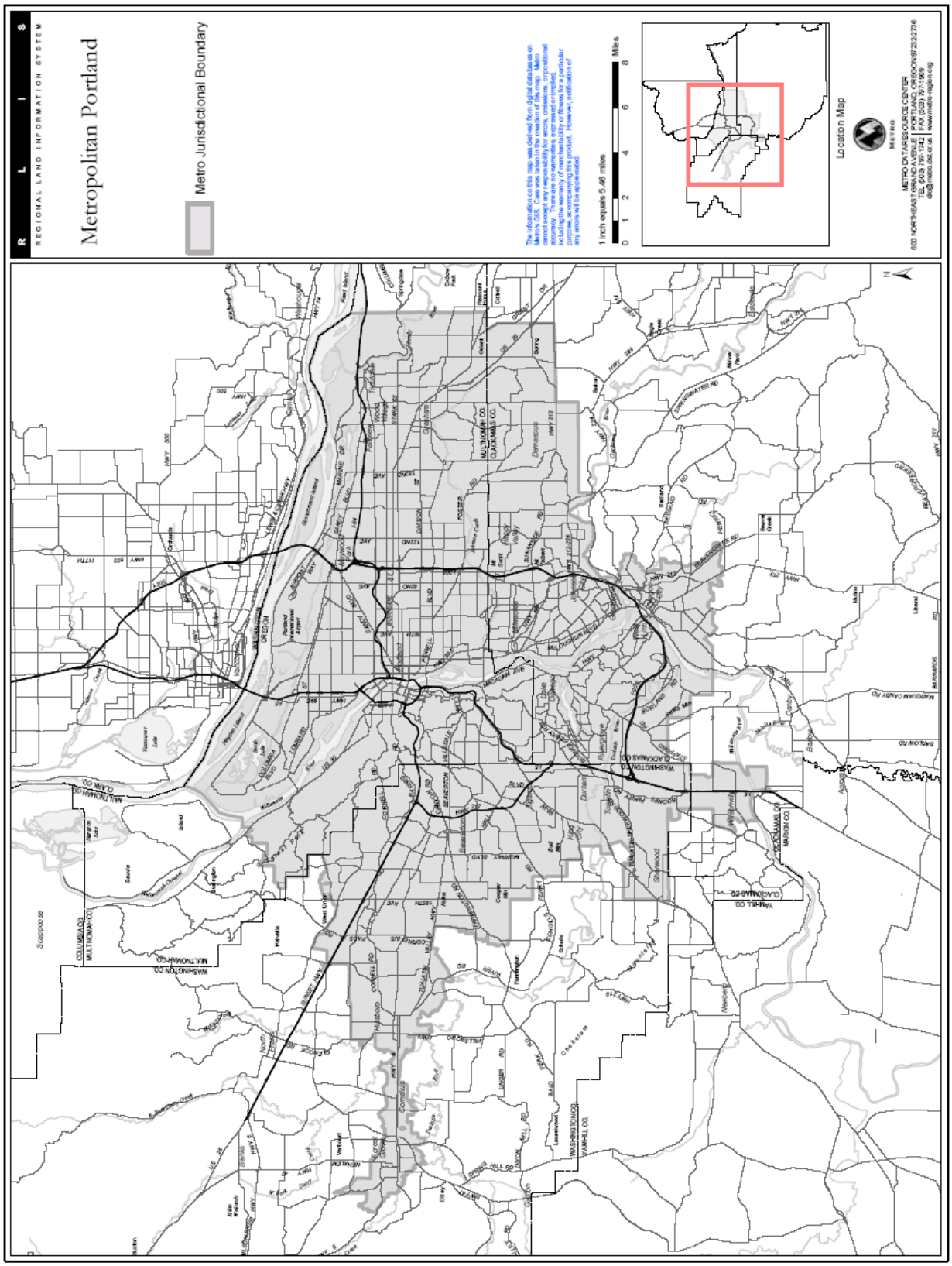


Figure 2. Carbon Monoxide - Area Analyzed

2.0 Demonstration of Conformity for CO

This air quality analysis is organized around and addresses those sections of the federal statutes and state administrative rule that are applicable to this MTIP and RTP amendment conformity determination. Accordingly, each subsection will cite a subject (e.g. "Consultation") and then describe how the requirement was addressed. Federal statutes concerning transportation air quality conformity begin at 40 CFR 93.100 and end at 40 CFR 93.128. Oregon administrative rules for transportation conformity follow federal statute and begin at OAR 340-252-0010 and end at OAR 340-252-0290. Each section is address in numerical order, except as noted in Appendix E.

2.1 GENERAL REQUIREMENTS

2.2.1 Applicability (OAR 340-252-0020 and 40 CFR 93.102)

This conformity rule applies to the proposed 2035 RTP and 2008-2011 MTIP as the Metro area has a Carbon Monoxide maintenance status and the actions being proposed are regionally significant as confirmed in consultation with other agencies including the DEQ, EPA, Federal Highway Administration, Federal Transit Administration, ODOT and TriMet at a meeting held on November 19, 2007.

2.1.2 Frequency of Conformity Determinations (OAR 340-252-0050 and 40 CFR 93.104)

Federal regulations call for a new conformity determination of regional transportation plans no less frequently than every four years. On March 5, 2004, the USDOT approved the air quality conformity determination for the 2004 RTP. Accordingly, the 2035 RTP must be conformed. In addition, MTIP's must be conformed within 18 months of conforming a new RTP. So, additionally, the proposed 2008-2011 MTIP must be conformed consistent with the new RTP.

Accordingly, this conformity determination has been prepared for the 2035 RTP and 2008-2011 MTIP.

2.1.3 Consultation (OAR 340-252-0060 and 40 CFR 93.105)

This section addresses the consultation requirements for air quality planning. The regulations in this section state that the metropolitan planning organization is responsible for development the transportation plan (RTP) and transportation improvement program (MTIP), making the conformity determination, performing regional emissions analysis and documenting timely implementation of transportation control measures.

Consultation is comprised of two components – technical and public. Agency representatives must be provided the opportunity to review and comment on the technical aspects of a conformity determination and the public must be given the opportunity to see the conformity determination report and provide comment.

On November 19, 2007, representatives of the Federal Highway Administration, Federal Transit Administration, EPA, DEQ, ODOT, TriMet and Metro met and discussed the upcoming 2008-2011 MTIP and discussed and commented on a Pre-Conformity Plan (see

Appendix F for final version reviewed by federal representatives and TPAC). Further, TPAC is specifically listed in state air quality regulations for consultation and they were also provided the Pre-Conformity Plan and project summary for discussion at their November 30, 2007 meeting.

These technical groups will be provided an opportunity to comment on this document during a 30 day period starting January 18, 2008 and ending February 20, 2008.

In addition to technical review, an opportunity for public comment period also must be provided prior to taking formal action. Reasonable access to technical and policy information must be provided at the beginning of the public comment period. Any charges for public inspection and copying must be consistent with a specified fee schedule.

Metro is making this document available on its website at the beginning of the public comment period, January 18, 2008, so that it may be accessed for free at any public library via the internet or from a resident's home, if they have a computer and internet access. In addition, a telephone number has been advertised so that the public may call should they have questions. Metro has also arranged to mail hard copies of this report to those who may wish to use this method of inspecting the document. Metro has also provided a telephone number for the hearing impaired so that questions may be answered using TTY technology, so that text messages may be conveyed back and forth. Public comments received by noon, February 20, 2008, will be compiled and written responses addressing comments will be completed and made available to the Joint Policy Advisory Committee on Transportation and the Metro Council and will be included in Appendix B.

2.1.4 Content of Transportation Plans (OAR 340-252-0070 and 40 CFR 93.106)

This regulation concerns the years in which a "snapshot" of transportation conditions are estimated. The years may not be more than 10 years apart and the first horizon year must not be more than 10 years from the base year. The last year must be the last year of the transportation plan's forecast period and the forecast demographic conditions (location and amount of jobs, housing and population) for each of these analysis years must be included in the plan.

The 2035 RTP is based on forecasts out to the year 2035. The air quality analysis years for the 2035 RTP and 2008-2011 MTIP include 2010, 2017, 2025 and 2035 to address the Carbon Monoxide budgets established by the SIP.

2.1.5 Relationship of Transportation Plan and TIP Conformity with the NEPA Process (OAR 340-252-0080 and 40 CFR 93.107)

This provision provides some flexibility between the projects described in the RTP and MTIP and specific projects for which National Environmental Policy Act (NEPA) analysis is being completed.

There are several major transportation projects in the region which are in various stages of project development, including, for some, NEPA processes. Following are the

descriptions of how these projects are assumed – for purposes of air quality conformity determination only – and as reviewed by federal agencies and TPAC.

Project	Project Description and Extent	2035 Financially Constrained System Assumption
Columbia River Crossing	Preliminary Engineering and Right-of-Way from Victory Blvd. to Washington State	Replacement Bridge with 10,000 vehicles per hour each direction with $2 tolls and light rail transit with termini at the Lincoln Park and Ride lot near Main Street and I-5. To be completed by 2017.
Sunrise (I-205 to 172nd Avenue)	Preliminary Engineering, Right-of-Way purchase and some construction funds from I-205 to 172nd Ave.	Assumes full build, 6 lanes, without Tolls. To be completed by 2017.
I-5/I-84 Interchange	Preliminary Engineering and Right-of-Way for the interchange at I-5 and I-84 as well as the area around I-5 and Greeley Street.	Assumes full build of the interchange. The air quality assumptions for 2025 and beyond reflect capacity increases for I-5 resulting from braiding of ramps at both ends of the Broadway interchange. Northbound I-5 will increase from 3500 capacity across the three lanes to 6000 capacity as a result of the interchange improvements. Southbound I-5 capacity will increase from 3500 to 6000 across 3 lanes as it approaches the I-405 loop, an increase from 4500 to 6000 over three lanes just beyond the loop, and an increase from 6000 to 7000 across 3.5 lanes as I-5 approaches I-84. To be completed by 2025.
I-5/Highway 99W Connector	Preliminary Engineering and Right-of-Way purchase for the entire facility from 99W to I-5.	Assumes 4 lanes, without Tolls, to be completed by 2025.

When a project hasn't been adequately defined through the NEPA process, conformity allows coding the network based upon a placeholder project as best as can be defined at the time. For purposes of this air quality conformity determination, a specific configuration to these projects has been made. If the final project configuration is substantially different that what has been assumed, there will need to be a determination whether additional conformity analysis will be needed at that time.

2.1.6 Fiscal Constraints for Transportation Plans and TIP (OAR 340-252-0090 and 40 CFR 93.108)

This section requires that transportation plans and transportation improvement programs be fiscally constrained. That is, that the total cost of the transportation plan and the MTIP be equal or less than the total of identified transportation resources. The 2035 RTP includes a fiscally constrained system. Likewise, the 2008-20011 MTIP has been created based on the availability of funds, the project list starting from one that vastly exceeded available

dollars, to the proposed project list consistent with foreseeable revenues during the program period.

Each project included in the Financially Constrained System of the Regional Transportation Plan and those programmed in the Metropolitan Transportation Improvement Program has an identified funding source(s) that can be reasonably expected to be available over the planning period. This is documented in section 1.4 of the 2008-2011 MTIP.

A list of the financially constrained projects from the 2035 RTP is included as Appendix A.

2.2 CRITERIA AND PROCEDURES FOR DETERMINING CONFORMITY

2.2.1 General (OAR 340-252-0100 and 40 CFR 93.109)

This section outlines which portion of the conformity rule is applicable for particular actions. Compliance with this section is specifically demonstrated in the following sections.

2.2.2 Latest Planning Assumptions (OAR 340-252-0110 and 40 CFR 93.110)

The assumptions about land use, including the location of jobs, housing and the demographic characteristics of the population are a key element in the transportation analysis and accordingly, are reflected in the air quality assessment. As noted before, using estimates of the location and quantity of total housing, population and jobs out to the year 2035 were estimated for the 2035 RTP. As they provide a 20 plus year forecast – to the year 2035, they provide a long enough time horizon to understand the results of both the forecast demographic and employment changes and how the combination of the existing transportation system and improvements included in the financially constrained system will operate. From this, air quality analysis is derived.

2.2.3 Latest Emissions Model (OAR 340-252-0120 and 40 CFR 93.111)

One difference from the last conformity determination and this one is that a new air quality emission model is required to be used. This new model, MOBILE6.2, the latest EPA approved model, has been employed for this air quality conformity determination.

2.2.4 Consultation (OAR 340-252-0130 and 40 CFR 93.112)

This section refers back to the earlier section on consultation and provides for the state implementation plans (SIP) to have additional consultation requirements if appropriate. The second Portland Area CO Maintenance Plan and both the first and second Ozone Maintenance Plans have no further consultation requirements beyond those already addressed in the earlier consultation section.

2.2.5 Timely Implementation of Transportation Control Measures (OAR 340-252-0140 and 40 CFR 93.113)

The State and Federal conformity regulations require that the air quality conformity determination demonstrates compliance with Transportation Control Measures (TCM) that are included in the Carbon Monoxide Maintenance Plan by providing for the timely completion or implementation of all TCM. It must also be demonstrated that nothing in the MTIP program or RTP amendment interferes with the implementation of TCMs.

The Second Portland Area CO Maintenance Plan includes three TCM and has been approved by the Oregon Environmental Quality Commission and US EPA and are addressed below. These TCM are: 1) Transit Service Increase; 2) Bicycle Paths; and 3) Pedestrian Paths.

TCM 1. Transit Service Increase

Regional transit service revenue hours (weighted by capacity) shall be increased 1.0% per year. The increase shall be assessed on the basis of a 5 year rolling average of actual hours for assessments conducted between 2006 and 2017. Assessments made for the period through 2008 shall include the 2004 opening of Interstate MAX."

Compliance Actions - Transit Service Increase

This transit service TCM calls for a calculation of actual hours for assessments conducted between 2006 and 2017. . Presented below are actual transit service hours weighted by capacity from 2002 through 2006.

Table 5. Service Hours – Weighted by Capacity

	Bus	Rail (bus equivalency)	Total	Percent Change year-to-year
2001	2,032,944	682,765	2,715,709	
2002	2,048,484	866,708	2,915,192	7%
2003	2,049,156	908,560	2,957,716	1%
2004	2,047,932	949,732	2,997,664	1%
2005	2,033,544	1,157,461	3,191,005	6%
2006	1,953,420	1,126,543	3,079,963	-3%
Average annual change				**2.7%**

Source: TriMet. Streetcar and Commuter rail not included, nor is SMART or CTRAN service which connects to or provides service to the Metro area.

Findings. Accordingly it is found that this transit service TCM concerning transit service increase been met because:

- the above analysis of weighted transit service hours shows an annual average transit service increase of 2.7 percent, which exceeds the TCM of 1.0 percent.

"2. Bicycle Paths
Jurisdictions and government agencies shall program a minimum total of 28 miles of bikeways or trails within the Portland metropolitan area between the years 2006 through 2017. Bikeways shall be consistent with state and regional bikeway standards. A cumulative average of 5 miles of bikeways or trails per biennium must be funded from all sources in each Metropolitan Transportation Improvement Program (MTIP). Facilities subject to this TCM must be in addition to those required for expansion or reconstruction projects under ORS 366.514."

Compliance Actions - Bicycle Paths

The region has allocated funding for at least 21.11 miles of bicycle lanes and multi-use paths for 2006-2011 as shown in Table 6.[1] This represents an average of 7.04 miles per biennium, 41% above the 5 mile per biennium target for new bicycle/trail improvements.

Table 6. MTIP 2006-09 Bicycle Projects

2006-2007 Funding		2008-2009 Funding	
Beaverton Powerline trail	1.95 mi	Springwater trail	0.90 mi
Washington SQ RC multi-use trail	0.57 mi	Marine Dr. bike lanes	1.50 mi
Mcloughlin: I-205 to Hwy 43 bridge	0.1 mi	Gresham-Fairview trail	1.9 mi
102nd Ave boulevard improvements	0.80 mi	Gresham MAX trail	1.90 mi
Hwy 99E: River Rd to Park Ave bike lanes	0.57 mi	Rock Creek trail	0.80 mi
		Trolley trail	6.0 mi
Total 2006-2007	3.99 mi	SE 92nd Ave	0.38 mi
		Waud Bluff trail	0.25 mi
		Total 2008-2009	11.73 mi

2010-2011 Funding	
NE/SE 50s Bikeway	4.3 mi
East Baseline St, Cornelius	0.54 mi
East Burnside	0.55 mi
Total 2010-2011	5.39 mi

Total 2006-2011 21.11 mi

1. Mileage counts are derived from GIS measurements based on project descriptions.

Additionally, the RTP Financially Constrained list includes several bicycle projects to be completed by 2017. A sample is provided below (analysis was stopped once it could be shown that the goal could be met and in no case were projects beyond the year 2017 even counted).

Table 7. RTP Financially Constrained System Bicycle Projects

Monroe Bike Blvd (21st to Linwood)	2.1 mi
NE Glisan Street Bikeway (162nd to 202nd)	2.01 mi
Willamette Falls Dr (Hwy 43-10th)	2.1 mi
Glisan (162nd-202nd)	1.9 mi
Total:	**8.11 mi**

Adding this mileage to the 21.11 miles from 2006-2011 MTIP allocations totals 29.22 miles, which exceeds the target of 28 miles by 2017.

Findings. Accordingly, it is found that this TCM concerning bicycle paths has been met because:

- Over 21 miles of bicycle paths are programmed for the years 2006-2011; and,
- The Financially Constrained System of the RTP shows an additional 8.11 miles of bicycle paths to be constructed by 2017; and,
- The total miles planned to be constructed by 2017 is 29.22 miles, which exceeds the TCM of 28 miles by the year 2017.

> **"3. Pedestrian Paths**
> *Jurisdictions and government agencies shall program at least nine miles of pedestrian paths in mixed use centers between the years 2006 through 2017, including the funding of a cumulative average of 1½ miles in each biennium from all sources in each MTIP. Facilities subject to this TCM must be in addition to those required for expansion or reconstruction projects under ORS 366.514.except where such expansion or reconstruction is located within a mixed-use center."*

Compliance Actions - Pedestrian Projects

As shown in Table 8, the region has allocated funding for at least 6.5 miles of new pedestrian improvements in mixed-use centers for 2006-2011.[2] This represents an average of 2.17 miles per biennium, 44% above the 1.5 mile per biennium target for new pedestrian improvements.

Table 8. MTIP 2006-09 Pedestrian Projects[3]

2006-2007 Funding		2008-2009 Funding	
St John's Ped/Freight Improvement	0.45 mi	Forest Grove TC*	0.65 mi
Hillsboro Regional Center Ped Project	1.77 mi	Milwaukie TC	0.26 mi
Central Eastside Bridgeheads	0.10 mi	SE 92nd Ave	0.38 mi
Hwy 224 Preservation (99E to I-205)	0.15 mi	Gresham MAX trail	0.40 mi
Total 2006-2007	2.37 mi	Total 2008-2009	1.69 mi

2010-2011 Funding	
Hood Street: Se Division St to SE Powell Blvd	0.18 mi
Foster-Woodstock: SE 87th St to SE 101st St	1.13 mi
East Baseline St, Cornelius: 10th Ave to 19th Ave	0.18 mi
East Burnside: 3rd Ave to 14th Ave	1.1 mi
Total 2010-2011	2.59 mi

Total 2006-2011 6.65 mi

*Note Scope of Forest Grove TC project reduced due to cost constraint

Additionally, the RTP Financially Constrained list,includes several bicycle projects to be completed by 2017. A sample is provided below.

Table 9. RTP Financially Constrained System Pedestrian Projects

SW Capitol Hwy Ped Improvements (Multnomah to Taylor's Ferry)	1.0 mi
SE Jackson and SE Main	0.2 mi
Washington Sq RC greenbelt shared us path	0.5 mi
Kellogg Creek Dam Removal/river access	0.1 mi
Mcloughlin Blvd phase 2 (Duens Dr to Clackamas River bridge)	0.5 mi
Ped to Max: Hood St (Division to Powell)	0.5 mi
Total:	**2.8 mi**

2 Mileage counts are derived from GIS measurements based on project descriptions.
3 The MAX multi-use path project is 2.32 miles total, with 1.90 miles being applied to the bike/trail TCM target, and.40 miles counting toward TCM pedestrian target, as it is located in the Gresham regional and Rockwood town centers.

Adding this mileage to the 6.65 miles from the 2006-2011 MTIP allocations totals 9.45miles, which exceeds the target of 9 miles by 2017.

Findings. Accordingly, it is found that this TCM concerning pedestrian projects has been met because:

- a total of 6.65 miles of pedestrian paths are programmed for the period 2006-2011; and,
- a total of an additional 2.8 miles of pedestrian paths are included in the Financially Constrained System of the RTP by the year 2017; and
- the total of programmed and planned pedestrian paths between 2006 and 2017 is 9.45 miles, which exceeds the TCM of 9 miles by the year 2017. (The documentation of this was stopped once it could be shown that the target could be met and in no case were projects beyond the year 2015 counted in the tally)

Overall TCM findings

The above facts and findings for each TCM demonstrate the timely completion or implementation of each TCM. In addition, the above examination of each TCM demonstrates that there are no obstacles that interfere with the implementation of any TCM in the current or proposed CO maintenance plans, including no obstacles in the MTIP or RTP as proposed to be adopted.

Accordingly, it is found that the criteria and procedures of *Criteria and Procedures: Timely Implementation of TCMs*, (*OAR 340-252-0140 and 40 CFR 93.113*) have been met.

2.2.6 Currently conforming transportation plan and TIP (OAR 340-252-0150 and 40 CFR 93.114)

This section concerns projects, and that only one conforming transportation plan or TIP may exist at any one time and the old conformity determination for a transportation plan or TIP expires once the new one is approved. Potentially a project could lose its conformity determination if not built and not carried over to the new conformity determination.

The 2035 RTP is proposed to be adopted, replacing the 2004 RTP and the air quality conformity determination for the 2035 is the subject of this document.

The 2008-2011 MTIP, upon conformity determination approval, will allow for three years of transportation improvements to proceed, consistent with the financially constrained system of the 2035 RTP. The 2008-2011 MTIP will replace the 2006-2009 MTIP.

2.2.7 Motor Vehicle Emissions Budget (OAR 340-252-0190 and 40 CFR 93.118)

This section requires that the projected emissions from the entire transportation system not exceed the approved motor vehicle emission budget for each year that an emission budget has been established. The EPA found that the motor vehicle emission budgets in the *Second Portland Area Carbon Monoxide Maintenance Plan* are adequate for transportation conformity purposes (see Appendix D)

These EPA approved budgets for wintertime Carbon Monoxide levels from all on-road transportation sources are as follows:

2005 - 1,238, 575 pounds per day (provided for information only)
2010 – 1,003,578 pounds per day
2017 – 1,181,341 pounds per day (2017 is the proposed end year of the Maintenance Plan)
2025 – same as 2017
2035 – same as 2017

As is shown below, none of these budgets have been exceeded.

Using the Metro travel forecast model, the transportation network capacity that would result with the implementation of the financially constrained system of the 2035 RTP and the specific timing of projects included in the proposed 2008-2011 MTIP, as consistent with the financially constrained 2035 RTP, the forecasts of population, housing, employment and the use of the MOBILE6.2 air quality model with the assumptions as listed above, the following results, when comparing these to the motor vehicle emission budgets, is found:

Table 6. Carbon Monoxide Emission Results Compared with Budgets

Year	**Carbon Monoxide Motor Vehicle Emission Budgets** **(Budgets are Maximum Allowed Emissions)** (pounds/ winter day)	**Forecast Carbon Monoxide Motor Vehicle Emissions** (pounds/ winter day)
2007	N/A	935,394
2010	1,033,578	856,054
2017	1,181,341	670,926
2025	1,181,341	801,203
2035	1,181,341	822,596

Accordingly, based on these model results, the other data provided in this document and on documents in the appendices, it is concluded that the proposed 2008-2011 MTIP meets the transportation air quality conformity determination requirements and standards.

2.3 REGIONAL EMISSIONS ANALYSIS & METHODOLOGY

2.3.1 Transportation Networks

The projects listed in Appendix A are those assumed for the region. This list includes the project name, location, project description, whether it was included in the air quality analysis (for example, some of the projects are exempt, like safety improvements that do not include capacity improvements) and the year that the project was assumed to be completed and therefore added to the system modeled.

2.3.2 Procedures for Determining Regional Transportation-Related Emissions (OAR 340-252-0230 and 40 CFR 93.122)

This section requires that the analysis be performed for all "regionally significant" projects. Metro's approach has been to attempt to model any improvement that can be modeled. This approach helps ensure that any capacity increases that may be involved in an improvement are included in the analysis and that all possible consideration of improvements has been made.

This section also addresses the model assumptions and methods to be used. The Metro travel demand model was used in the first step of this analysis. Once the travel demand model has been run for a particular year, with the attendant assumptions about the transportation network improvements and capacities, transit service levels, jobs, housing and demographic characteristics, the miles traveled and the speeds at which the miles are traveled are estimated.

MOBILE6.2, the air quality model, is the second step taken to estimate air pollutant levels for the year that the transportation model was run. To run MOBILE6.2, several additional assumptions must be made. Following are the assumptions made for running MOBILE6.2

Table 7. MOBILE6.2 Input Assumptions

	Parameter	Details	Data Source
a.	Emission Model Version:	MOBILE6.2	EPA
b.	Emission Model Runs:	2007, 2017, 2035	EPA, DEQ
c.	Time Periods:	Seven - 2200hrs-0559; 0600-0659;0700-0859; 0900-1359; 1400-1459, 1800-1859 (PM shoulder); 1500-1759 and 1900-2159.	
d.	Pollutants Reported:	Carbon Monoxide	
e.	Vehicle Class:	As per MOBILE6.2	EPA
f.	Functional Class:	MOBILE6.2 default (freeways, arterials, local and ramp)	
g.	Temperatures:	Min, Max for January	OR DEQ
h.	VMT mix:	MOBILE6.2 default	
i.	Speed:	3-65 MPH	
j.	Vehicle Registration:	1999 fleet for 2000 run, all other runs using 2004 fleet, except for trips originating in Washington State which are provided through the SW Clean Air Agency.	OR DEQ / ODOT DMV
k.	I/M Program:	Assumes no oxygenated fuels and two Inspection and Maintenance tests depending on vehicle manufacture year - Basic and On-Board Diagnostic through the year 2017. Analysis beyond 2017 assumes no inspection and maintenance program as a more conservative assumption. However, DEQ has not determined whether inspection and maintenance will be required after 2017.	OR DEQ
l.	Reid Vapor Pressure:	13.6 – Jan.	OR DEQ

The transit network used for this analysis included the existing transit network as well as the improvements included in the financially constrained system of the RTP, which includes TriMet's Transit Investment Plan.

This section also provides for emission reduction credits for any transportation control measures (TCM) that may be implemented as long as timely implementation can be assured. As the analysis has demonstrated that the region's regional CO emission levels have been achieved at this time without the use of emission reduction credits, these credits have not been included in these calculations.

2.3.3 Exempt Projects (OAR 340-252-0270 and 40 CFR 93.126)

This section includes certain safety (railroad/highway crossings, hazard elimination program, etc.), mass transit (operating assistance to transit agencies, purchase of support vehicles, etc.) air quality (ride-sharing and van pooling promotion, bicycle and pedestrian facilities, etc.), unless the standing committee concurs that the project has potentially adverse emission impacts.

As noted in Appendix A, all projects that could be modeled were included in this conformity determination. However, most all of projects qualifying as an exempt project would not be included in the travel forecast model and this air quality analysis.

2.3.4 Projects Exempt from Regional Emissions Analyses (OAR 340-252-0280 and 40 CFR 93.127)

In addition to the list of exempt projects, certain projects are exempt from regional emissions analyses. These include intersection channelization projects, intersection signalization at individual intersections, changes in vertical and horizontal alignments and other projects that do not significantly affect the regional emission analysis (but which must have a local hot spot analysis to check on potential impact to the area directly around the project's location.)

As was noted in the section above, all possible improvements possible to be modeled in the travel forecast model were included.

2.3.5 Traffic Signal Synchronization Projects (OAR 340-252-0290 and 40 CFR 93.128)

Regionally significant traffic signal synchronization projects must be included as required by these sections of federal and state statutes. The literature suggests that throughput from such traffic signal synchronization projects can be increased by as much as ten percent. However, the Metro travel forecast model has been revised to allow only additional 50 vehicles per hour more capacity through intersections with traffic signal signalization projects than those without this feature. Analysis of existing or in construction projects will provide better information about the actual capacity increase that such improvements provide. Recent traffic signal synchronization changes include:

- a joint City of Gresham/Multnomah County adaptive (real-time) traffic signal control system on Burnside Road between Eastman Parkway and Powell Boulevard; (2006) (An assessment of effectiveness of this project is underway)
- a Portland Central City signal re-timing of 150 intersections (2005)
- an incidence responsive (for example an accident on I-205) traffic signal system on 82nd Avenue (being completed). This approach was also completed for Barbur Boulevard.

As future air quality conformity determinations are made, the Metro travel forecast model will continue to improve its modeling by including consideration of traffic signal synchronization projects.

APPENDIX A – *Project List*

DRAFT
2035 Regional Transportation Plan Project List

Metro Project ID	Nominating Agency	Facility Owner / Operator	Other Sponsors	Project/Program Name	Project Start Location (Identify starting point of project)	Project End Location (Identify terminus of project)	Description	Estimated Cost ($2007)	Estimated Cost (YOE $)	Time Period	2040 Land Use
10855	Metro			Regional TOD Implementation Program	2040 Centers, Stations Areas and Corridors	2041 Centers, Stations Areas and Corridors	Metro, the government of the Portland metropolitan region responsible for growth management, is implementing a highly integrated land use and transportation plan calling for substantial amounts of the region's growth to occur in medium- to high-density mixed-use, walkable urban "centers" linked by high quality transit service. TOD Program funding helps cause the construction of "transit villages" and other catalyst projects by the private sector. These projects mix of moderate- to high-intensity land uses, are physically or functionally connection to the transit system (including MAX light rail, Portland streetcar, commuter rail and high frequency bus), and create a walkable communities through design features that reinforce pedestrian relationships and scale.	$67,500,000	$121,793,510	2008 - 2035	Other
10810	THPRD	THPRD	Metro	Westside Trail (Regional)	Hwy 26	THPRD Nature Park	To design and construct a regional trail multi-use segment in a utility corridor, 10'-12' wide paved.	$4,000,000	$4,866,612	2008-2017	Other
10000	Clackamas Co.	Clackamas Co.		Linwood/Harmony Rd./ Lake Rd. Overcrossing/ Intersection	Linwood/Harmony/ Lake Rd.		Add NB right turn lane, add EB right turn lane, add WB left turn lane and grade separate UPRR.	$20,000,000	$24,333,058	2008-2017	Regional center
10001	Clackamas Co.	ODOT		Johnson Creek Blvd. Interchange Improvements	JCB/I-205 interchange		Add loop ramp and NB on-ramp; realign SB off-ramp.	$9,800,000	$11,923,198	2008-2017	Employment area
10003	Clackamas Co.	Clackamas Co.		Harmony Rd. Improvements	Hwy 224	SE 84th Ave.	Widen to five lanes, add bike lanes and sidewalks.	$23,400,000	$28,469,678	2008-2017	Regional center
10004	Clackamas Co.	Clackamas Co.		Otty Rd. Improvements	82nd Ave.	92nd Ave.	Widen, add turn lanes, sidewalks, on-street parking, central median and landscaping.	$7,340,000	$8,930,232	2008-2017	Employment area
10008	Clackamas Co.	Clackamas Co.		79th Ave. Extension	Johnson Creek Blvd.	King Rd.	Build N-S collector west of 82nd Ave..	$12,780,000	$15,548,824	2008-2017	Employment area
10009	Clackamas Co.	Clackamas Co.		Fuller Rd. Improvements	Otty Rd.	Johnson Creek Blvd.	Widen street and add turn lanes, sidewalks, on-street parking, central median and landscaping.	$4,000,000	$4,866,612	2008-2017	Employment area
10013	Clackamas Co.	Clackamas Co.		Boyer Dr. Extension	82nd Ave.	Fuller Rd.	New two-lane extension.	$2,520,000	$3,065,965	2008-2017	Employment area
10018	Clackamas Co.	Clackamas Co.		82nd Ave. Blvd. Design Improvements	Monterey Ave.	Sunnybrook Blvd.	Complete boulevard design improvements.	$5,400,000	$6,569,926	2008-2017	Regional center
10019	Clackamas Co.	Clackamas Co.		West Sunnybrook Rd. Extension	82nd Ave.	Harmony Rd.	Construct three-lane extension.	$6,970,000	$8,480,071	2008-2017	Regional center
10020	Clackamas Co.	Clackamas Co.		Clackamas County ITS Plan	Countywide		Deploy traffic responsive signal timing, ramp metering, traffic management equipment for better routing of traffic during incidents along the three key ODOT corridors - I-205, I-5, 99E. Install signal controller upgrades and update county ITS plan.	$6,500,000	$7,908,244	2008-2017	Regional center
10021	Clackamas Co.	Clackamas Co.		102nd Ave./Industrial Way Improvements	Hwy 212	Lawnfield Rd.	Extend Industrial Way from Mather Road to Lawnfield Road.	$8,570,000	$10,426,715	2008-2017	Industrial area
10025	Clackamas Co.	Clackamas Co.	Oregon City	Beavercreek Rd. Improvements Phase 2	Hwy 213	Clackamas Community College	Widen to 5 lanes with sidewalks and bike lanes.	$5,800,000	$7,056,587	2008-2017	Industrial area
10026	Clackamas Co.	Clackamas Co.	Oregon City	Beavercreek Rd. Improvements Phase 3	Clackamas Community College	Urban Growth Boundary	Widen to 4 lanes with sidewalks and bike lanes.	$12,920,000	$15,719,155	2008-2017	Industrial area
10033	Clackamas Co.	Clackamas Co.	Happy Valley	172nd Ave. Improvements	Foster Rd./190th	Hwy. 212	Widen to five lanes including new bridge. Construct connection to 190th.	$38,480,000	$46,816,804	2008-2017	Industrial area
10042	Clackamas Co.	Clackamas Co.		97th realignment	Lawnfield Rd.	Sunnybrook Blvd.	Realign the existing Lawnfield Rd. Road from 98th to 97th, reduce the grade from 18% to 8%.	$20,650,000	$25,123,882	2008-2017	Industrial area
10047	Clackamas Co.	Clackamas Co.	Oregon City	Holcomb Blvd.	Abernethy Rd.	Bradley Rd.	Reconstruct & widen (urban).	$22,790,000	$27,727,520	2008-2017	Neighborhood
10052	Clackamas Co.	Clackamas Co.		Mather Rd.	SE 82nd Dr.	Industrial Way	Extend Mather Rd. across railroad to SE 82nd Dr.	$17,250,000	$20,987,263	2008-2017	Neighborhood
10057	Clackamas Co.	Clackamas Co.	Oregon City	Redland Rd.	Abernethy Rd.	UGB	Turn lanes, bike lanes, sidewalks, intersection improvements, bridge replacements (2).	$17,060,000	$20,756,099	2008-2017	Town center
10066	Clackamas Co.	Clackamas Co.		92nd/Johnson Creek Blvd. intersection	92nd/JCB intersection		Add turn lanes on 92nd (northbound left at JCB, and northbound right at Idleman).	$1,000,000	$1,216,653	2008-2017	Employment area
10067	North Clackamas PRD	Clackamas Co.	Clackamas Co.	Phillips Creek Trail	I-205 Trail	N Clackamas Greenway	Build trail through Clackamas Town Center for access to light rail.	$2,270,000	$2,761,802	2008-2017	2040 corridor
10069	Gresham	Gresham	Happy Valley	East Buttes Powerline Trail	Springwater/Gresham-Fairview trail	Clackamas Greenway	Build trail linking Gresham and the Clackamas River.	$1,900,000	$2,311,641	2008-2017	2040 corridor
10070	North Clackamas PRD		Happy Valley	Mt. Scott Creek Trail	Mt. Talbert	Springwater corridor	Build trail to Mt. Talbert regional park.	$5,100,000	$6,204,930	2008-2017	2040 corridor
10071	North Clackamas PRD		Happy Valley	Scouter's Mt. Trail	Springwater/Powell Butte	Springwater corridor	Build trail to/on Scouter's Mt.	$9,070,000	$11,035,042	2008-2017	2040 corridor
10072	Damascus			Sunnyside Rd. Frequent Bus	Clackamas TC	Damascus TC	Construct improvements that enhance Frequent bus service.	$1,000,000	$1,216,653	2008-2017	Town center
10073	Damascus	ODOT		Hwy.-212 intersections	SE 162nd	Anderson Rd.	Existing Highway 212 remains two lanes with turn pockets from 162nd Ave. to Anderson Road south of limited access parkway. Design elements to be included are sidewalks, bike lanes, and a landscaped buffer.	$5,970,000	$7,263,418	2008-2017	Industrial area
10081	Happy Valley		Clackamas Co.	122nd/129th Improvements	Sunnyside Rd.	King Rd.	Widen to three lanes, smooth curves.	$13,360,000	$16,254,483	2008-2017	Town center
10092	Wilsonville		Metro	Tonquin Trail	Washington/Clackamas County line	Boones Ferry Landing	Shared use path with some on-street portions.	$2,000,000	$2,433,306	2008-2017	Other

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10095	Milwaukie	Milwaukie		Railroad Ave. Bike/Ped Improvement	37th Ave.	Linwood Ave.	Construct sidewalks and bike lanes. Key E-W connection parallel route for Highway 224 mobility corridor.	$21,500,000	$26,158,037	2008-2017	Town center
10099	Milwaukie	Milwaukie		Monroe Bike Boulevard	21st Ave.	Linwood Ave.	Minor widening to allow shared lanes, improve signage, striping. Bicycle Boulevard treatment.	$2,400,000	$2,919,967	2008-2017	Town center
10100	Milwaukie	Milwaukie		Downtown Station Area Streetscaping (21st & Main)	TBD	TBD	Reconstruct streetscape, including street trees, rain gardens, ADA ramps, street furniture, parking meters, and pedestrian-scale lighting.	$6,700,000	$8,151,574	2008-2017	Station community
10101	Milwaukie	Milwaukie		Kellogg Creek Dam Removal/Bridge Replacement/Milwaukie TC River Access Improvements	Washington	Adams	Remove dam and bridge; replace bridge with full bike and pedestrian facilities and a multi-use path undercrossing.	$12,400,000	$15,086,496	2008-2017	Town center
10104	Milwaukie	Milwaukie	North Clackamas PRD	17th Ave. Trolley Trail Connector	17th Ave. & McLoughlin	17th Ave. & Ochoco	Construct sidewalks; improve bus stops; and correct gaps in bike lanes on 17th Ave. to provide connection between Trolley Trail and Springwater Corridor. Alternative alignment: multi-use path along Johnson Creek from Lava Drive to Ochoco.	$3,200,000	$3,893,289	2008-2017	Town center
10109	Milwaukie	Milwaukie		Kellogg Creek Trail	99-E	Miramonte Lodge	Construct low-impact trail-type sidewalk.	$3,100,000	$3,771,624	2008-2017	Town center
10110	Milwaukie	Milwaukie		Milwaukie TC reconstruction (including layover improvements)	Downtown TC	Milwaukie Park & Ride	Construct new bus shelters/stops at Transit Center, consolidating multiple bus stops. Build bus layover facility at Milwaukie Park and Ride.	$4,900,000	$5,961,599	2008-2017	Intermodal facility
10125	Oregon City	Oregon City		Molalla Ave. Streetscape Improvements Phase 4	Beavercreek	Hwy. 213	Streetscape improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities.	$8,000,000	$9,733,223	2008-2017	Regional center
10127	West Linn	ODOT		Hwy. 43 Improvements	Holly St.	Arbor Dr.	Although the project is now in the conceptual design stage (to be completed by June 30, 2007), the project should consist of roadway improvements such as widening, installation of medians, turn lanes, street trees, signal interconnections, bike lanes.	$21,400,000	$26,036,372	2008-2017	Town center
10128	West Linn	West Linn		Willamette Falls Dr./bicycle lanes and streetlights	Hwy. 43	10th St.	Widen street to provide bike lanes and sidewalks on a narrow roadway. This will provide a direct connection between two town center areas. Bicycle lanes will be 6' wide adjacent to 12' wide travel lanes. The addition of streetlights to this roadway will.	$2,500,000	$3,041,632	2008-2017	Station community
10130	Wilsonville	Wilsonville		Kinsman Rd. Extension from Barber St. to Boeckman Rd.	Barber St.	Boeckman Rd.	Extend 3 lanes with sidewalks and bike lanes.	$5,750,000	$6,995,754	2008-2017	Employment area
10131	Wilsonville	Wilsonville		Tooze Rd. Improvements	110th Ave.	Grahams Ferry Rd.	Widen Tooze Rd to 3 lanes, add bike/pedestrian connections to regional trail system.	$3,800,000	$4,623,281	2008-2017	Neighborhood
10132	Wilsonville	Wilsonville		Boeckman Rd./I-5 Overcrossing Improvements	Boberg Rd.	Parkway Ave.	Widen Boeckman Road bridge over I-5 to 3 lanes. Add bike/pedestrian connections to regional trail system.	$13,600,000	$16,546,479	2008-2017	Intermodal facility
10133	Wilsonville	Wilsonville	Metro	French Prairie Bicycle/Pedestrian Bridge	Boones Ferry Rd.	Butteville Rd..	New bicycle/pedestrian/emergency vehicle only bridge crossing the Willamette River.	$15,000,000	$18,249,794	2008-2017	Other
10134	Wilsonville	Wilsonville	Clackamas Co.	SW 65th, Elligsen Rd. and Stafford Rd. Intersection Improvements	Intersection of SW 65th, Elligsen Rd. and Stafford Rd.	Intersection of SW 65th, Elligsen Rd. and Stafford Rd.	Currently there are two intersections with a dangerous grade difference and within 100 ft of one another. Combining them into one or the construction of a round-about will help with safety and navigability concerns.	$1,000,000	$1,216,653	2008-2017	Other
10135	West Linn	West Linn		19th St. Improvements	Blankenship Rd.	Willamette Falls Dr.	Improvements to include curb, gutter, pavement widening and sidewalks.	$1,200,000	$1,459,983	2008-2017	Town center
10137	Damascus	Damascus		Multi-Use Local/Regional Trail and PRT Study	Damascus	N/A	Study for a multi-use path for bikes, pedestrians, horses that provides local access and connects with Happy Valley and Gresham. Study will also evaluate potential for personal rapid transit.	$2,000,000	$2,433,306	2008-2017	Town center
10141	Oregon City	ODOT		I-205/Hwy. 213 Interchange Phase 1	Redland Rd.	I-205	Grade separate SB Hwy. 213 at Washington Street and add a northbound lane to Hwy. 213 from just south of Washington Street to the I-205 on-ramp. Reconstruct I-205 SB off-ramp to Hwy. 213 to provide more storage and enhance freeway operations and safety.	$22,000,000	$26,766,364	2008-2017	Regional center
10146	Oregon City	ODOT		McLoughlin Blvd. Improvements - Phase 2	Dunes Dr.	Clackamas River Bridge	Complete boulevard and gateway improvements.	$4,000,000	$4,866,612	2008-2017	Regional center
10148	Oregon City	Oregon City		Oregon City Loop Trail	Beavercreek Rd.	Hwy 213	Regional trail would generally follow the Oregon City UGB on a collection of local roads, through new development, along Powerline right-of-way, and down the bluff to link up with the Promenade in downtown Oregon City	$3,000,000	$3,649,959	2008-2017	Neighborhood
10149	Oregon City	Oregon City		Beaver Lake Trail	Clackamas Community College	Oregon City UGB	Regional trail would travel from Clackamas Community College through the Oregon City High School campus to the airstrip area. The trail would skirt the golf course area and continue to Beaver Lake.	$500,000	$608,326	2008-2017	Employment area
10150	Oregon City	Oregon City		Barlow Rd. Trail	Abernethy Rd.	Oregon City limits	Regional trail would follow the perceptive alignment of the historic Barlow Road from Abernethy Green to the Oregon City UGB. The trail would primarily utilize existing and proposed roadways.	$1,000,000	$1,216,653	2008-2017	Regional center
10153	Wilsonville	Wilsonville		Barber St. Extension from Kinsman Rd. to Villebois Village	Kinsman Rd.	Villebois Village	Extend 3 lanes with sidewalks and bike lanes.	$8,900,000	$10,828,211	2008-2017	Employment area

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10154	Wilsonville	ODOT	ODOT	Wilsonville Rd./I-5 Interchange Improvements - Setback Abutments & Widen Wilsonville Rd.	Town Center Loop W	Boones Ferry Rd.	Provide additional left-turn lanes, setback abutments, improves signal synchronization, fixes sight distance problems, and provides for enhanced bike/pad safety.	$11,000,000	$13,383,182	2008-2017	Town center
10155	Wilsonville	ODOT		Wilsonville Rd./I-5 Interchange Improvements - On/Off Ramps	N. of Interchange	S. of Interchange	Widen and lengthen on/off ramps.	$12,000,000	$14,599,835	2008-2017	Town center
10158	ODOT			I-5 Northbound Off Ramp at SW Macadam	I-5	I-405	Construct new off-ramp at NB I-5 to NB Macadam Ave and provide safety and modernization improvements to I-5 S.	$40,000,000	$48,666,116	2008-2017	Portland Central City
10159	Portland		Metro	Springwater [Trail Connection] - Sellwood Gap	SE Umatilla	SE 19th Ave.	Construct trail-with-rail shared use path between Springwater on the Willamette and Springwater Three Bridges.	$3,032,411	$3,689,392	2008-2017	Main street
10160	Portland	ODOT		Lloyd District Access Improvements	I-5		Add traffic signals and improve intersections at NE 2nd and Broadway and NE 2nd and Weidler Streets.	$998,243	$1,214,515	2008-2017	
10162	Portland			Willamette Greenway Trail - South Waterfront	Marquam Bridge (overhead)	SW Lowell	Provide two paths in order to separate bicyclists from pedestrians in remaining gaps (Marquam Bridge to SW Gibbs, SW Lowell to SW Lane, Benz Springs) of South Waterfront's Willamette Greenway trail.	$2,650,000	$3,224,130	2008-2017	Town center
10163	Portland	ODOT		I-5 at Gibbs, SW: Pedestrian/Bike Overcrossing		I-5/SW Gibbs Bridge	Construct a bike and pedestrian bridge of I-5 at SW Gibbs to connect the Corbett-Terwilliger-Lair Hill neighborhood to North Macadam.	$12,259,000	$14,914,948	2008-2017	
10164	Portland			South Portal, Phase I & II	Intersection Bancroft/Hood/Macadam	Bancroft/Hood/Macadam	Improve SW Bancroft, SW Moody and SW Bond Streets.	$57,330,684	$69,751,543	2008-2017	Portland Central City
10165	Portland			Moody/Bond Ave, SW (Sheridan to Gibbs)	River Parkway	SW Bancroft	Five lane street improvement from SW Sheridan to SW Gibbs Street.	$18,834,515	$22,915,067	2008-2017	Portland Central City
10169	Portland			Burnside/Couch, East [Blvd/Streetscape]	E 12th	Burnside Bridge	Implements a one-way couplet design including new traffic signals, widened sidewalks, curb extensions, bike lanes on-street parking and street trees.	$23,908,393	$29,088,216	2008-2017	Portland Central City
10171	Portland			Burnside/Couch, West [Blvd/Streetscape]	Burnside Bridge	W 15th	Implements a one-way couplet design including new traffic signals, widened sidewalks, curb extensions, bike lanes on-street parking and street trees.	$75,895,353	$92,338,302	2008-2017	Portland Central City
10174	Portland			Going, N (Interstate - Greeley): ITS	Interstate	Greeley	Install needed ITS infrastructure (communication network, new traffic controllers, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system.	$950,024	$1,155,849	2008-2017	Industrial/Employment area
10175	Portland/ ODOT			Yeon/St. Helens, NW (US 30): ITS	NW Yeon/St. Helens		Install needed ITS infrastructure (communication network, new traffic controllers, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system.	$885,499	$1,077,345	2008-2017	Industrial/Employment area
10178	Portland			Going St Bridge, N: Seismic Retrofit	Going St Overpass	n/a	Seismic retrofit project will include work to both the substructure and superstructure to help minimize the risk of a structural collapse in a major earthquake.	$4,000,000	$4,866,612	2008-2017	Industrial/Employment area
10182	Portland/ODOT			St. Johns Pedestrian District, N			Enhance pedestrian access to transit, improve safety, and enhance the streetscape such as better lighting and crossings. Improvements including realigning the "ivy" island, curb extensions, a new traffic signal at Richmond/Lombard, and pedestrian connections between St. Johns and the riverfront based on the St. Johns/Lombard Plan.	$5,000,000	$6,083,265	2008-2017	Town Center, Main Street or Station Community
10185	Portland			Foster & Woodstock, SE (87th - 94th): Street Improvements, Phase I	SE 87th	SE 94th	Implement Lents Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting, increased on-street parking.	$13,812,000	$16,804,410	2008-2017	Town Center, Main Street or Station Community
10186	Portland			Foster & Woodstock, SE (94th - 101st): Street Improvements, Phase II	SE 94th	SE 101st	Implement Lents Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, and street lighting.	$11,510,000	$14,003,675	2008-2017	Town Center, Main Street or Station Community
10187	Portland			Foster Rd., SE (82nd - 87th): Lents Town Center Street Improvements	SE 82nd	SE 87th	Implement Lents Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting, and on-street parking as appropriate.	$4,625,000	$5,627,020	2008-2017	Town Center, Main Street or Station Community
10189	Portland			Capitol Hwy, SW	SW Multnomah Blvd	SW Taylors Ferry	Improve SW Capitol Highway from SW Multnomah Boulevard to SW Taylors Ferry Road per the 1996 Capitol Highway Plan.	$9,613,958	$11,696,850	2008-2017	Town Center, Main Street or Station Community
10190	Portland			23rd Ave., NW (Lovejoy - Burnside): Rd. Reconstruction	NW Lovejoy	W Burnside	Rebuild street.	$3,350,000	$4,075,787	2008-2017	Town Center, Main Street or Station Community
10191	Portland			Garden Home Rd., SW (Capitol Hwy - Multnomah): Multi-modal Improvements	SW Capitol Hwy	SW Multnomah Blvd	Improve and signalize the intersection at SW Garden Home and SW Multnomah Blvd.	$1,931,033	$2,349,397	2008-2017	

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10192	Portland			Division Streetscape and Reconstruction	SE 6th Ave. SE 39th Ave.	SE 39th Ave.	The project will design and build streetscape and transportation improvements between SE 12th Ave and SE 39th Ave, complete base repair and pavement reconstruction between SE 6th Ave and SE 10th Ave, and grind and overlay asphalt in the area between SE 10th Ave and SE 39th Ave.	$5,848,135	$7,115,150	2008-2017	
10194	Portland			Killingsworth, N (Interstate - MLK Jr Blvd): Street Improvements	N Interstate	MLK Jr Blvd	Construct street improvements to improve pedestrian connections to Interstate MAX LRT and to establish a main street character promoting pedestrian-oriented activities. Commentary: Update project to reflect recommendations in the Killingsworth Street Improvements Planning Project.	$4,900,000	$5,961,599	2008-2017	Town Center, Main Street or Station Community
10201	Portland			102nd Ave., NE (Weidler - Glisan): Gateway Plan District Multi-modal Improvements, Phase I	NE Weidler	NE Glisan	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.	$3,234,000	$3,934,655	2008-2017	Regional center
10202	Portland			102nd Ave, NE/SE (Glisan - Stark): Gateway Plan District Multi-modal Improvements, Phase II	NE Glisan	SE Market	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting and new bicycle facilities.	$2,137,561	$2,600,670	2008-2017	Regional center
10204	Portland			Gateway Regional Center, Local and Collector Streets	NE Weidler/97th	NE Glisan/102nd	High priority local and collector street and pedestrian improvements in the Gateway Regional Center.	$32,648,540	$39,721,941	2008-2017	Regional center
10206	Portland			Marine Drive bike lanes 6th to 28th & off-street trail gaps between I-5 and 185th	I-5	NE 185th Ave.	Close gaps in Marine Dr bike lanes (NE 6th to 28th);and trail (Bridgeton levee & one connector, 28th to 33rd, 112th to 122nd, gaps near 185th)	$2,130,835	$2,592,487	2008-2017	Industrial area
10208	Portland		Port	MLK O-Xing/Turn Lanes (Columbia-Lombard)	Intersections of MLK and NE Columbia Blvd/Lombard		Intersection and signalization improvements with right turn lane.	$2,228,909	$2,711,809	2008-2017	Industrial/Employment area
10209	Portland		Port	92nd Dr. (Columbia Slough to Alderwood)	Columbia Slough	NE Alderwood	Improve NE 92nd Drive from Columbia Slough to Alderwood Rd.	$2,406,547	$2,927,932	2008-2017	
10210	Portland		Port	47th, NE (Columbia - Cornfoot): Roadway & Intersection Improvements	NE 47th	NE Columbia Blvd	Widen and reconfigure intersections to better facilitate truck turning movements to the cargo area located within the airport area. Project includes sidewalk and bikeway improvements.	$5,541,678	$6,742,299	2008-2017	Industrial/Employment area
10212	Portland			Airport Way/122nd, NE: Intersection Improvement	NE Airport Way/122nd		Add northbound left turn lane, modify traffic signal, and reconstruct island.	$1,100,000	$1,338,318	2008-2017	Industrial/Employment area
10213	Port/ Portland			Airport Way, NE (I-205 to NE 158th Ave.): ITS	I-205	NE 158th	Install needed ITS infrastructure (communication network, new traffic controllers, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system.	$278,251	$338,535	2008-2017	Industrial/Employment area
10214	Portland/ ODOT			Lombard, N (Rivergate - to T-6): Multi-modal Improvements	Rivergate	T-6	Widen N Lombard to include two travel lanes, a non-continuous center turn land, medians, bike lanes, sidewalks and planting strips.	$34,517,517	$41,995,837	2008-2017	Industrial/Employment area
10215	Portland			Foster Rd., SE (136th - Jenne): Multi-modal Improvements	SE 136th	SE Jenne Rd.	Widen street to three lanes to provide two travel lanes, continuous turn lane, bike lanes, sidewalk, and drainage.	$16,963,856	$20,639,125	2008-2017	
10217	Region			Lombard at Columbia Slough, N: Overcrossing	N Lombard/Columbia Slough Overcrossing		Add sidewalk and bike lanes to strengthened bridge.	$9,767,000	$11,883,049	2008-2017	
10218	Portland			Burgard-Lombard, N: Street Improvements	Intersection of N Burgard/Columbia	UPRR Bridge on N. Lombard	From UPRR Bridge to N Columbia Blvd. Widen street to include 2 12-foot travel lanes, continuous left turn lane, bike lanes and sidewalk.	$24,884,000	$30,275,191	2008-2017	
10228	ODOT/ Portland/ Port			82nd Ave./Columbia, NE: Intersection Improvements	Intersection of NE 82nd/Columbia Blvd		Widen and reconfigure intersection.	$3,408,000	$4,146,353	2008-2017	
10229	Portland			Columbia Blvd./Portland Rd., N: Intersection Improvements	Intersection of Columbia Blvd/Portland Rd.		Redesign intersection.	$1,214,000	$1,477,017	2008-2017	
10232	Portland			Flanders, NW (Steel Bridge to Westover): Bicycle Facility	Steel Bridge	NW Westover	Add bike boulevard from NW 24th Ave to the Steel Bridge, new bike/pedestrian bridge over I-405 on Flanders, connections to bikeways on Vista, 18th, 14th, 13th, Broadway, 3rd, 2nd, Glisan and Everett.	$2,392,337	$2,910,644	2008-2017	
10234	Portland		Metro	Columbia Slough Trail system	Confluence of Columbia Slough and North Slough	NE 158th Ave.	Close gaps in Columbia Slough Trail: North Slough to North Portland Rd; Landfill to Pier Park; I-5 to NE Elrod; NE Elrod to NE 82nd Ave; NE 82nd Ave to 92nd Ave; I-205 to approx. NE 128th; NE 145th to 158th, Peninsula Canal, Cross-Levee, Delta Park Trail.	$8,460,000	$10,292,884	2008-2017	Intermodal facility
10334	Portland			11th/13th, NE (at Columbia Blvd.): Crossing Elimination	NE Columbia Blvd	NE Lombard	If feasible, eliminate the at-grade crossing and improve alternate roadway access.	$1,000,000	$1,216,653	2008-2017	
10336	Portland			Alderwood/Columbia Blvd/Cully, NE: Intersection Improvements	Intersection of NE Alderwood/Columbia Blvd/Cully		Reconstruct intersection to provide left turn pockets, enhancing turning radii and improving circulation for trucks serving expanding air cargo facilities south of Portland.	$1,460,000	$1,776,313	2008-2017	Industrial/Employment area
10343	Portland/ Port			West Hayden Crossing, N	N Marine Dr.	Hayden Island	New four-lane bridge between Marine Drive to Hayden Island.	$99,258,000	$120,762,534	2008-2017	Industrial/Employment area
10354	Portland			Fanno Creek Greenway (Red Electric) Trail	SW Dover near Multnomah County line	Willamette Park	Provide east-west route for pedestrians in cyclists in SW Portland that connects and extends the existing Fanno Creek Greenway Trail to Willamette Park.	$17,653,000	$21,477,574	2008-2017	Town center

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10355	Portland			North Portland Willamette Greenway Study	N Burlington Ave.	Steel Bridge	Study mostly off-street trail near the river for both bicycle and pedestrian commuting and recreational use.	$200,000	$243,331	2008-2017	Portland Central City
10357	Port of Portland			Channel Deepening	mouth of Columbia River	Portland/Vancouver harbor	Deepening the Columbia River channel to 43 feet between mouth of Columbia River and Portland/Vancouver Harbor.	$150,573,000	$183,195,077	2008-2017	Other
10358	Port of Portland			Airport Way Terminal Entrance Roadway Relocation	PDX Terminal Area		Relocate and widen Airport Way northerly at Terminal entrance (to be scoped by PDX Master Plan).	$12,818,000	$15,595,057	2008-2017	Industrial area
10360	Port of Portland			Airport Way Return and Exit Roadways	PDX Terminal Area		Relocate Airport Way exit roadway and construct new return roadway (Terminal Access Study, projects R4 and R5; to be scoped by PDX Master Plan).	$6,400,900	$7,787,674	2008-2017	Industrial area
10361	Port of Portland			Widen Airport Way West of 82nd	82nd Ave.	PDX Terminal	Widen Airport Way from terminal to 82nd Ave.	$8,588,400	$10,449,102	2008-2017	Industrial area
10362	Port of Portland			82nd Ave./Airport Way Grade Separation			Construct grade-separated overcrossing.	$92,000,000	$111,932,067	2008-2017	Industrial area
10363	Port of Portland			SW Quad Access	NE 33rd Ave.	SW Quad	Provide street access from 33rd Ave. into SW Quad.	$5,917,500	$7,199,544	2008-2017	Industrial area
10364	Port of Portland			PDX Light Rail Station/Track Realignment			Realign light rail track into terminal building.	$16,330,700	$19,868,794	2008-2017	Industrial area
10366	Port of Portland		Portland	Alderwood Rd. and Cornfoot Intersection Improvements			Add signals and/or improve turn lanes at Alderwood Rd/82nd Ave, Alderwood Rd/Cornfoot Rd, AirTrans Way/Cornfoot Rd.	$2,206,000	$2,683,936	2008-2017	Industrial area
10367	Port of Portland			CS/PIC Access Improvements			Intersection improvements (installation of stop signs, signalization and/or channelization) at Sandy Blvd/105th Ave, Airport Way/Holman St, Alderwood Rd/Holman St, Alderwood Rd/Cascades Pkwy.	$1,217,000	$1,480,667	2008-2017	Industrial area
10368	Port of Portland			PIC Ped/Bike Network			Construct bike and pedestrian facilities as shown in the CS/PIC Plan District.	$1,163,835	$1,415,983	2008-2017	Industrial area
10369	Port of Portland		Portland	Leadbetter St. Extension/Overcrossing			Complete Leadbetter St. loop to Marine Dr. (Pacific Gateway/T-6 intersection) and construct road bridge over rail line.	$11,203,600	$13,630,892	2008-2017	Industrial area
10370	Port of Portland			PDX ITS			Intelligent Transportation Systems in the PDX area.	$3,000,000	$3,649,959	2008-2017	Industrial area
10373	Port of Portland			Rivergate ITS			Intelligent Transportation System in Rivergate.	$480,000	$583,993	2008-2017	Industrial area
10375	Port of Portland		Portland	Cathedral Park Quiet Zone			Address rail switching noise related to the Toyota operations at T-4 by improving multiple public rail crossings in the St. Johns Cathedral Park area.	$5,198,900	$6,325,257	2008-2017	Industrial area
10376	Port of Portland			Columbia Blvd. Widening	60th Ave.	82nd Ave.	Widen Columbia Blvd. to five lanes between 60th Ave and 82nd Ave.	$14,859,000	$18,078,245	2008-2017	Industrial area
10377	Port of Portland			PSU ITS Expansion, incl. freight data repository			Expand PSU's existing web based ITS "count sensor" program beyond the freeway to some key arterials throughout the region. Create a repository of freight data (primarily truck data) from the region's Freight Data Collection project.	$0	$0	2008-2017	Industrial area
10378	Port of Portland			T-6 Internal Overcrossing	Marine Dr.	Terminal 6	Construct an elevated roadway between Marine Dr. and Terminal 6.	$3,649,084	$4,439,669	2008-2017	Industrial area
10380	Port of Portland			PDX Transportation Demand Management (TDM)			Implement strategies at PDX and PIC properties that reduce auto trips in the airport area. Programs to be undertaken with other area businesses/developers to maximize effectiveness; possible administration through a transportation management association.	$0	$0	2008-2017	Other
10382	Multnomah Co.	Multnomah Co.	Troutdale	Improve Stark St. to arterial standards by widening the existing 2 lanes to provide for 4 traffic lanes, a continuous left-turn lane, bike lanes, sidewalks, and intersection improvements.	257th Ave.	Troutdale Rd.	Upgrades road from rural 2 land facility to urban standards with sidewalks and bicycle lanes.	$3,150,000	$3,832,457	2008-2017	Other
10385	Multnomah Co.	Multnomah Co.	Troutdale	Reconstruct Halsey St.	238th Ave.	Historic Columbia River Hwy	Widen Halsey St to 3 lane arterial with center turn lane/median, sidewalk and bicycle lanes.	$3,600,000	$4,379,950	2008-2017	Town center
10386	Gresham & Multnomah County	Gresham & Multnomah County		Reconstruct Glisan St.	202nd Ave.	207th Ave.	Construct Glisan Street to arterial standards including bike lanes, sidewalks, two travel lanes in each direction, center turn lane/median and drainage improvements. South side of Glisan St is City of Gresham.	$9,842,749	$11,975,209	2008-2017	Employment area
10387	Multnomah Co.	Multnomah Co.	Wood Village	Reconstruct Arata Rd.	223rd Ave.	238th Ave.	Construct to 3 lane collector standards with center turn lane/median, sidewalks, bicycle lanes.	$2,300,000	$2,798,302	2008-2017	Town center
10388	Multnomah Co.	Multnomah Co.	Fairview	Reconstruct 223rd Ave.	Halsey St.	Sandy Blvd	Reconstruct 223rd Ave to major collector standards with 2 travel lanes, center turn lane/median, sidewalks and bicycle lanes. Requires reconstruction of RR bridge under another project.	$1,400,000	$1,703,314	2008-2017	Neighborhood
10392	Multnomah Co.		Port of Portland	Columbia/Cascade River District Projects	Various streets		Implement findings of traffic management plan.	$9,200,000	$11,193,207	2008-2017	Industrial area
10393	Multnomah Co.	Multnomah Co.	Fairview	Replace RR Over-crossing on 223rd Ave.	At I-84		Reconstruct railroad bridge on 223rd Ave, at I-84 to accommodate wider travel lanes, sidewalks and bike lanes.	$7,000,000	$8,516,570	2008-2017	Industrial area

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10397	Gresham		Multnomah Co.	Reconstruct 242nd Ave.	Stark St.	Glisan St.	Construct 242nd Ave to principal arterial standards with 4 travel lanes, center turn lane/median, sidewalks and bicycle lanes, and install traffic signal at 23rd St. Project is southern segment of 242nd Ave Connector. (West half of road is in Gresham).	$1,925,000	$2,342,057	2008-2017	Other
10398	Multnomah Co.	Multnomah Co.	Fairview	Wood Village Blvd Extension	Arata Rd.	Halsey St.	Construct new extension of Wood Village Blvd as a major collector with 2 travel lanes, center turn lane/median, sidewalks and bicycle lanes.	$1,573,000	$1,913,795	2008-2017	Town center
10400	Multnomah Co.	Multnomah Co.	Portland	Construct new bicycle/pedestrian facility on Morrison Bridge	East Bridge head	West bridge head	Existing sidewalk on bridge is narrow, not accessible to persons with disability and presents major obstacles to bicycle and pedestrian use. Project would provide a multi-use bicycle and pedestrian facility providing improved access for non-motorized travelers.	$2,100,000	$2,554,971	2008-2017	Portland Central City
10403	Multnomah Co.	Multnomah Co.	Troutdale	257th Ave. Pedestrian improvements at intersections and mid-block crossings	Stark St.	Cherry Park Rd. north	Improve sidewalks, crossings, lighting and bus stops.	$1,600,000	$1,946,645	2008-2017	2040 corridor
10404	Multnomah Co.	Multnomah Co.	Troutdale	Beaver Creek Culvert Replacement	Troutdale Rd.	Cochran Rd.	Replace culverts with fish friendly structures allowing for passage to federally endangered species	$6,000,000	$7,299,917	2008-2017	Other
10410	Multnomah Co.	Multnomah Co.	Portland	Broadway Bridge Rehabilitation			Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	$22,700,000	$27,618,021	2008-2017	Portland Central City
10411	Multnomah Co.	Multnomah Co.	Portland	Burnside Bridge Rehabilitation			Rehabilitate mechanical system, approach structure, corrosion control, phase 1and 2 seismic.	$41,600,000	$50,612,761	2008-2017	Portland Central City
10412	Multnomah Co.	Multnomah Co.	Portland	Morrison Bridge Rehabilitation			Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	$42,000,000	$51,099,422	2008-2017	Portland Central City
10413	Multnomah Co.	Multnomah Co.	Portland	Hawthorne Bridge Rehabilitation			Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	$13,300,000	$16,181,484	2008-2017	Portland Central City
10414	Multnomah Co.	Multnomah Co.	Portland	Sellwood Bridge Rehabilitation/Replacement			Implement results of alternatives analysis.	$25,100,000	$30,537,988	2008-2017	Main street
10419	Gresham	Gresham		Civic Neighborhood. LRT station plaza	Max line west of City Hall	728' to the northwest	Constructs new light rail station to max blue line.	$5,600,000	$6,813,256	2008-2017	Regional center
10421	Gresham	Gresham		Burnside Rd. Blvd Improvements	181st	197th	Complete boulevard improvements.	$7,873,990	$9,579,913	2008-2017	Town center
10423	Gresham	Gresham		Cleveland St. Reconstruction.	Powell	Burnside	Reconstructs street from Burnside to Powell.	$1,100,000	$1,338,318	2008-2017	Regional center
10428	Gresham	Gresham		257th Corridor Improvements	Division	Powell Valley Rd.	Brings to standards, adds pedestrian, bicycle facilities.	$8,623,103	$10,491,323	2008-2017	Regional center
10431	Gresham	Gresham		Highland/190th Rd. Widening	200' south of SW 11th	Ending at the intersection of Pleasant View Dr./SE 190th and Butler	Reconstruct and widen street to five lanes with sidewalks and bike lanes. Widen and determine the appropriate cross-section for Highland Drive and Pleasant View Drive from Powell Boulevard to 190th Ave..	$19,646,521	$23,902,997	2008-2017	Employment area
10434	Gresham	Gresham		Burnside St. Improvements	NE Wallula St.	Hogan	Complete boulevard design improvements Wallula to Hogan (2004 RTP 2048), also improve intersection of Burnside at Division (2002 TSP #15) by adding eastbound RT and signal, and also improve the intersection of Burnside and Hogan (2004 RTP #2032).	$32,545,601	$39,596,700	2008-2017	Regional center
10436	Gresham	Gresham		Max Trail	Cleveland	Ruby Junction	Construct new shared use path.	$1,897,279	$2,308,330	2008-2017	Regional center
10439	Gresham	Gresham		Main City Park Trailhead	Main City Park		Improves parking lot, facilities (MTIP project).	$570,299	$693,856	2008-2017	Regional center
10441	Gresham	Gresham		Gresham RC Ped and Ped to Max	all stations		Improve sidewalks, lighting, crossings, bus shelters, benches.	$584,820	$711,523	2008-2017	Regional center
10442	Gresham	Gresham		Phase 3 Signal Optimization	System Wide		Optimize signals, provide message boards.	$6,227,280	$7,576,438	2008-2017	Regional center
10444	Gresham	Gresham		181st Ave. Widening	Halsey St.	EB on-ramp to I-84	Widens street to three lanes southbound.	$1,797,270	$2,186,654	2008-2017	2040 corridor
10449	Gresham	Gresham		201st: Halsey to Sandy	Halsey	Sandy	Improve to collector standards, signalize 201st/Sandy Blvd.	$8,335,400	$10,141,289	2008-2017	Industrial area
10450	Gresham	Gresham		2 Birdsdale Projects, at Division,	at Division	at Stark	Division: SB, EB turn lanes. At Stark: add 2nd NB LT lane and exclusive RT lane.	$1,375,500	$1,673,506	2008-2017	Industrial area
10454	Gresham	Gresham		181st Ave. Improvements	Glisan	Yamhill	Complete boulevard design improvements.	$11,440,061	$13,918,583	2008-2017	Town center
10458	Gresham		Multnomah Co.	Halsey St. Improvements	190th	201st	Widen to 4 lanes w. sidewalks and bikelanes.	$4,430,961	$5,390,942	2008-2017	Town center
10462	Gresham	Gresham	Multnomah Co.	Butler Rd. Improvements	190th	Towle Rd.	Improve Butler Rd. in new alignment to collector standards, at intersection, add northbound and westbound turn pockets and signalize.	$13,166,455	$16,019,006	2008-2017	Neighborhood
10463	Gresham	Gresham	Multnomah Co.	Foster Rd. Extension (north)	Jenne	172nd	New north extension of Foster.	$15,417,627	$18,757,901	2008-2017	Town center
10471	Gresham	Gresham	Multnomah Co.	Butler Rd. Extension and Bridge	Binford	Rodlun	Construct new Butler road extension and bridge crossing.	$12,268,899	$14,926,992	2008-2017	Town center
10472	Gresham	Gresham		Eastman at Division			Add 2nd NB and SB LT lanes.	$912,928	$1,110,717	2008-2017	Regional center
10473	Gresham	Gresham		Eastman at Stark			Add EB and NB RT lanes and 2nd NB and SB LT lanes.	$1,196,756	$1,456,037	2008-2017	Regional center
10474	Gresham	Gresham	Multnomah Co.	Rugg Rd. Ext.	Orient Dr.	US 26	Construction of new roadway that adds e/w capacity in vicinity Rugg Rd and connects Springwater Industrial area to Highway 26.	$30,672,208	$37,317,431	2008-2017	Industrial area
10475	Gresham	Gresham	Multnomah Co.	Rugg Rd. Ext.	US 26	252nd Ave.	Construction of new roadway that adds e/w capacity in vicinity Rugg Rd and connects Springwater Industrial area to Highway 26.	$39,329,973	$47,850,926	2008-2017	Industrial area
10476	Gresham	Gresham	Multnomah Co.	Rugg Rd.	252nd Ave.	242nd. Ave.	Construction of new roadway that adds e/w capacity in vicinity Rugg Rd and connects Springwater Industrial area to Highway 26.	$12,770,187	$15,536,885	2008-2017	Industrial area
10477	Gresham	Gresham	Multnomah Co.	Springwater Road Section 4	242nd Ave.	252nd Ave.	Construction of new street for implementation of Springwater Plan.	$13,148,679	$15,997,378	2008-2017	Industrial area
10478	Gresham	Gresham	Multnomah Co.	252nd Ave.	Palmquist Rd.	10	Construction of new street for implementation of Springwater Plan.	$26,162,462	$31,830,635	2008-2017	Industrial area

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10479	Gresham	Gresham	Multnomah Co.	252nd Ave.	10	Rugg Rd.	Construction of new street for implementation of Springwater Plan.	$9,808,690	$11,933,771	2008-2017	Industrial area
10480	Gresham	Gresham	Multnomah Co.	Springwater Road Section 7	242nd Ave.	9	Construction of new street for implementation of Springwater Plan.	$8,008,421	$9,743,469	2008-2017	Industrial area
10481	Gresham	Gresham	Multnomah Co.	Springwater Road Section 8	242nd Ave.	9	Construction of new street for implementation of Springwater Plan.	$5,519,551	$6,715,378	2008-2017	Industrial area
10482	Gresham	Gresham	Multnomah Co.	Springwater Road Section 9	7	252nd Ave.	Construction of new street for implementation of Springwater Plan.	$8,008,421	$9,743,469	2008-2017	Industrial area
10483	Gresham	Gresham	Multnomah Co.	Springwater Road Section 10	252nd Ave.	Telford Rd.	Construction of new street for implementation of Springwater Plan.	$12,202,421	$14,846,111	2008-2017	Industrial area
10484	Gresham	Gresham	Multnomah Co.	Springwater Road Section 11	Telford Rd.	Orient Dr.	Construction of new street for implementation of Springwater Plan.	$21,031,280	$25,587,768	2008-2017	Industrial area
10485	Gresham	Gresham	Multnomah Co.	Hogan	Palmquist Rd.	Rugg Rd.	Improvement of existing roadway to arterial 4 lane standards.	$47,291,190	$57,536,964	2008-2017	Industrial area
10486	Gresham	Gresham	Multnomah Co.	Telford Rd.	Springwater Boundary	252nd Ave.	Improvement of existing roadway to collector standards, add bike and ped facilities, intersection improvements.	$29,419,888	$35,793,792	2008-2017	Industrial area
10488	Gresham	Gresham	Multnomah Co.	282nd Ave.	Springwater Boundary	20	Improvement of existing roadway to collector standards, add bike and ped facilities, intersection improvements.	$7,146,436	$8,694,732	2008-2017	Industrial area
10490	Gresham	Gresham		201st RR Bridge at I-84	201st/I-84	"	Construct new RR bridge to accommodate alternative modes.	$2,359,125	$2,870,236	2008-2017	Industrial area
10494	Gresham	Gresham		162nd at Stark St.			Exclusive southbound and eastbound right turns at Stark.	$888,209	$1,080,642	2008-2017	Employment area
10495	Gresham	Gresham		181st Ave. at Halsey	181st/Halsey		add 2nd LT lane to N & S legs, add RT lane to EB WB SB.	$1,025,038	$1,247,115	2008-2017	Industrial area
10497	Gresham	Gresham		181st at Sandy, at Stark			At Sandy: Northbound right turn, 2nd westbound left turn. Overlap eastbound right turn. At Stark, add 2nd left turn lane on east and west legs.	$1,884,390	$2,292,649	2008-2017	2040 corridor
10498	Gresham	Gresham		181st (182nd) at Division/Powell Intersections	181st at Division, Powell		At Division: add second westbound left turn lane (TIF P1). At Powell, add northbound and southbound double left turn lanes (TIF P2 and TSP8).At Powell add SB and NB lanes.	$1,682,670	$2,047,225	2008-2017	2040 corridor
10499	Gresham	Gresham		192nd Ave. Wilkes to Halsey	192/Wilkes	192/Halsey	Improve to collector street standards.	$3,833,031	$4,663,468	2008-2017	Industrial area
10502	Gresham	Gresham		Bike signs	various locations		Add directional signs to bike network.	$1,400,000	$1,703,314	2008-2017	Other
10503	Gresham	Gresham		Burnside at Powell			At Powell: eliminate EB and WB left turn lanes.	$683,517	$831,603	2008-2017	2040 corridor
10504	Gresham	Gresham		Ped to Max: Hood St.	Powell	Division	Improve ped access/multi-modal on Hood St.	$986,467	$1,200,188	2008-2017	Regional center
10505	Gresham	Gresham		Civic Neighborhood TOD	16th and NW Norman		Support construction of street infrastructure improvements.	$4,765,219	$5,797,618	2008-2017	Regional center
10506	Gresham	Gresham		Transit: Columbia Corridor TMA			Transit/bus service improvements, 2 locations.	$185,258	$225,395	2008-2017	Industrial area
10507	Gresham	Gresham		Glisan, 162nd to 202	162nd/I-84	202nd	Retrofit bikelanes.	$104,850	$127,566	2008-2017	Employment area
10508	Gresham	Gresham		Glisan, Eastman (223rd) to Hogan	223rd (Eastman)	Hogan	Construct bike lane.	$62,910	$76,540	2008-2017	2040 corridor
10509	Gresham	Gresham		Safe walking routes, missing links	various locations		Construct missing links and safe routes to school.	$4,089,150	$4,975,076	2008-2017	Other
10516	Gresham	Gresham		San Rafael, 181st to 201st	181st	201st	Complete collector and remove frontage road.	$9,990,952	$12,155,521	2008-2017	Industrial area
10519	Gresham	Gresham		Pedestrian enhancements	162nd/Bside, and	181st Burnside	Pedestrian enhancements.	$75,492	$91,848	2008-2017	Regional center
10533	Gresham	Gresham	Multnomah Co.	190th:30th to So. Boundary of Pleasant Valley	30th	Southern boundary of Pleasant Valley	Improve existing road to major arterial standards, signalize 190th @ Giese, Butler, Richey, Cheldelin.	$28,644,245	$34,850,104	2008-2017	Town center
10534	Gresham	Gresham	Multnomah Co.	Cheldelin: 172nd to 190th	172nd	190th	Improve existing road to minor arterial standards, signalize Cheldelin at 172nd, 182nd, and Foster.	$19,795,513	$24,084,268	2008-2017	Town center
10535	Gresham	Gresham	Multnomah Co.	Clatsop: New extension	162nd	172nd	Extend Clatsop into Pleasant Valley, and construct bridge.	$20,163,595	$24,532,096	2008-2017	Town center
10536	Gresham	Gresham	Portland	Clatsop: Improvements	162nd	Portland Boundary	Improve Clatsop to minor arterial standards, and signalize Clatsop at 162nd.	$4,202,582	$5,113,084	2008-2017	Town center
10537	Gresham	Gresham	Multnomah Co.	Richey	182nd	190th	Improve to collector standards, and signalize 190th/Richey.	$7,925,735	$9,642,868	2008-2017	Town center
10538	Gresham	Gresham	Clackamas Co.	Sager	162nd	Foster	Improve to collector standards, and signalize Sager @172nd.	$15,794,720	$19,216,692	2008-2017	Town center
10539	Gresham	Gresham	Clackamas Co.	Foster South: new road	County Line	Sager	Build new road section to collector standards.	$7,120,992	$8,663,776	2008-2017	Town center
10540	Gresham	Gresham	Portland	162nd	Foster	southern boundary of Pleasant Valley	Improve 162nd to collector standards, add signal at Foster @ 162nd.	$21,236,546	$25,837,505	2008-2017	Town center
10541	Gresham	Gresham	Portland	182nd	Giese	Cheldelin	Improve 182nd to collector standards.	$11,797,690	$14,353,694	2008-2017	
10542	Gresham	Gresham	Portland	Foster Rd. Improvements	162nd	Jenne Rd.	Improve Foster Rd. to Minor Arterial (Parkway) standards, 2 lanes, with turn pockets where appropriate.	$3,014,698	$3,667,841	2008-2017	Town center
10543	Gresham	Gresham	Portland	172nd: Cheldelin south to Pleasant Valley boundary	Cheldelin	So. Boundary of Pleasant Valley	Improve 172nd Ave. to major arterial standards.	$8,651,396	$10,525,746	2008-2017	Town center
10549	Washington Co.	Washington Co.		Cornell @ 143rd Improvements	Science Park Dr.	143rd Ave.	Realign 143rd with Science Park Dr. @ Cornell as a 4-way signalized intersection.	$12,400,000	$15,086,496	2008-2017	Town center
10551	Washington Co.	Washington Co.		185th to West Union Improvement	North of Westview H.S.	West Union Rd.	Add 1 thru-lane in each direction with continuous center turn lane, bikelanes and sidewalks.	$6,794,000	$8,265,940	2008-2017	Neighborhood
10560	Washington Co.	Washington Co.		Farmington Rd. Improvements	170th Ave.	185th Ave.	Widen roadway from 2/3 lanes to 5 lanes with bike lanes and sidewalks.	$17,676,000	$21,505,557	2008-2017	2040 corridor
10576	Washington Co.	Washington Co.		Saltzman Rd. Improvements	Cornell Rd.	Burton Rd.	Widen from two to three lanes with bike lanes and sidewalks.	$12,550,000	$15,268,994	2008-2017	Town center
10579	Washington Co.	Washington Co.		Barnes to 119th Improvements	Hwy. 217	119th (future)	Widen to five lanes with bike lanes and sidewalks	$30,316,000	$36,884,049	2008-2017	Station community
10581	Washington Co.	Washington Co.		Brookwood Rd. Improvements	T.V. Hwy.	Baseline Rd.	Widen roadway to three lanes with bike lanes and sidewalks.	$11,970,000	$14,563,335	2008-2017	Neighborhood
10587	Washington Co.	Washington Co.		Cornelius Pass Rd. Improvements	Amberwood Dr.	T.V. Hwy.	Widen to five lanes with bike lanes and sidewalks	$59,872,000	$72,843,443	2008-2017	Neighborhood
10592	Washington Co.	Washington Co.		205th Ave. Improvements	Quatama Rd.	Baseline Rd.	Widen road to 5 lanes with bike lanes and sidewalks. Widen bridge over Beaverton Creek to four lanes with bike lanes and sidewalks.	$18,061,000	$21,973,968	2008-2017	Station community

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10597	Washington Co.			Evergreen Rd. Improvements	253rd Ave.	Sewell Ave.	Widen to 5 lanes with bike lanes and sidewalks.	$11,242,000	$13,677,612	2008-2017	Employment area
10600	Washington Co.	ODOT	ODOT	Hwy. 26/Shute Interchange Improvements	Hwy. 26/Shute Rd./Helvetia Rd.	N/A	Add westbound to southbound loop ramp, additional northbound through lane and relocate Jacobsen intersection.	$29,272,000	$35,613,864	2008-2017	Industrial area
10602	Washington Co.	Washington Co.		Scholls Ferry ATMS	Hall Blvd.	Murray Blvd.	Install integrated surveillance and management equipment.	$1,109,000	$1,349,268	2008-2017	2040 corridor
10603	Washington Co.	Washington Co.		Tualatin-Sherwood Rd. ATMS	I-5	Teton Ave.	Install integrated surveillance and management equipment.	$1,594,000	$1,939,345	2008-2017	Industrial area
10604	Washington Co.	Washington Co.		185th Ave. ATMS	Baseline Rd.	Hwy. 26	Install integrated surveillance and management equipment.	$1,095,000	$1,332,235	2008-2017	2040 corridor
10605	Washington Co.	Washington Co.		Cornell Rd. ATMS	Cornelius Pass Rd.	Wash. Co. TOC	Install integrated surveillance and management equipment.	$2,043,000	$2,485,622	2008-2017	2040 corridor
10606	Washington Co.	Washington Co.		Washington Square Regional Center Pedestrian Improvements	Wash. Sq. Regional Center		Complete 7400 feet of sidewalk improvements.	$8,954,000	$10,893,910	2008-2017	Regional center
10607	Washington Co.	Washington Co.		Sunset TC Station Community Pedestrian Improvements	Sunset TC Station Community		Complete 9100 feet of sidewalk improvements.	$6,006,000	$7,307,217	2008-2017	Station community
10608	Washington Co.	Washington Co.		Aloha TC Pedestrian Improvements	Aloha Town Center		Complete23,500 feet of sidewalk improvements.	$10,105,000	$12,294,278	2008-2017	Town center
10610	Washington Co.	Washington Co.		Saltzman Rd. Bike	Cornell Rd.	Barnes Rd.	Complete 950 feet of bike lanes in town center.	$823,000	$1,001,305	2008-2017	Regional center
10611	Washington Co.	Washington Co.		Locust Ave. Bike	Hall Blvd.	80th Ave.	Completes 1650 feet of bike lanes in regional center.	$3,417,000	$4,157,303	2008-2017	Station community
10612	Washington Co.	Washington Co.		Greenburg Rd. Bike	Hall Blvd.	Hwy. 217	Completes 3400 feet of bike lanes in regional center.	$3,610,000	$4,392,117	2008-2017	Town center
10613	Washington Co.	Washington Co.		Cornell Rd. Bike	Saltzman Rd.	119th Ave.	Completes 1750 feet of bike lanes in town center.	$1,036,000	$1,260,452	2008-2017	Town center
10614	Washington Co.	Washington Co.		Butner Rd. Bike	Cedar Hills Blvd..	Park Way	Completes 7800 feet of bike lanes to transit corridor.	$3,524,000	$4,287,485	2008-2017	2040 corridor
10615	Washington Co.	Washington Co.		Bronson Rd. Bike	185th Ave.	Bethany Blvd.	Completes 7500 feet of bike lanes to transit corridor.	$5,490,000	$6,679,424	2008-2017	2040 corridor
10616	Beaverton	Beaverton		Rose Biggi Ave.: Crescent Street to Hall Blvd. Complete right-of-way and construction of multimodal street extension with Boulevard Design	Crescent St.	Hall Blvd.	Extend 2-lane Rose Biggi Ave. to Hall Blvd. (via Westgate Drive) to fill a gap; boulevard design; add sidewalks, bikeway (PE funded STIP Key #14400).	$3,500,000	$4,258,285	2008-2017	Regional center
10617	Beaverton	Washington County		Farmington Rd.: Murray Blvd. to Hocken Ave. Safety, turn lanes, bicycle, and pedestrian improvements	Murray Blvd.	Hocken Ave.	Construct turn lanes and intersection improvements; signalize where warranted; add bike lanes and sidewalks in gaps.	$8,700,000	$10,584,880	2008-2017	Regional center
10618	Beaverton	Beaverton		Dawson/Westgate multimodal extension from Rose Biggi Ave. to Hocken Ave.	Rose Biggi Avenue	Hocken Ave. via Dawson to Westgate at Rose Biggi	Extend 2 lane street from Hocken via Dawson and Westgate at Rose Biggi to fill a gap; realign Dawson/Westgate at Cedar Hills; add turn lanes at intersections, sidewalks, bikeway.	$8,900,000	$10,828,211	2008-2017	Regional center
10619	Beaverton	Beaverton		Crescent St. multimodal extension to Cedar Hills Blvd.	Rose Biggi Ave.	Cedar Hills Blvd.	Extend 2 lane Crescent from Cedar Hills to Rose Biggi Ave. to fill a gap; add sidewalks, bikeway.	$3,500,000	$4,258,285	2008-2017	Regional center
10625	Beaverton	Beaverton		Rose Biggi Ave.: 2 lane multimodal street extension	Tualatin Valley Hwy	Broadway	Construct 2 lane boulevard extension with bikeways and sidewalks.	$3,000,000	$3,649,959	2008-2017	Regional center
10626	Beaverton	Beaverton		114th Ave./115th Ave. 2 lane multimodal street	LRT	Beaverton Hillsdale Hwy/Griffith Drive	Construct 2 lane street with bike and pedestrian improvements.	$10,000,000	$12,166,529	2008-2017	Regional center
10628	Beaverton	Beaverton		Center Street and 113th Ave. safety, bike, and pedestrian improvements	Hall Blvd.	Cabot Street	Add sidewalks and bikelanes; add turn lanes where needed.	$5,400,000	$6,569,926	2008-2017	Regional center
10630	Beaverton	Beaverton		Hall Blvd. multimodal extension from Cedar Hills Blvd. to Hocken Ave.	Hocken Ave.	Cedar Hills Blvd.	Extend Hall Blvd. from Cedar Hills to Hocken to fill a gap; add turn lanes at intersections, sidewalks and bikeway.	$5,500,000	$6,691,591	2008-2017	2040 corridor
10631	Beaverton	Beaverton		141st/142nd/144th multimodal street extension connections	141st Ave.	144th Ave.	Connect streets, add bikeways, sidewalks, turns lanes and signalize as warranted.	$6,400,000	$7,786,579	2008-2017	Station community
10635	Beaverton	Beaverton		125th Ave. multimodal extension Brockman to Hall Blvd.	Brockman St.	Hall Blvd.	Construct new multimodal street with bike lanes and sidewalks.	$13,900,000	$16,911,475	2008-2017	Neighborhood
10638	Beaverton	Beaverton		Davies Rd. multimodal street extension	Scholls Ferry Rd.	Barrows Rd.	Extend 2 lane street with turn lanes, bike lanes and sidewalks.	$4,900,000	$5,961,599	2008-2017	Town Center
10643	Beaverton	ODOT		Hall Blvd. sidewalk gaps at Hwy 217	217 SB ramp	740' w/o ramp	Construct sidewalks.	$400,000	$486,661	2008-2017	Regional center
10645	Beaverton	Beaverton		117th Ave. sidewalk gaps	LRT	Center St.	Construct sidewalks.	$400,000	$486,661	2008-2017	Regional center
10646	Beaverton	Beaverton		Hall Blvd. / Watson Ave. pedestrian improvements	Cedar Hills Blvd..	Allen Blvd.	Add pedestrian improvements at intersections and amenities (lighting, plazas).	$2,400,000	$2,919,967	2008-2017	Regional center
10652	Beaverton	Beaverton		141st Ave. sidewalks	Farmington Rd	Allen Blvd	Construct sidewalks.	$300,000	$364,996	2008-2017	2040 corridor
10659	Beaverton	Beaverton		Laurelwood Ave., Birchwood Road, 87th Ave. sidewalks	Scholls Ferry Road	Canyon Road	Construct sidewalks.	$700,000	$851,657	2008-2017	
10661	Beaverton	Beaverton		155th Ave. sidewalks	Beard Rd.	Weir Rd.	Construct sidewalks.	$2,700,000	$3,284,963	2008-2017	
10662	Beaverton	Beaverton		155th Ave. sidewalks	Davis Rd.	Beverly Beach Ct	Construct sidewalks.	$1,800,000	$2,189,975	2008-2017	

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10692	Sherwood		Washington Co.	Edy Rd	Borcher Dr	City limits	Reconstruct road to collector standards w/ sidewalks and bike lanes.	$8,760,000	$10,657,879	2008-2017	Neighborhood
10694	Sherwood	Sherwood		Murdock	UGB	Oregon St	Add bike lanes.	$1,340,000	$1,630,315	2008-2017	Neighborhood
10709	Tualatin	Tualatin		Sagert	Martinazzi	N/A	Signalize intersection and change grades to provide better sight distance.	$1,700,000	$2,068,310	2008-2017	Neighborhood
10714	Tualatin	Tualatin		105th Ave/Avery Street	Blake	105th	Realign curves, signalize intersection of Avery/105th, sidewalks on 105th from Avery to 108th.	$5,000,000	$6,083,265	2008-2017	Neighborhood
10715	Tualatin	Tualatin		Herman	Teton	Tualatin	Reconstruct and widen to 3 lanes from Teton to Tualatin.	$2,500,000	$3,041,632	2008-2017	Industrial area
10716	Tualatin	Tualatin		Myslony	112th	124th Ave	Reconstruct/widen from 112th to 124th to fill system.	$9,400,000	$11,436,537	2008-2017	Industrial area
10718	Tualatin	Tualatin		Herman	Cipole	124th Ave	Reconstruction from Cipole to 124th.	$4,100,000	$4,988,277	2008-2017	Industrial area
10728	Tualatin	Tualatin		Boones Ferry	N/A	N/A	Interconnect signals on Boones Ferry Road from Tualatin-Sherwood Road to Ibach (6 signals).	$78,000	$94,899	2008-2017	Other
10730	Tualatin	Tualatin		E-W connection	108th	112th	Construct new street.	$18,200,000	$22,143,083	2008-2017	Industrial area
10736	Tualatin	Tualatin		124th Ave	Tualatin-Sherwood	Tonquin	Construct new street from Tualatin-Sherwood to Tonquin Rd - 5 lanes.	$82,500,000	$100,373,864	2008-2017	Main street
10737	Tualatin	Tualatin		Central Design District Pedestrian Improvements			Pedestrian improvements & bike lanes.	$10,600,000	$12,896,521	2008-2017	Town center
10748	Tigard			Greenburg Road Improvements, South	Shady Lane	North Dakota	Widen to 5 lanes with bikeways and sidewalks. Includes bridge replacement.	$14,330,000	$17,434,636	2008-2017	Regional center
10753	Tigard	Tigard		Durham Road Improvements	Upper Boones Ferry Road	Hall Blvd.	Widen to 5 lanes.	$21,093,000	$25,662,860	2008-2017	Employment area
10754	Tigard	Tigard		Walnut Street Extension	99W	Hunziker Road	Extend street east of 99W to connect to Hunziker Road. (PE Phase only)	$3,770,000	$4,586,781	2008-2017	Town center
10755	Tigard	Tigard		72nd Ave. Improvements	99W	Hunziker Road	Widen to 5 lanes with bikeways and sidewalks. Includes bridge replacement.	$50,964,000	$62,005,499	2008-2017	Employment area
10759	Tigard	Tigard		Dartmouth Street Improvements	72nd Ave.	68th Ave.	Widen to 4 lanes with turn lanes and sidewalks.	$4,412,000	$5,367,873	2008-2017	Employment area
10763	Tigard			Washington Square Regional Center Greenbelt Shared Use Path	Hall Blvd.	Hwy. 217	Complete shared-use path construction.	$1,821,000	$2,215,525	2008-2017	Regional center
10767	Tigard		ODOT	72nd Ave. Intersection Improvements	Hwy 99W	Upper Boones Ferry	Southbound right turn lane, northbound right turn overlap at Hwy 99W and 72nd; Southbound or Eastbound right turn lane at 72nd/Hampton/Hunziker.	$2,000,000	$2,433,306	2008-2017	Employment area
10768	Tigard	Tigard		Upper Boones Ferry Intersection Improvements	Durham Road	I-5	Reconfigure intersection of Durham & Upper Boones Ferry to create a through route between Durham & I-5/Carmen Interchange; 2nd Northbound Turn Lane at 72nd/Carmen; 72nd/Boones Ferry assuming Boones Ferry/72nd widened to 5 lanes; eastbound right turn lane at Carman/I-5 southbound.	$9,630,000	$11,716,367	2008-2017	Employment area
10769	Tigard	Tigard		Greenburg Intersection Improvements	Hall	Tiedeman Ave	2nd Northbound turn lane, modify signal timing at Greenburg/Oleson/Hall; install boulevard treatment at Greenburg/Washington Square Road; improve geometry/alignment and extend cycle length at intersection of Greenburg/Tiedeman.	$9,512,000	$11,572,802	2008-2017	Regional center
10770	Tigard	ODOT	ODOT	Hwy. 99W Intersection Improvements	68th	Beef Bend Road	Provide increased capacity at priority intersections, including bus queue bypass lanes in some locations, improved sidewalks, priority pedestrian crossings, and an access management plan, while retaining existing 4/5-lane facility from I-5 to Durham Road.	$19,669,000	$23,930,346	2008-2017	2040 corridor
10771	Forest Grove	TriMet		High Capacity Transit: Blue Line west : Hwy. 8 extension	Hillsboro	Forest Grove	The Cities of Forest Grove, Cornelius, Hillsboro, and Washington County have identified a need to extend the MAX system to Forest Grove. The proposed line would run from the end of the existing HCT system in Hillsboro to downtown Forest Grove.	$1,500,000	$1,824,979	2008-2017	Regional center
10773	Forest Grove		Washington Co.	Thatcher/Gales Creek	Thatcher	Gales Creek	Re-align Thatcher Road at its intersection with Gales Creek Road.	$3,600,000	$4,379,950	2008-2017	Employment area
10774	Forest Grove	Forest Grove		23rd/24th	Hawthorne	Quince	Construct collector level roadway between Hawthorne Ave. and Quince Street.	$15,000,000	$18,249,794	2008-2017	Industrial area
10775	Forest Grove	Forest Grove		E/Pacific/19th Intersection	E	Pacific	Extend 19th west and connect up to E and Pacific with a round-about.	$4,800,000	$5,839,934	2008-2017	Neighborhood
10776	Forest Grove	Forest Grove		HWY 8/HWY 47 Intersection	HWY 8	HWY 47	Turn Lanes, modify traffic signal.	$3,300,000	$4,014,955	2008-2017	Employment area
10778	Forest Grove	Forest Grove		Heather Industrial Connector	Mountain View	HWY 47	Extend westerly from existing terminus to connect to Hwy 47 and the City of Cornelius.	$5,800,000	$7,056,587	2008-2017	Industrial area
10779	Forest Grove	Forest Grove		Hwy 8/Pacific/19th	Cornelius City Limits	B	Retrofit the street with a boulevard design from Quince Street to B Street including wider sidewalks, curb extensions, safer street crossings, bus shelters and benches.	$12,100,000	$14,721,500	2008-2017	2040 corridor
10781	Forest Grove	Forest Grove		West UGB Trail	Ritchey	David Hill	Multi-use trail.	$3,100,000	$3,771,624	2008-2017	Neighborhood
10782	Forest Grove	Forest Grove		Thatcher / Willamina / B St Pedestrian and Bicycle Improvements	Gales Creek-David Hill /Gales Creek - Sunset / 26th-Willamina	Gales Creek-David Hill /Gales Creek - Sunset / 26th-Willamina	Bike lanes and sidewalks.	$5,600,000	$6,813,256	2008-2017	Neighborhood
10784	Forest Grove	Forest Grove		David Hill Bicycle Pedestrian	Thatcher	Forest Gale Dr.	Multi-use trail.	$4,900,000	$5,961,599	2008-2017	Neighborhood

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10785	Cornelius	Cornelius		14th Ave	Dogwood	Holladay	Regulate OR8 traffic flow; widen local collector to improve Main Street/Industrial Area north/south connectivity.	$2,800,000	$3,406,628	2008-2017	Main street
10786	Cornelius		Washington Co.	Susbauer Rd	TV Hwy	Zion Church Rd	Improve County Freight Connector route to urban standard w/in City (sidewalks & bike lanes); widen rural road with shoulder bike lane, reconstruct Dairy Creek Bridge to eliminate frequent road flooding.	$1,000,000	$1,216,653	2008-2017	Main street
10796	Cornelius	Cornelius		Holladay St Extension	10th	Gray	Construct new collector.	$1,300,000	$1,581,649	2008-2017	Main street
10800	Cornelius	Cornelius		Dogwood St. Extension	E. City Limits	345th Ave.	Construct new collector.	$1,500,000	$1,824,979	2008-2017	Main street
10801	Cornelius	Cornelius		29th Ave.	TV Hwy	345th Ave.	Construct new collector.	$4,200,000	$5,109,942	2008-2017	Main street
10802	Cornelius	Cornelius		29th Ave	TV Hwy		Signalize intersection.	$600,000	$729,992	2008-2017	Main street
10803	Cornelius	Cornelius		TV Hwy	4th Ave	29th Ave	Interconnect OR 8 signal system in Cornelius.	$450,000	$547,494	2008-2017	Main street
10804	Cornelius	Cornelius		Collector Bike Lanes			Sign & stripe about 50 blocks of collectors.	$350,000	$425,829	2008-2017	Main street
10805	Cornelius	ODOT		TV Hwy Ped Infill			Build out sidewalk gaps on TV Hwy. in Cornelius.	$1,020,000	$1,240,986	2008-2017	Main street
10806	Cornelius		Metro	Council Creek Trail System	See Metro Trail Map	See Metro Trail Map	Build a bike/ped trail system along Council Creek in Cornelius.	$2,040,000	$2,481,972	2008-2017	Main street
10813	THPRD	THPRD	Metro	Westside Trail (Regional)	Farmington Rd.	Scholls Ferry Rd.	To design and construct a regional trail multi-use segment in a utility corridor, 10'-12' wide paved.	$4,000,000	$4,866,612	2008-2017	Other
10814	Hillsboro	Hillsboro		Evergreen Rd	25th Ave	Sewell Rd	Widen to 5 lanes with bike lanes and sidewalks.	$4,000,000	$4,866,612	2008-2017	Employment area
10815	Hillsboro	Hillsboro		Cornell Rd Signal Coordination	185th	Cornelius Pass	Interconnect Traffic Signals (Extends County ATMS).	$1,000,000	$1,216,653	2008-2017	Town center
10816	Hillsboro	Hillsboro		TV Hwy. Signal Coordination	209th	10th Ave.	Interconnect traffic signals.	$2,350,000	$2,859,134	2008-2017	2040 corridor
10819	Hillsboro	Hillsboro		231st Ave./Century Blvd	Baseline	Dogwood	Widen to 3 lanes with bike lanes and sidewalks.	$6,800,000	$8,273,240	2008-2017	
10820	Hillsboro	Hillsboro		Brookwood (247th)	TV Hwy.	River Road	Widen to 3 lanes with bike/ped TV Hwy to Alexander, 2 lanes with onstreet parking and bike/ped Alexander to UGB.	$2,094,000	$2,547,671	2008-2017	
10821	Hillsboro	Hillsboro		Huffman	Shute	West UGB (Sewell)	Build 3 lane with bike lanes and sidewalks.	$9,282,000	$11,292,972	2008-2017	Industrial area
10822	Hillsboro	Hillsboro		253rd	Evergreen	North UGB	Build 3 lane with bike lanes and sidewalks.	$6,162,000	$7,497,015	2008-2017	Industrial area
10827	Hillsboro	Hillsboro		Quatama Road	LRT	Cornelius Pass	Widen to 3 lane with bike lanes/sidewalks.	$1,800,000	$2,189,975	2008-2017	Station community
10838	Hillsboro	Hillsboro		Davis Road	Brookwood	234th (Century)	Extend 3 lane road with bike lanes/sidewalks.	$4,474,000	$5,443,305	2008-2017	
10839	Hillsboro	Hillsboro		Century Blvd (234th)	Alexander	South UGB	Extend 3 lane road with bike lanes/sidewalks.	$11,636,000	$14,156,973	2008-2017	
10841	Hillsboro	Hillsboro		Other Traffic Signals	N/A	N/A	Future Traffic Signals (Town Centers, 2040 Corridors).	$5,700,000	$6,934,922	2008-2017	
10852	Wilsonville	ODOT		95th Ave/Boones Ferry Rd/Commerce Circle Intersection Improvements	95th Ave.	Southbound off-ramp I-5/Stafford Rd Interchange	Provide dual left-turn and right-turn lanes, improve signal synchronization, access management measures, fix sight-distance problems, and add extra lanes.	$2,500,000	$3,041,632	2008-2017	2040 corridor
10853	Wilsonville	Wilsonville		Kinsman Rd Extension from Ridder Rd to Day St	Ridder Rd	Day St	Extend 3 lanes with sidewalks and bike lanes.	$6,500,000	$7,908,244	2008-2017	Industrial area
10854	Wilsonville		Metro	Tonquin Trail	Tualatin/Sherwood	Washington/Clackamas County line	Shared use path with some on-street portions.	$2,000,000	$2,433,306	2008-2017	Other
10860	Gresham	Gresham		Collector 72 (Knapp)	172nd	182nd	Build new road to green street collector standards.	$10,703,002	$13,021,838	2008-2017	Town center
10861	Gresham	Gresham		Collector 72 (Knapp)	182nd	190th	Build new road to green street collector standards.	$10,368,393	$12,614,735	2008-2017	Town center
10862	Gresham	Gresham		Community Street 72	190th	Binford Parkway	Build new road to green street community standards.	$9,991,393	$12,156,057	2008-2017	Employment area
10865	ODOT	ODOT	Port of Portland	New I-205 NB on-ramp at I-205/Airport Way interchange based on I-205/Airport Way Study	I-205 and Airport Way		New I-205 NB on-ramp at I-205/Airport Way interchange based on I-205/Airport Way Study.	$27,200,000	$33,092,959	2008-2017	Throughway
10866	ODOT	ODOT		Improve I-5/Columbia River bridge (Oregon share)	Victory Blvd.	Washington state line	Improve I-5/Columbia River bridge (Oregon share).	$50,000,000	$60,832,645	2008-2017	Throughway
10867	ODOT	ODOT		I-5: Conduct preliminary engineering and environmental work to modernize freeway and ramps to improve access to the Lloyd District and Rose Quarter	I-5 and I-84	I-5 and Greeley St.	Conduct preliminary engineering and environmental work to modernize freeway and ramps to improve access to the Lloyd District and Rose Quarter.	$30,000,000	$36,499,587	2008-2017	Throughway
10869	ODOT	ODOT	Clackamas County	Sunrise Project: Construct new highway facility from I-205 to 122nd and interim connection to 122nd Ave as defined by supplemental EIS	I-205	172nd Ave.	Construct improvements as defined by supplemental EIS.	$116,000,000	$141,131,737	2008-2017	Throughway
10870	ODOT	ODOT	Washington County	I-5/99W Connector Phase 1: Conduct study, complete environmental design work and NEPA for I-5 to OR-99W Connector and acquire ROW	OR 99W	I-5	Phase 1: Conduct study, complete environmental design work and NEPA for I-5 to OR-99W Connector and acquire ROW.	$100,500,000	$122,273,617	2008-2017	Throughway
10871	ODOT	ODOT	Port of Portland	Marine Dr. extension (Backage road), from I-84 EB off-ramp to 257th Dr.	I-84 EB off ramp	257th Dr.	Marine Drive extension (Backage road), from I-84 EB off-ramp to 257th Drive.	$8,200,000	$9,976,554	2008-2017	Throughway

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10872	ODOT	ODOT		Add lane: SB I-205 to SB I-5 interchange ramp and extend acceleration lane and add auxiliary lane on SB I-5 to Stafford Road.	I-205	Stafford Road	Add lane to SB I-205 to SB I-5 interchange ramp and extend acceleration lane and add auxiliary lane on SB I-5 to Stafford Road.	$9,700,000	$11,801,533	2008-2017	Throughway
10873	ODOT	ODOT		US 26W: Widen highway to 6 lanes	185th Ave.	Cornelius Pass Road	Widen highway to 6 lanes.	$36,119,034	$43,944,328	2008-2017	Throughway
10874	ODOT	ODOT		I-5: Construct new roadway between Columbia Blvd and Denver Ave near Argyle Street; replace Denver Viaduct; Relocate/reconstruct and signalize Denver/Schmeer Rd intersection	Victory	Lombard	Construct new roadway between Columbia Blvd and Denver Ave near Argyle Street; replace Denver Viaduct; Relocate/reconstruct and signalize Denver/Schmeer Rd intersection.	$46,000,000	$55,966,034	2008-2017	Throughway
10875	ODOT	ODOT	Washington County	OR 217: Braid OR 217 ramps between Beaverton-Hillsdale Hwy. and Allen Blvd. in both directions.	Beaverton-Hillsdale Hwy.	Allen Blvd.	Braid OR 217 ramps between Beaverton-Hillsdale Highway and Allen Boulevard in both directions.	$79,600,000	$96,845,571	2008-2017	Throughway
10876	ODOT	ODOT		I-84: Extend Halsey exit lane to I-205 NB exit	Halsey exit	I-205 NB exit	I-84 Lane Extension: Halsey to I-205 NB ramp.	$6,446,790	$7,843,506	2008-2017	Throughway
10890	ODOT	ODOT	Clackamas County	Sunrise Project: Acquire right-of-way: I-205 to SE 172nd Ave	I-205	122nd Ave.	Acquire right-of-way: I-205 to SE 172nd Ave.	$129,000,000	$156,948,224	2008-2017	Throughway
10894	ODOT	ODOT	Clackamas County	Sunrise Hwy. PE: I-205 to SE 172nd Ave	I-205	SE 172nd Ave	Preliminary engineering and EIS from I-205 to 172nd.	$25,000,000	$30,416,323	2008-2017	Throughway
10899	TriMet		Portland and Western RR / Washington County	Washington County Commuter Rail spare DMUs	N/A	N/A	1 powered and 2 trailer DMUs for spares and service reliability.	$9,000,000	$10,949,876	2008-2017	
10901	TriMet			MAX light rail: South Corridor Ph 2: Portland to Milwaukie	N/A	N/A	Portland, N Macadam, OMSI, Brooklyn, Milwaukie, (Park Ave.).	$816,500,000	$993,397,095	2008-2017	
10912	TriMet		City of Lake Oswego	Streetcar Extension: Portland to Lake Oswego via Willamette Shore	N/A	N/A	Portland to Lake Oswego extension of Portland Streetcar.	$250,000,000	$304,163,226	2008-2017	
10916	TriMet			Bus Rapid Transit: SE McLoughlin to Oregon City and CCC	N/A	N/A	Milwaukie, Gladstone, Oregon City, CCC (possible predecessor to LRT).	$8,500,000	$10,341,550	2008-2017	
10921	TriMet			MAX LRT on Steel Bridge: Capacity and operations improvements	N/A	N/A	Possible additional tracks, bridge rehabilitation, seismic upgrade.	$50,000,000	$60,832,645	2008-2017	
10926	TriMet			Transit dispatch center upgrade	N/A	N/A	To accommodate increasing operating complexities.	$7,600,000	$9,246,562	2008-2017	
10929	TriMet			Frequent Bus: Line 76 - Beaverton / Tualatin	N/A	N/A	390 additional service hours upgrade and related bus stop and ROW improvements.	$3,075,000	$3,741,208	2008-2017	
10930	TriMet			Frequent Bus: Line 31 - Milwaukie to Clackamas Regional Center	N/A	N/A	240 additional service hours upgrade and related bus stop and ROW improvements.	$1,100,000	$1,338,318	2008-2017	
10933	TriMet			Frequent Bus: Line 9 - Powell Blvd. to I-205	N/A	N/A	80 additional service hours for span of service and related bus stop and ROW improvements.	$1,600,000	$1,946,645	2008-2017	
10934	TriMet			Frequent Bus: Line 4 - Division to Gresham TC	N/A	N/A	50 additional service hours for span of service and related bus stop and ROW improvements.	$3,375,000	$4,106,204	2008-2017	
10935	TriMet			Frequent Bus: Line 8 - Jackson Park	N/A	N/A	25 additional service hours for span of service and related bus stop and ROW improvements.	$1,200,000	$1,459,983	2008-2017	
10936	TriMet			Frequent Bus: Line 15 - Belmont	N/A	N/A	75 additional service hours for span of service and related bus stop and ROW improvements.	$2,600,000	$3,163,298	2008-2017	
10979	City of Portland		TriMet	Burnside/Couch Streetcar, East & West [NW 23rd to E 14th]	NW 23rd	E 14th	Construct streetcar from NW 23rd Avenue to E 14th Avenue.	$118,500,000	$144,173,369	2008-2017	
10981	TriMet			Regional Bus: North Macadam / Line 35 realignment	N/A	N/A	Shift of Line 35 through this fast-growing area.	tbd	tbd	2008-2017	
10984	TriMet			Reconfiguration of Millikan Way Park & Ride	N/A	N/A	Reconfigure lot in response to lease expiration.	$2,000,000	$2,433,306	2008-2017	
10993	TriMet		City of Milwaukie	Milwaukie bus layover facility	N/A	N/A	Modification to Milwaukie Park & Ride.	$627,000	$762,841	2008-2017	
10995	TriMet			Rose Quarter Bike Improvements	N/A	N/A	Modify Rose Quarter to accommodate through bike traffic.	$250,000	$304,163	2008-2017	

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10997	TriMet			Willow Creek Transit Center	N/A	N/A	Reconstruct TC portion of MAX/bus facility for TOD opportunity (PCC).	tbd	tbd	2008-2017	
11032	TriMet			Ruby Junction light rail operating base expansion	N/A	N/A	Stub yard expansion on west side of Eleven-Mile Ave. Cost is included as part of the Milwaukie light rail project cost estimate.	tbd	tbd	2008-2017	
11035	TriMet			Powell bus operating base expansion	N/A	N/A	Good deadhead site, land already available, shop annex and parking.	$11,637,609	$14,158,931	2008-2017	
11036	TriMet			Merlo fuel / service house replacement	N/A	N/A	Over due replacement, creates new entrance.	$6,411,300	$7,800,327	2008-2017	
11038	TriMet			Center Street bus operating base expansion	N/A	N/A	Phase 1 to include parking structure.	$10,386,000	$12,636,157	2008-2017	
11044	Metro			Regional Trail Master Plans	N/A	N/A	Develop trail master plans, working with local jurisdictions, trail advocate organizations, local residents, property owners, railroad companies, and businesses, for the following locations: Hillsboro to Council Creek & Gales Creek Trail, North Portland Greenway Trail: Steel Bridge to ST John's Bridge, East Buttes Loop Trail Master Plan: Gresham and Happy Valley to Damascus; Springwater Corridor to Clackamas Bluffs and Greenway, Gateway to the Columbia Gorge Trail: Gresham/Fairview to Troutdale to Columbia Gorge Trail Connections, Portland South Waterfront to Lake Oswego to West Linn Trail, Columbia Slough Trail, Regional Trails Strategy and Master Plan for the Portland Metro Area (including relationship of regional trails to on-street bikeways and local trail system).	$1,100,000	$1,338,318	2008-2017	
11071	ODOT	ODOT		I-5/Wilsonville Road Interchange: Phase 1	Hubbard cut-off	Wilsonville Road	Reconstruct NB and SB on ramps, and NB off ramp. Add NB auxiliary lane from Hubbard cut-off to Wilsonville Rd.	$18,500,000	$22,508,079	2008-2017	
11074	Gresham		Portland	East Buttes Loop Trail: From Springwater Trail to Rodlun Road	Springwater Trail	Rodlun Road	Construct new shared use trail (12' wide pervious asphalt)	$8,300,000	$10,098,219	2008-2017	Outer neighborhood/Park
11081	Lake Oswego			Boones Ferry Rd bike lanes	Country Club	North City Limits	Bike lanes	$5,710,000	$6,947,088	2008-2017	2040 corridor
11082	Lake Oswego			Carman Dr. sidewalks & bike lanes	Meadows Rd	I-5	bike lanes	$760,000	$924,656	2008-2017	Neighborhood
11083	Lake Oswego			Iron Mountain	10th St.	Bryant Rd.	bike lanes	$3,900,000	$4,744,946	2008-2017	Neighborhood
11084	Lake Oswego			Pilkington Rd bike lanes/ sidewalk	Boones Ferry Rd	Childs Rd	park & ride relocation	$1,510,000	$1,837,146	2008-2017	Neighborhood
11085	Lake Oswego			Kerr Parkway bike lanes	Stephenson	Boones Ferry Rd	bike lanes	$1,560,000	$1,897,979	2008-2017	Neighborhood
11087	Lake Oswego			Bryant Rd bike lanes/pathway	Childs Rd	Boones Ferry Rd		$610,000	$742,158	2008-2017	Neighborhood
11089	Washington Co.	Washington Co.		92nd Ave. Ped.	Garden Home Blvd.	Allen Blvd.	Completes 3800 feet of sidewalk improvements to transit corridor	$3,922,000	$4,771,713	2008-2017	Neighborhood
11090	Washington Co.	Washington Co.		10th Ave/Cornell Bike	Baseline Rd.	25th Ave.	Completes 5400 feet of bike lanes in transit corridor	$7,911,000	$9,624,941	2008-2017	2040 corridor
11091	Portland/Port of Portland	Portland/Port of Portland		Columbia Blvd./I-205 Interchange: SB On-Ramp Improvement			Expand the on-ramp to three lanes, including for truck/HOV	$750,000	$912,490	2008-2017	
11092	Port of Portland			Ramsey Rail Yard	Bonneville Yard	BNSF Ford Facility	Construct up to six yard tracks and one lead track	$13,900,000	$16,911,475	2008-2017	
11093	Washington Co.	Washington Co.		Flashing Yellow Arrow Program (ITS)	Various locations in urban Washington Co.		Install flashing yellow arrow signal phase at more than 200 intersections	$1,326,000	$1,613,282	2008-2017	2040 corridor
11094	Cornelius			Baseline Boulevard Improvement	10th	19th	Build sidewalks & other pedestrian amenities	$3,600,000	$4,379,950	2008-2017	Main street
11095	Cornelius			11th-17th Avenue	Baseline	Adair	Ped improvement of Main Street Dist local streets	$3,400,000	$4,136,620	2008-2017	
11100	Gresham		Portland	East Buttes Loop Trail: From Rodlun Road to 190th	Rodlun	190th	Construct new shared use trail (12' wide pervious asphalt)	$2,800,000	$3,406,628	2008-2017	Outer neighborhood/Park
11102	City of Portland		TriMet	Burnside/Couch Streetcar Extension to Hollywood via Sandy Blvd	E 14th	Hollywood District	Extend streetcar from E 14th Avenue to the Hollywood District.	$70,000,000	$85,165,703	2008-2017	
11105	SMART			Current Fixed Route and Dial-a-Ride Services			Continuation of 5 fixed routes with scheduled service and dial-a-ride service for seniors and people with disabilities	$228,700,000	$278,248,519	2008-2017	Other
11106	SMART			Extension of transit service to connect with regional commuter rail			Expansion of transit service to coordinate and connect with the commuter rail service.	$33,750,000	$41,062,035	2008-2017	Intermodal facility
11107	SMART			Extension of transit service from Wilsonville to downtown Portland			Provide an intercity transit connection between Wilsonville and Portland.	$19,100,000	$23,238,070	2008-2017	Other
11108	SMART			Extension of transit service within Wilsonville			Extend transit service to connect newly-developed residential areas with other areas of Wilsonville and with multi-modal connections.	$24,550,000	$29,868,829	2008-2017	Neighborhood
11110	SMART			Wilsonville Commuter Rail Station Park & Ride Improvements			Provide paved parking spaces at the Wilsonville commuter rail station.	$4,500,000	$5,474,938	2008-2017	Intermodal facility
11111	SMART			Wilsonville SMART Offices			Design and construct SMART offices near the Wilsonville commuter rail station	$2,000,000	$2,433,306	2008-2017	Other

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11112	SMART			Wilsonville SMART Fleet Services Facility			Design and construct a transit fleet services facility near the Wilsonville commuter rail station	$8,000,000	$9,733,223	2008-2017	Other
11114	Portland			Foster & Woodstock, SE (87th - 101st): Streetscape	SE 87th	SE 101st	Implement Lents Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting, increased on-street parking.	$2,151,724	$2,617,901	2008-2017	Town Center, Main Street or Station Community
11115	TriMet			Merlo ATP Administration Building	N/A	N/A	Replaces lease space in CWS offices.	$1,048,537	$1,275,706	2008-2017	
11118	Washington County			185th Ave. to Kinnaman Improvements	TV Hwy.	Kinnaman Rd.	Widen to 3 lanes with bike lanes and sidewalks.	$5,820,000	$7,080,920	2008-2017	2040 Corridor
11119	Washington County			Murray Blvd. to Cornell Improvement	Hwy. 26	Cornell Rd.	Widen to 5 lanes with bike lanes and sidewalks.	$4,770,000	$5,803,434	2008-2017	Town Center, Main Street or Station Community
11120	Washington County			Bethany Blvd. to Bronson Improvements	West Union Rd.	Bronson Rd.	Widen to 5 lanes with bike lanes and sidewalks.	$14,328,000	$17,432,203	2008-2017	2040 Corridor
11121	ODOT	ODOT		I-5 Delta Park Phase 1	Victory	Lombard	Widen I-5 to 3 lanes and realign ramps.	$73,079,000	$88,911,777	2008-2017	Throughway
11122	ODOT	ODOT		OR 217: Sunset Hwy to TV Hwy	US 26	OR 8	Widen OR 217 and structures.	$37,676,000	$45,838,615	2008-2017	Throughway
11123	ODOT	ODOT		I-5 North Macadam	I-5 MP 298.93	I-5 MP 298.93	Construct flyover at I-5 NB off-ramp to North Macadam/South Waterfront area.	$28,416,000	$34,572,409	2008-2017	Throughway
11124	ODOT	ODOT		US 26W Cornell to 185th	Cornell Rd	185th Ave.	Widen US 26 to 6 lanes from Cornell Rd. to 185th Ave.	$21,312,000	$25,929,307	2008-2017	Throughway
11125	ODOT	ODOT	Gresham	US 26E Springwater at grade intersection	N/A	N/A	Construct at-grade intersection connecting Springwater area to US 26.	$6,700,000	$8,151,574	2008-2017	Throughway
11126	Milwaukie	Milwaukie		Milwaukie Town Center: Main/Harrison/21st	SE Scott and SE Main	SE Jackson and SE Main	Improvements include renovated block faces, two travel lanes, bike lanes, 15 foot sidewalks, planter strips, lighting, benches and ADA-compliant sidewalks.	$501,505	$610,158	2008-2017	Town Center
10990	TriMet			Park & Ride management strategy implementation	N/A	N/A	Convert major park & ride lots for shared use and/or pay lots.	$0	$0	2008-2035	
10998	TriMet			Bus replacements	N/A	N/A	40 buses.	$355,200,000	$640,904,515	2008-2035	
10999	TriMet			Bus purchases for congestion	N/A	N/A	40 buses.	$0	$0	2008-2035	
11015	TriMet			Bus purchases for expansion	N/A	N/A	Allocate to individual routes, above.	$0	$0	2008-2035	
11016	TriMet			LIFT vehicle replacement	N/A	N/A	36 buses.	$145,350,000	$262,262,025	2008-2035	
11054	Metro			Regional Travel Options Program	Employment Areas, 2040 Centers, new corridor projects and congested corridors	Employment Areas, 2040 Centers, new corridor projects and congested corridors	RTO is the region's tool to manage congestion and reduce air pollution. RTO implements transportation demand management strategies such as employer outreach to encourage employers to subsidize and provide end-of-trip facilities to help employees choose options other than driving alone. RTO supports Transportation Management Associations and other public/private partnerships that reduce VMT. RTO also addresses non-commute trips through individualized marketing; helping residents try new travel options fro some or all of their trips. As the region's population and economy grows, the RTO program will gain efficiencies moving people and goods on built-out transportation infrastructure.	$74,250,000	$133,972,861	2008-2035	Employment area
11103	Metro			Regional Planning				$67,500,000	$121,793,510	2008-2035	
11104	Metro			Regional ITS/TSMO				$40,500,000	$73,076,106	2008-2035	
11109	SMART			Bus Replacements			Purchase buses to replace those that are no longer safe or reliable.	$13,100,000	$23,636,963	2008-2035	Other
10216	Portland			Smart Trips Portland, a city-wide individualized marketing strategy			Smart Trips Portland is a comprehensive approach to reduce drive-alone trips and increase biking, walking and public transit in targeted geographic areas or key transportation corridors of the city. It incorporates the innovative and highly effective “individualized marketing” methodology, which hand delivers packets of information to residents who wish to learn more about transportation options. Key components feature biking and walking maps and organized activities which get people out in their neighborhoods or places of employment to shop, work, and discover how many trips they can easily, conveniently, and safely make without using a car. Success is tracked by evaluating qualitative and quantitative results from surveys and other performance measures.	$4,450,000	$5,414,105	2008-2017	other
10931	TriMet			Frequent Bus: Line 31 - Clackamas Regional Center to 152nd	N/A	N/A	125 additional service hours upgrade and related bus stop and ROW improvements.	$1,100,000	$1,904,844	2018-2025	
10937	TriMet			Frequent Bus: Line 54 - Beaverton Hillsdale Hwy. to Beaverton TC	N/A	N/A	225 additional service hours for FS extension and related bus stop and ROW improvements.	$2,450,000	$4,242,607	2018-2025	

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10938	TriMet			Frequent Bus: Line 33 - McLoughlin to Clackamas Community College	N/A	N/A	260 additional service hours for FS extension and related bus stop and ROW improvements.	$875,000	$1,515,217	2018-2025	
10939	TriMet			Frequent Bus: Line 33 - McLoughlin to Oregon City	N/A	N/A	1601 additional service hours for span of service and related bus stop and ROW improvements.	$1,675,000	$2,900,558	2018-2025	
10940	TriMet			Frequent Bus: Line 35 - Macadam Ave. to Oregon City	N/A	N/A	605 additional service hours upgrade and related bus stop and ROW improvements.	$3,600,000	$6,234,035	2018-2025	
10941	TriMet			Frequent Bus: Line 12 - Barbur to Durham Road	N/A	N/A	60 additional service hours for span of service and related bus stop and ROW improvements.	$3,500,000	$6,060,868	2018-2025	
10942	TriMet			Frequent Bus: Line 12 - Sandy to Parkrose TC	N/A	N/A	40 additional service hours for span of service and related bus stop and ROW improvements.	$4,175,000	$7,229,749	2018-2025	
10943	TriMet			Frequent Bus: Line 12 - Barbur from Durham to Sherwood	N/A	N/A	140 additional service hours for FS extension and related bus stop and ROW improvements.	$1,050,000	$1,818,260	2018-2025	
10944	TriMet			Frequent Bus: Line 79 - Clackamas Town Center to Oregon City via Webster Road	N/A	N/A	305 additional service hours for upgrade of service and related bus stop and ROW improvements.	$2,825,000	$4,891,986	2018-2025	
10945	TriMet			Frequent Bus: Line 87 - 181st/182nd Ave., NE Sandy to SE Powell Blvds	N/A	N/A	380 additional service hours for upgrade of service and related bus stop and ROW improvements.	$2,025,000	$3,506,645	2018-2025	
10002	Clackamas Co.	Clackamas Co.		Johnson Creek Blvd. Improvements	45th Ave.	82nd Ave.	Widen from three to five lanes and widen bridge over Johnson Creek.	$40,790,000	$70,635,082	2018-2025	Industrial area
10005	Clackamas Co.	Clackamas Co.		West Monterey Extension	82nd Ave.	Fuller Rd.	New two-lane extension.	$6,200,000	$10,736,394	2018-2025	Regional center
10007	Clackamas Co.	Clackamas Co.		Causey Ave. Overcrossing	over I-205	Bob Schumacher Rd.	Extend new three-lane crossing over I-205.	$14,800,000	$25,628,811	2018-2025	Regional center
10029	Clackamas Co.	Clackamas Co.		Stafford Rd Improvements	I-205	Rosemont Rd.	Widen to three lanes including bike lanes and sidewalks.	$46,300,000	$80,176,620	2018-2025	Other
10038	Clackamas Co.	Clackamas Co.	Damascus	242nd	Multnomah County line	Hwy. 212	Reconstruct 242nd and widen to three/five lanes. The Damascus/Boring Concept Plan identifies 242nd as a community bus transit classification.	$53,340,000	$92,367,622	2018-2025	Town center
10040	Happy Valley	Clackamas Co.	Clackamas Co.	162nd Ave. Extension North	Hagen Rd.	Clatsop St.	Construct a new 3 lane roadway with traffic signals.	$27,970,000	$48,434,990	2018-2025	Neighborhood
10041	Happy Valley	Clackamas Co.	Clackamas Co.	162nd Ave. Extension South	157th Ave.	Hwy. 212	Construct a new 3 lane roadway with traffic signals, bridge over Rock Creek.	$22,610,000	$39,153,204	2018-2025	Employment area
10048	Clackamas Co.	Clackamas Co.	Oregon City	Holly Lane	Redland Rd.	Maple Lane	Turn lanes, bike lanes, sidewalks, intersection improvements, bridge replacement.	$20,740,000	$35,914,970	2018-2025	Other
10074	Damascus			New Connection	Parkway Interchange Near 190th Ave.	Arterial #3	Rock Creek junction interchange to 172nd Ave through Rock Creek industrial area.	$19,800,000	$34,287,194	2018-2025	Industrial area
10076	Damascus	Damascus		SE Sunnyside Rd East Extension	SE 172nd Ave.	SE 242nd Ave.	Extend Sunnyside Road east from 172nd Ave to 242nd Ave. Evaluate alignment options between Bohna Park Road and Tillstrom Road for the connection from Foster Road to 242nd Ave.	$101,500,000	$175,765,159	2018-2025	Town center
10078	Damascus	ODOT		Hwy. 224	Sunrise End	Carver Bridge	Widen Highway 224 to four lanes with turn pockets at intersections to Carver bridge. The Damascus/Boring Concept Plan identifies Highway 224 as a community bus transit classification.	$12,150,000	$21,039,869	2018-2025	Industrial area
10083	Happy Valley		Clackamas Co.	Clatsop St. Extension West	132nd Ave.	Mt. Scott Blvd	Construct a new 3 lane roadway with traffic signals.	$17,190,000	$29,767,518	2018-2025	Neighborhood
10088	Lake Oswego			Lower Boones Ferry Rd.	Madrona Street	Kruse Way	Widen to inlcude bike lanes and turn lanes.	$20,720,000	$35,880,336	2018-2025	Town center
10096	Milwaukie	Milwaukie		37th Ave. Bike/Ped Improvement	Hwy. 224	Harrison St.	Construct sidewalks and bike lanes. Key connection between Highway 224 and Harrison Street (Arterial).	$2,800,000	$4,848,694	2018-2025	Town center
10103	Milwaukie	Milwaukie		King Rd. Blvd. Project	42nd Ave.	Linwood Ave.	Construct boulevard, including new sidewalks, bus stop shelters, planter strips, medians, pedestrian scale lighting.	$14,300,000	$24,762,973	2018-2025	Town center
10118	Oregon City	ODOT		McLoughlin Blvd. Improvements - Phase 3	Railroad Tunnel	10th St.	Complete boulevard design improvements and viaduct improvements.	$14,300,000	$24,762,973	2018-2025	Regional center
10124	Oregon City	Oregon City		Molalla Ave. Streetscape Improvements Phase 3	Holmes	Warner Milne	Streetscape improvements including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities.	$700,000	$1,212,174	2018-2025	Regional center
10126	Oregon City	Oregon City		Swan Extension	Swan	UGB	Through lanes, sidewalks, bike lanes, turn lanes to serve UGB expansion area.	$41,000,000	$70,998,734	2018-2025	Regional center
10129	West Linn		Lake Oswego	Willamette River Greenway Trail	Willamette Park	Lake Oswego - Willamette River trail	Paved trail running parallel to the Willamette River from Willamette Park at the mount of the Tualatin River eventually to the Lake Oswego City Limits facilitating connection to the Willamette River Trail with neighboring cities as part of the Metro Region.	$2,000,000	$3,463,353	2018-2025	Town center
10138	Damascus	Damascus		Hwy 212 widening to 5 lane boulevard	Sunrise Unit 1 Terminus	East City Limits	Widen Highway 212 to a 5 lane boulevard section through Damascus.	$58,500,000	$101,303,072	2018-2025	Town center
10147	Oregon City	Oregon City		Newell Creek Canyon Trail (East)	Hwy 213 and Redland Rd.	Beavercreek Rd.	Regional trail would follow the Oregon City-Molalla interurban railroad bench on the east side of Newell Creek Canyon.	$3,000,000	$5,195,029	2018-2025	Neighborhood
10161	Portland			5th/6th, NW/SW (Irving - Jefferson): Portland Transit Mall Restoration and reconstruction for Light Rail Transit	Irving	Jefferson	Extend mall and reconfigure to accommodate light rail tracks and stations. Repairs to Transit Mall including sidewalk brick work, reconstruction, curbs, gutters, and other pedestrian improvements.		$0	2018-2025	Portland Central City

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10173	Portland/ODOT			Macadam, SW (Bancroft - Sellwood Br): ITS	SW Bancroft	Sellwood Bridge	Install needed ITS infrastructure (communication network, new traffic controllers, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system.	$401,794	$695,777	2018-2025	Portland Central City
10176	Portland			PSL - Eastside Extension	NW Lovejoy/10th	NE 7th/ Oregon.	Construct streetcar from NW Lovejoy/10th to NE 7th / Oregon.	$147,000,000	$254,556,438	2018-2025	Portland Central City
10177	Portland			PSL - OMSI to Riverplace or South Waterfront (close loop)	NE Oregon	SE Water	Construct streetcar from NE Oregon to SE Water.	$19,000,000	$32,901,853	2018-2025	Portland Central City
10196	Portland			Cully Blvd. Green St.	NE Prescott St.	NE Killingsworth	The project will plan, design and rebuild NE Cully Boulevard between NE Prescott Street and NE Killingsworth Street. Project planning and preliminary engineering will analyze alternatives for the roadway with public input and involvement.	$5,255,633	$9,101,056	2018-2025	
10197	Portland			Russell St. Improvements, N	N Williams	N Interstate	Construct improvements to Russell (Williams - Interstate), Albina & Mississippi (Russell - Interstate) to enhance ped connections from Eliot neighborhood and Lower Albina dist to the LRT station. Improve the N Williams at N Stanton intersection.	$3,300,000	$5,714,532	2018-2025	Town Center, Main Street or Station Community
10198	Portland			122nd, NE/SE (NE Airport Way to SE Powell Blvd): ITS	Airport Way	SE Powell Blvd	Install needed ITS infrastructure (communication network, new traffic controllers, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system.	$515,703	$893,031	2018-2025	
10203	Portland			Glisan St, NE (122nd - City Limits): Multi-modal Improvements	NE 122nd	City Limits	Infill missing sidewalk, add curb ramps at corner, add 3 median island crossings, and add a signal.	$3,100,241	$5,368,614	2018-2025	
10219	ODOT/ Portland			Argyle on the Hill, N Columbia to N Denver Ave.	Columbia Blvd	N Denver	New N Argyle street connection, west of I-5.	$11,773,032	$20,387,082	2018-2025	
10220	Portland			Seventies Greenstreet and Bikeway, NE	NE Killingsworth Ave.	Clatsop St.	Develop a combined pedestrian greenway and bike boulevard including crossing improvements at arterials, streetlighting, and public art from Killingsworth to Clatsop. Develop a combined pedestrian greenway and bike boulevard including crossing improvements at arterials.	$4,120,727	$7,135,766	2018-2025	
10371	Port of Portland			Airport Way Braided Ramps			Construct braided ramps between the I-205 interchange and Mt. Hood Interchange.	$59,000,000	$102,168,910	2018-2025	Industrial area
10379	Port of Portland			Marine Dr. Improvement Phase 2			Construct rail overcrossing on Marine Dr.	$13,644,200	$23,627,340	2018-2025	Industrial area
10389	Multnomah Co.	Multnomah Co.	Fairview	Reconstruct 223rd Ave.	Sandy Blvd	Marine Dr.	Improve 223rd Ave to major collector standards including 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes. Possible culvert replacement for fish passage could add $120,000 to cost. Requires replacement of RR bridge not included in this proposal.	$2,267,000	$3,925,711	2018-2025	Industrial area
10394	Multnomah Co.	Multnomah Co.	Fairview	Replace RR Over-crossing on 223rd Ave.	2000' north of I-84		Reconstruct railroad bridge on 223rd Ave, 2000' north of I-84 to accommodate wider travel lanes, sidewalks and bike lanes.	$7,000,000	$12,121,735	2018-2025	Industrial area
10399	Multnomah Co.	Multnomah Co.	Wood Village	Reconstruct Sandy Blvd.	207th Ave.	238th Ave.	Reconstruct Sandy Blvd to arterial standards with bike lanes, sidewalks and drainage improvements, utilizing recommendations from TGM grant.	$7,438,000	$12,880,209	2018-2025	Industrial area
10401	Multnomah Co.	Multnomah Co.	Troutdale	Reconstruct Marine Dr.	Interlachen	I-84	Reconstruct Marine Drive between Intelachen and the frontage roads in Troutdale.	$14,000,000	$24,243,470	2018-2025	Industrial area
10402	Multnomah Co.	Multnomah Co.	Wood Village	Construct new road north of I-84, Exit 16	Sandy Blvd	Marine Dr.	Construct new connector between Sandy Blvd. and Marine Dr, linking industrial sites with I-84	$14,500,000	$25,109,308	2018-2025	Industrial area
10405	Multnomah Co.	Multnomah Co.	Fairview	Pedestrian Improvements	Various streets		Install pedestrian improvements--crossings, lighting, sidewalks.	$1,940,000	$3,359,452	2018-2025	Neighborhood
10406	Multnomah Co.	Multnomah Co.	Troutdale	Reconstruct Stark St. to arterial standards	Troutdale Rd.	Hampton Rd.	Reconstruct road to arterial standards with 1 travel lanes in each direction, center turn lane/median, sidewalks and bicycle lanes.	$1,810,000	$3,134,334	2018-2025	Neighborhood
10408	Multnomah Co.	Multnomah Co.	Troutdale	40 mile loop trail	Marine Dr.	Historic Columbia River Hwy	Constructs new multi-use trail adjacent to Columbia and Sandy Rivers.	$3,500,000	$6,060,868	2018-2025	Other
10409	Multnomah Co.	Multnomah Co.	Troutdale	Beaver Creek Trail	Mt. Hood Comm. Coll.	Historic Columbia River Hwy	Constructs new trail adjacent to Beaver Creek.	$1,400,000	$2,424,347	2018-2025	Other
10420	Gresham	Gresham		Palmquist Rd. Improvements	242nd Ave.	US 26	Improves to five lane collector standards, intersection improvements.	$7,784,844	$13,480,831	2018-2025	Employment area
10424	Gresham	Gresham		Wallula St. Reconstruction, + intersections	Division	Stark	Widen road, add curb/gutter, sidewalks. At Burnside, add northbound, southbound, left turn lanes. Signalize Stark.	$8,347,988	$14,456,014	2018-2025	Regional center
10425	Gresham	Gresham		Bull Run Rd.. Reconstruction	242nd Ave.	257th Ave.	Brings to standards, adds pedestrian, bicycle facilities.	$4,466,312	$7,734,207	2018-2025	Employment area
10427	Gresham	Gresham		Regner Rd. Reconstruction	Roberts	City Limits	Brings to standards, adds pedestrian, bicycle facilities, improves Regner/Butler intersection by adding NB left-turn pocket and signalizing intersection.	$29,265,570	$50,678,498	2018-2025	Neighborhood
10430	Gresham	Gresham	Multnomah Co.	Orient Dr. Imps.	South City Limits	257th Ave.	Upgrades to arterial 4 lane standards.	$9,000,000	$15,585,088	2018-2025	Industrial area
10437	Gresham	Gresham		Gresham/Fairview Trail	Halsey	Marine Dr.	Springwater trail connect. incl. Trailhead @ Marine Dr.	$4,608,799	$7,980,949	2018-2025	Town center
10438	Gresham	Gresham		Springwater Trail Connections	Pl. View/190th	N/A	Provide ped, bike and equestrian access to regional trail.	$271,562	$470,258	2018-2025	Town center

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Metro Project ID	Nominating Agency	Facility Owner / Operator	Other Sponsors	Project/Program Name	Project Start Location (Identify starting point of project)	Project End Location (Identify terminus of project)	Description	Estimated Cost ($2007)	Estimated Cost (YOE $)	Time Period	2040 Land Use
10443	Gresham	Gresham	Portland	Sandy Blvd. Widening	165th	202nd	Widens street to 5 lanes w. sidewalks, bikelanes.	$26,040,578	$45,093,856	2018-2025	Industrial area
10445	Gresham	Gresham		181st Ave. Intersection Improvement (181st/Glisan)	181st./Glisan	"	Improve Intersection.	$1,041,867	$1,804,177	2018-2025	2040 corridor
10446	Gresham	Gresham		181st Ave. Intersection Improvement (181st/Burnside)	181st/Burnside		Improve Intersection.	$831,210	$1,439,387	2018-2025	2040 corridor
10447	Gresham	Gresham		162nd Ave. Imps. Plus TIF project	Glisan	Halsey	Reconstruct, widen to 5 lanes, plus EB RT at Glisan.	$7,915,303	$13,706,744	2018-2025	Other
10453	Gresham	Gresham		Stark St. Improvements	190th	197th	Complete boulevard design improvements.	$6,774,280	$11,730,861	2018-2025	Town center
10455	Gresham	Gresham		Rockwood TC Ped and Ped to Max:188th LRT Stations and Ped to Max			Improve sidewalks, lighting, crossings, bus shelters, benches.	$8,919,615	$15,445,887	2018-2025	Town center
10459	Gresham	Gresham		Burnside SC Pedestrian Imps.	172nd, 197th, Glisan, Stark & intersecting streets		Improve sidewalks, lighting, crossings, bus shelters, benches.	$1,192,669	$2,065,317	2018-2025	Regional center
10464	Gresham	Gresham	Multnomah Co.	Giese Rd. Extension	182nd	172nd	New ext. of Giese Rd. to Foster Road.	$17,987,232	$31,148,066	2018-2025	Town center
10465	Gresham	Gresham	Multnomah Co.	172nd Ave. Improvements	Giese Rd.	Foster Rd.	Upgrade street to urban standards w. sidewalks, bikelanes.	$11,520,364	$19,949,543	2018-2025	Town center
10466	Gresham	Gresham	Multnomah Co.	172nd Ave. Improvements	Butler Rd.	Cheldelin Rd.	Upgrade street to urban standards w. sidewalks, bikelanes, and add roundabout or traffic signal at 172nd/Foster.	$7,112,978	$12,317,376	2018-2025	Town center
10468	Gresham	Gresham	Multnomah Co.	Giese Rd. Improvements	182nd Ave.	190th Ave.	Upgrade street to urban standards w. sidewalks, bikelanes.	$5,430,469	$9,403,815	2018-2025	Town center
10469	Gresham	Gresham	Multnomah Co.	Foster Rd. Bridge	Foster Rd.		Construct bridge crossing.	$2,642,220	$4,575,470	2018-2025	2040 corridor
10470	Gresham	Gresham	Multnomah Co.	Giese Rd. Extension Bridge	Giese Rd.		Construct bridge crossing.	$2,642,220	$4,575,470	2018-2025	Town center
10493	Gresham	Gresham		181st Ave. Sandy to I-84	Sandy	I-84	Add southbound aux lane & widen RR overcrossing.	$827,659	$1,433,238	2018-2025	Industrial area
10496	Gresham	Gresham		181st at I-84	181st/I-84		Freight mobility improvements subject to refinement study.	$250,000	$432,919	2018-2025	2040 corridor
10501	Gresham	Gresham		Barnes Rd.: Powell Valley to City Limits: only Orient to So. City Limits	Powell Valley	Orient Dr.	Widen road and add improvements.	$7,135,229	$12,355,908	2018-2025	Neighborhood
10511	Gresham	Gresham		Hogan Rd. at Stark St.	Stark		Add right turn lanes on all approaches and second northbound and southbound left turns.	$1,908,431	$3,304,785	2018-2025	2040 corridor
10512	Gresham	Gresham		Hogan: Powell to Burnside boulevard improvements plus three intersection improvements	Powell	Burnside	Improve to boulevard standards, and intersection improvements at Burnside, Division and Powell.	$8,739,328	$15,133,688	2018-2025	Regional center
10518	Gresham	Gresham		Wilkes St., 181st to 192nd	181st	192nd	Improve Wilkes to collector standards and provide slip ramp connection from Eastbound I-84 on ramp.	$6,781,698	$11,743,707	2018-2025	Industrial area
10521	Gresham	Gresham		Signalize intersections			Signalize intersections.	$768,590	$1,330,949	2018-2025	Other
10527	Gresham	Gresham		Hogan, Powell Blvd to Palmquist	Powell	Palmquist	Improve to arterial standards.	$8,444,619	$14,623,348	2018-2025	Industrial area
10530	Gresham	Gresham		Towle Ave. Butler Rd. to Binford Lake	Butler Rd.	Binford Lake Parkway	Improve to collector standards. Add roundabout at Towle/Binford.	$11,897,840	$20,603,209	2018-2025	Neighborhood
10545	Washington Co.		ODOT	OR 10: Oleson Rd. Improvement	Oleson Rd. south of OR10	Oleson Rd. at Scholls Ferry	Realign Oleson Rd. 500 feet to east and reconfigure Oleson intersections with OR10 and Scholls Ferry Rd.	$30,888,000	$53,488,022	2018-2025	Town center
10546	Washington Co.	Washington Co.		170th Ave. Improvements	Alexander St.	Merlo Rd.	Widen roadway to 4 lanes with left turn lanes at major intersections and bike lanes and sidewalks.	$28,093,000	$48,647,986	2018-2025	Neighborhood
10547	Washington Co.	Washington Co.		173rd/174th Under Crossing Improvement	Cornell Rd.	Bronson Rd.	Construct three-lane under crossing of Hwy. 26 with bike lanes and sidewalks.	$58,641,000	$101,547,239	2018-2025	Town center
10554	Washington Co.	Washington Co.		Bethany Blvd. Improvements	Kaiser Rd.	West Union Rd.	Widen to 5 lanes with bikelanes and sidewalks.	$22,046,000	$38,176,539	2018-2025	Town center
10558	Washington Co.	Washington Co.		Cornell Rd. Improvements	113th Ave.	107th Ave.	Widen from two to three lanes with bike lanes and sidewalks.	$9,941,000	$17,214,596	2018-2025	Neighborhood
10559	Washington Co.	Washington Co.		Cornell to Murray Improvements	Murray Blvd.	Hwy. 26	Widen Cornell from three to five lanes with bike lanes and sidewalks.	$40,620,000	$70,340,697	2018-2025	Town center
10561	Washington Co.	Washington Co.		Jenkins Rd. Improvements	Murray Blvd.	158th Ave.	Widen roadway from three to five lanes with bike lanes and sidewalks.	$15,530,000	$26,892,935	2018-2025	Station community
10563	Washington Co.	Washington Co.		Kaiser/143rd Ave. Improvements	Bethany Blvd.	Cornell Rd.	Widen from two to three lanes with bike lanes and sidewalks.	$38,357,000	$66,421,914	2018-2025	Neighborhood
10568	Washington Co.	Washington Co.		Tualatin-Sherwood Rd. Improvements	Hwy. 99W	Teton Ave.	Widen from three to five lanes with bike lanes and sidewalks.	$49,150,000	$85,111,897	2018-2025	Industrial area
10569	Washington Co.	Washington Co.		Walker Rd. Improvements	185th Ave.	Stucki Ave.	Widen from two to five lanes with bike lanes and sidewalks.	$14,776,000	$25,587,251	2018-2025	Station community
10570	Washington Co.	Washington Co.		Walker to Hwy. 217 Improvements	185th Ave.	Hwy. 217	Widen from two to five lanes with bike lanes and sidewalks.	$89,612,000	$155,178,990	2018-2025	Station community
10572	Washington Co.	Washington Co.		Barnes Rd. Improvements	St. Vincent's Hosp. entrance	Leahy Rd.	Widen from two to five lanes with bike lanes and sidewalks.	$8,933,000	$15,469,066	2018-2025	Station community
10578	Washington Co.	Washington Co.		Merlo/158th Improvements	170th Ave.	Walker Rd.	Widen roadway to five lanes with bike lanes and sidewalks	$24,735,000	$42,833,017	2018-2025	Station community
10590	Washington Co.	Washington Co.		Tonquin Rd. Improvements	Grahams Ferry Rd.	Oregon St.	Realign and widen to three lanes with bike lanes and sidewalks.	$28,406,000	$49,190,001	2018-2025	Other
10596	Washington Co.			Scholls Ferry Rd. Improvements	Hwy. 217	121st Ave.	Widen to seven lanes with bike lanes and sidewalks.	$19,749,000	$34,198,878	2018-2025	2040 corridor
10601	Washington Co.	ODOT	ODOT	Hwy. 26/Bethany Interchange Improvements	Cornell Rd.	Bronson Rd.	Rebuild overpass to accommodate additional northbound thru-lane.	$8,720,000	$15,100,219	2018-2025	Employment area

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10620	Beaverton	Beaverton		Millikan Way multimodal extension from Watson Ave. to 114th Ave.	Watson Ave.	114th Ave.	Extend 2 lane Millikan Way to 114th to fill a gap; add turn lanes at intersections, sidewalks, bikeway.	$13,800,000	$23,897,135	2018-2025	Regional center
10621	Beaverton	Beaverton		New street connection from Broadway to 115th Ave.	Broadway	115th Ave.	Construct new 2 lane street with bikeway and sidewalks.	$4,500,000	$7,792,544	2018-2025	Regional center
10622	Beaverton	Beaverton		Electric to Whitney to Carousel to 144th multimodal street connections	Electric	144th Ave.	Connect existing streets and improve to standard with bikeways and sidewalks.	$7,200,000	$12,468,070	2018-2025	Station community
10624	Beaverton	Beaverton		120th Ave.: new 2 lane multimodal street	Center St.	Canyon Rd.	Construct new multimodal street with bikeways and sidewalks; turn lanes and signals as needed.	$8,900,000	$15,411,920	2018-2025	Regional center
10627	Beaverton	Beaverton		Tualaway 2 lane multimodal street extension	Electric	Millikan	Extend existing street to Millikan with bikeways and sidewalks.	$3,900,000	$6,753,538	2018-2025	Station community
10633	Beaverton	Beaverton		Allen Blvd. safety, bicycle and pedestrian improvements	Highway 217	Western Ave.	Widen street to 4/5 lanes adding turn lanes and signals where needed, construct bike lanes and sidewalks.	$6,300,000	$10,909,562	2018-2025	Industrial area
10634	Beaverton	Beaverton		Cedar Hills Blvd. safety, bicycle and pedestrian improvements	Farmington Rd.	Walker Rd.	Add turn lanes, bike lanes and sidewalks.	$19,000,000	$32,901,853	2018-2025	2040 corridor
10636	Beaverton	Beaverton		Millikan Way safety, bike and pedestrian improvements	141st Ave.	Hocken Ave.	Add turn lanes as needed, bike lanes and sidewalks, signalize as warranted.	$2,600,000	$4,502,359	2018-2025	Station community
10639	Beaverton	Beaverton		Weir Rd. safety, bicycle and pedestrian improvements	155th Ave.	175th Ave.	Add turn lanes, bikelanes and sidewalks in gaps, turn lanes.	$4,100,000	$7,099,873	2018-2025	Neighborhood
10640	Beaverton	Beaverton		Nimbus Ave. 2 lane multimodal street extension from Hall Blvd. to Denney Road	Hall Blvd.	Denney Rd.	Extend 2 lane street with turn lanes, bikelanes and sidewalks.	$15,400,000	$26,667,817	2018-2025	Regional center
10642	Beaverton	Beaverton		Adaptive Traffic Signal Systems	Adaptive Traffic Signal Systems	Allen Blvd., Cedar Hills Blvd., Hall Blvd., Farmington Road	New signals and signal upgrades.	$10,000,000	$17,316,764	2018-2025	
10644	Beaverton	Washington County		110th Ave. sidewalk gaps	Beaverton Hillsdale Hwy	Canyon Rd	Construct sidewalks.	$1,400,000	$2,424,347	2018-2025	Regional center
10649	Beaverton	Beaverton		Allen Blvd sidewalks	Western Ave.	Arctic Dr.	Construct sidewalks.	$200,000	$346,335	2018-2025	Industrial area
10650	Beaverton	Beaverton		Western Ave. sidewalks	5th Street	800 ft s/o 5th Street	Construct sidewalks.	$600,000	$1,039,006	2018-2025	Industrial area
10651	Beaverton	Beaverton		Allen Blvd. sidewalks	King Blvd.	Western Ave.	Construct sidewalks.	$3,100,000	$5,368,197	2018-2025	Industrial area
10653	Beaverton	Beaverton		Sexton Mountain Drive multimodal street extension from 155th Ave. to Sexton Mtn. across the Powerline	155th Ave.	Sexton Mountain Drive	Extend 2 lane street with bikelanes and sidewalks	$2,500,000	$4,329,191	2018-2025	Neighborhood
10654	Beaverton	Beaverton		Nora Road sidewalks and bike lanes	175th Ave.	155th Ave.	Construct sidewalks and bike lanes.	$2,000,000	$3,463,353	2018-2025	
10656	Beaverton	Beaverton		Jamieson Rd. sidewalks	Pinehurst/Cypress	Woodlands Dr.	Construct sidewalks.	$400,000	$692,671	2018-2025	
10663	Beaverton	Beaverton		Hall Blvd. bike lanes & turn lanes to Cedar Hills	Farmington Road	Cedar Hills Blvd.	Construct bike lanes and turn lanes.	$5,200,000	$9,004,718	2018-2025	
10664	Beaverton	Beaverton		Watson Ave. bike lanes	Hall Blvd.	Cedar Hills Blvd.	Construct bike lanes.	$4,500,000	$7,792,544	2018-2025	
10665	Beaverton	Beaverton		6th Ave. bikelanes	Murray Blvd.	Erickson Ave.	Construct bike lanes.	$3,600,000	$6,234,035	2018-2025	
10666	Beaverton	Beaverton		Greenway Dr. bike lanes	Hall Blvd.	125th Ave.	Construct bike lanes.	$3,700,000	$6,407,203	2018-2025	
10667	Beaverton	Beaverton		155th Ave. bike lanes	Davis Rd.	Weir Rd.	Construct bike lanes in gaps.	$5,400,000	$9,351,053	2018-2025	
10668	Beaverton	Beaverton		Farmington Rd Bike lane retrofit	Hwy 217	Hocken Ave.	Construct bike lanes.	$12,600,000	$21,819,123	2018-2025	
10669	Beaverton	Beaverton		Hall Blvd. bike lanes & turn lanes	12th St.	s/o Allen Blvd.	Construct bike lanes and turn lanes.	$5,200,000	$9,004,718	2018-2025	
10670	Beaverton	Beaverton		Denney Rd. bike lanes	Hall Blvd.	Scholls Ferry Rd.	Construct bike lanes.	$6,100,000	$10,563,226	2018-2025	
10671	Beaverton	Beaverton		Allen Blvd. bike lanes	200' e/o Western	Scholls Ferry Rd.	Construct bike lanes.	$4,300,000	$7,446,209	2018-2025	
10672	Beaverton	Beaverton		Western Ave. bike lanes	Beaverton Hillsdale Hwy	Allen Blvd.	Construct bike lanes.	$5,000,000	$8,658,382	2018-2025	
10674	Sherwood	Sherwood		Oregon-Tonquin Intersection & Street Improvements	Oregon St.	at Tonquin	Intersection improvements (consider roundabout) on Oregon at Tonquin Road; sidewalks and bike access through the intersection.	$1,945,000	$3,368,111	2018-2025	Industrial area
10677	Sherwood	Sherwood		Adams Ave Phase 2	T-S Rd.	99W	Construct 3 lane road, landscaping and multi-use path.	$8,580,000	$14,857,784	2018-2025	Employment area
10680	Sherwood	Sherwood		Elwert Rd & 99W Intersection Improvements	99W	Kruger Rd	Intersection safety improvements.	$2,700,000	$4,675,526	2018-2025	Employment area
10681	Sherwood		Washington Co.	Elwert Rd	99W	Edy Rd	Upgrade road to arterial standards.	$11,430,000	$19,793,062	2018-2025	Employment area
10682	Sherwood	Sherwood		Brookman Rd	99W	Ladd Hill Rd	Reconstruct road to collector standards.	$20,510,000	$35,516,684	2018-2025	Neighborhood
10691	Sherwood		Washington Co.	Edy Rd/Sherwood Blvd	Borcher Dr	3rd St.	Reconstruct road to arterial standards; add sidewalks.	$7,740,000	$13,403,176	2018-2025	2040 corridor
10695	Sherwood	Sherwood		Meinecke	99W	1st	Add bike lanes.	$1,150,000	$1,991,428	2018-2025	Main street
10701	Sherwood	Sherwood		Regional Trail System / West fork of Tonquin Trail	Middle fork of Tonquin Trail	Wildlife Refuge	Construct regional trail to connect SE City limits with trail system north of City limits.	$2,465,000	$4,268,582	2018-2025	Other

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10703	Sherwood	Sherwood		Pedestrian Links to Schools & Town Center			Pedestrian upgrades, new sidewalks, sidewalk infill at: Sunset, Division, Edy, Elwert, Meinecke, Pine, Roy, Ladd Hill, Timbrel, Washington, Willamette, Old Pacific Hwy.	$6,983,000	$12,092,297	2018-2025	Neighborhood
10735	Tualatin	Tualatin		Herman	108th	Teton	Widen to 5 lanes from 108th to Teton.	$1,250,000	$2,164,596	2018-2025	Main street
10744	Tualatin	Tualatin		Tualatin River Pathway				$8,600,000	$14,892,417	2018-2025	Other
10745	Tualatin	Tualatin		Pedestrian Trail	65th	Martinazzi	Pedestrian trail from 65th to Martinazzi.	$1,600,000	$2,770,682	2018-2025	Other
10746	Tigard			Washington Square Connectivity Improvements	Washington Square local street connections	Washington Square local street connections	Increase local street connections at Washington Square Center based on recommendations in regional center plan.	$6,912,000	$11,969,348	2018-2025	Regional center
10747	Tigard			Hwy. 217 Overcrossing - Cascade Plaza	Nimbus	Locust	Provide a new connection from Nimbus to Washington Square south of Scholls Ferry Road.	$5,166,000	$8,945,841	2018-2025	Regional center
10749	Tigard			Washington Square Regional Center Pedestrian Improvements	Various	Various	Improve sidewalks, lighting, crossings, bus shelters, and benches at Washington Square.	$5,720,000	$9,905,189	2018-2025	Regional center
10750	Tigard			Greenburg Road Improvements	Tiedeman Ave.	Hwy. 99W	Widen to 5 lanes.	$15,017,000	$26,004,585	2018-2025	Town center
10751	Tigard	ODOT		Hwy. 217 Overcrossing	Hunziker Road	72nd Ave.	Realign Hunziker Road to meet Hampton Street at 72nd Ave. and removes existing 72nd/Hunziker Road intersection.	$9,635,000	$16,684,703	2018-2025	Employment area
10760	Tigard	Tigard		Tigard Town Center Pedestrian Improvements	Tigard Town Center	Throughout TC area	Improve Sidewalks, lighting, crossings, bus shelters and benches throughout the Town Center including: Highway 99W, Hall Blvd, Main Street, Hunziker, Walnut and neighborhood streets.	$4,882,000	$8,454,044	2018-2025	Town center
10762	Tigard		Washington Co.	Nimbus Ave. Extension	Nimbus Ave.	Greenburg Road	2 lane extension with sidewalks and bike lanes.	$4,680,000	$8,104,246	2018-2025	Regional center
10764	Tigard	Tigard		Durham Road Improvements	Hall Blvd.	99W	Widen to 5 lanes with bikeways and sidewalks.	$30,515,000	$52,842,107	2018-2025	2040 corridor
10788	Cornelius	Cornelius		10th Ave	TV Hwy	Golf Course Rd	Improve to urban standard w/in City (sidewalks & bike lanes); widen rural road with shoulder bike lane, reconstruct Council Creek Bridge.	$700,000	$1,212,174	2018-2025	Main street
10795	Cornelius	Cornelius		Holladay St Extension	4th	Yew	Construct new collector.	$2,500,000	$4,329,191	2018-2025	Main street
10797	Cornelius	Cornelius		Holladay St Extension	Gray	19th	Construct new collector.	$1,300,000	$2,251,179	2018-2025	Main street
10798	Cornelius	Cornelius		Davis St. Extension	4th Ave	10th Ave	Construct new collector.	$2,500,000	$4,329,191	2018-2025	Main street
10799	Cornelius	Cornelius		Davis St. Extension	19th Ave	29th Ave	Construct new collector.	$4,500,000	$7,792,544	2018-2025	Main street
10807	Cornelius	Cornelius		HCT Park & Ride	26th Ave	N/A	Build station area and park & ride facilities.	$850,000	$1,471,925	2018-2025	Main street
10808	Cornelius	Cornelius		HCT Park & Ride	10th Ave	N/A	Build station area and park & ride facilities.	$850,000	$1,471,925	2018-2025	Main street
10809	THPRD	THPRD		Bronson Creek Community Trail	Bronson Creek Park Cornell Rd. (THPRD)	Laidlaw Rd.	To design and construct a community trail segment in a greenway corridor, 8'-10' wide paved.	$3,500,000	$6,060,868	2018-2025	Other
10811	THPRD	THPRD		Beaverton Creek Trail (Regional)	SW 194th Ave.	Fanno Creek Trail	To design and construct a regional trail multi-use segment in a utility corridor, 10'-12' wide paved.	$7,000,000	$12,121,735	2018-2025	Other
10818	Hillsboro	Hillsboro		231st Ave./Century Blvd	Baseline	Lois	Bridge and 3 lanes with bike lanes and sidewalks.	$26,248,000	$45,453,043	2018-2025	
10823	Hillsboro	Hillsboro		Amberwood	206th	Cornelius Pass	Improve to 3 lane with bike lanes and sidewalks.	$2,312,000	$4,003,636	2018-2025	Town center
10824	Hillsboro	Hillsboro		Cornell Rd	Arrington	Main Street	Improve to 5 lane with bike lanes and sidewalks.	$9,248,000	$16,014,544	2018-2025	Regional center
10828	Hillsboro	Hillsboro		Edgeway (Salix)	LRT	Walker Rd	Extend as 2/3 lane with bike/sidewalks.	$6,664,000	$11,539,892	2018-2025	Station community
10831	Hillsboro	Hillsboro		Century Blvd	Bennett	West Union Rd	Extend 2/3 lane with US 26 Overpass, connect existing segments.	$12,920,000	$22,373,260	2018-2025	Industrial area
10833	Hillsboro	Hillsboro		Grant Street Extension	28th	Brookwood	Extend 3 lane road with bike lanes/sidewalks.	$12,240,000	$21,195,720	2018-2025	Station community
10834	Hillsboro	Hillsboro		28th Ave.	Main	25th	Widen to 3 lanes with bike/sidewalks.	$4,352,000	$7,536,256	2018-2025	Main street
10835	Hillsboro	Hillsboro		185th Ave.	Cornell Rd	Walker Rd	Widen to 7 lanes.	$4,896,000	$8,478,288	2018-2025	Town center
10840	Hillsboro	Hillsboro		Regional Center Improvements	N/A	N/A	Miscellaneous Improvements to maintain capacity.	$10,470,000	$18,130,652	2018-2025	Regional center
10842	Hillsboro	Hillsboro		Other Collector Reconstruction	N/A	N/A	Miscellaneous locations.	$35,000,000	$60,608,676	2018-2025	Regional center
10843	Hillsboro	Hillsboro		Intersection Improvements	N/A	N/A	Miscellaneous locations.	$25,000,000	$43,291,911	2018-2025	Regional center
10847	Hillsboro	Hillsboro		Regional Center Ped Improvements	N/A	N/A	Infill missing pedestrian sidewalks.	$4,550,000	$7,879,128	2018-2025	Regional center
10848	Hillsboro	Hillsboro		Industrial/Town Center Ped Improvement	N/A	N/A	Infill missing pedestrian sidewalks.	$1,300,000	$2,251,179	2018-2025	2040 corridor
10849	Hillsboro	Hillsboro		Regional Center- Bike Improvement	N/A	N/A	Infill missing bike lane connections.	$2,110,000	$3,653,837	2018-2025	Regional center
10850	Hillsboro	Hillsboro		Beaver Ck Trail, Bronson Ck Trail,			Construct bike/ped trail.	$1,000,000	$1,731,676	2018-2025	2040 corridor
10851	Hillsboro	Hillsboro		Rock Ck Trail - Multi Use	River Road	Orchard Park (East of Cornelius Pass Rd)	Construct bike/ped trail.	$5,520,000	$9,558,854	2018-2025	2040 corridor
10856	Gresham			Richey/Foster Connection	Intersection Richey/Foster		Construct roundabout and related improvements to Foster.	$656,452	$1,136,762	2018-2025	Employment area
10857	Gresham	Gresham		Jenne/Foster	Intersection Jenne/Foster		Add second EB left turn lane. Requires widening of Jenne North.	$540,780	$936,456	2018-2025	Employment area
10858	Gresham	Gresham		174th/Powell	Intersection of 174th/Powell		Improve intersection to 5 lane section.	$1,860,824	$3,222,345	2018-2025	Employment area
10863	ODOT	ODOT	Port of Portland	Convert Marine Dr. one-way southbound to two-way under I-84 and widen to five lanes.	Troutdale interchange (exit 17)		Convert Marine Drive one-way southbound to two-way under I-84 and widen to five lanes.	$20,400,000	$35,326,200	2018-2025	Throughway

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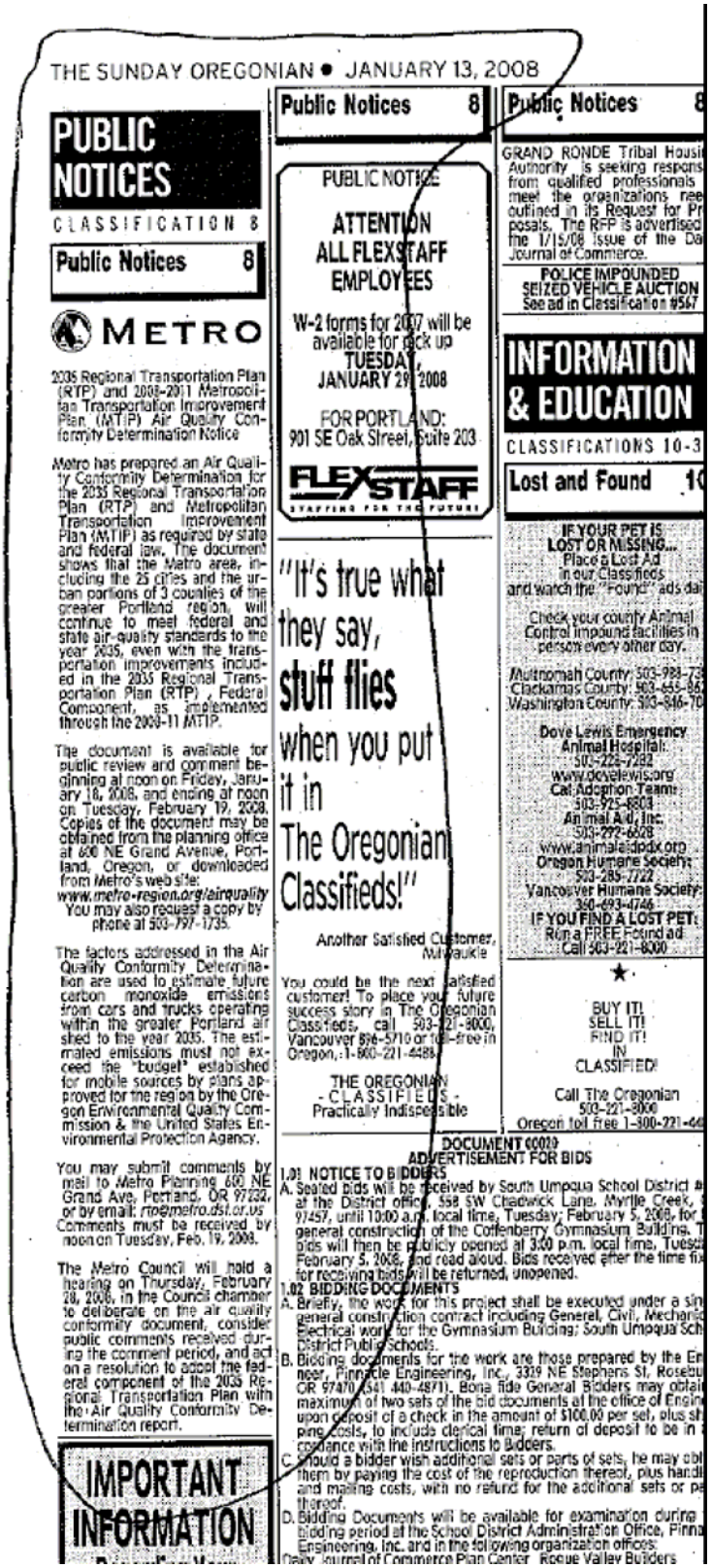
2035 Regional Transportation Plan Project List

Metro Project ID	Nominating Agency	Facility Owner / Operator	Other Sponsors	Project/Program Name	Project Start Location (Identify starting point of project)	Project End Location (Identify terminus of project)	Description	Estimated Cost ($2007)	Estimated Cost (YOE $)	Time Period	2040 Land Use
10864	ODOT	ODOT	Gresham	New interchange on US 26 to serve industrial area.	US 26 and Callister Road	US 26 and 267th Ave.	New interchange on US 26 to serve industrial area.	$29,500,000	$51,084,455	2018-2025	Throughway
10884	ODOT	ODOT		I-5/I-84 Interchange: Acquire R-O-W	I-5 and I-84	I-5 and Greeley St.	Acquire right-of-way.	$30,000,000	$51,950,293	2018-2025	Throughway
11088	Oregon City	Clackamas Co.	Oregon City	Holly Lane	Redland Rd.	Holcomb Rd.		$21,000,000	$36,365,205	2018-2025	Other
11113	SMART			Transportation Management Association (TMA)			Form a transportation management association (TMA) to provide transportation services and information on alternatives to local employers and employees	$200,000	$346,335	2018-2025	Industrial area and Employment Area
10089	Lake Oswego			Lake Oswego Transit center	Lake Oswego downtown	Near street car	Move existing transit center closer to the street car for better connectivity.	$7,790,000	$13,489,760	2018-2025	Town center
10012	Clackamas Co.	Clackamas Co.		Fuller Rd. Improvements	Harmony Rd.	Monroe St.	Widen to three lanes to include disconnecting auto access to King Road.	$5,300,000	$13,062,992	2026-2035	Employment area
10014	Clackamas Co.	Clackamas Co.		82nd Ave. Multi-Modal Improvements	Clatsop Ave.	Monterey Ave.	Widen to add sidewalks, lighting, central median, planting strips and landscaping.	$13,600,000	$33,520,131	2026-2035	Regional center
10022	Clackamas Co.	Clackamas Co.		SE 82nd Dr. Improvements	Hwy 212	Lawnfield Rd.	Widen to five lanes to accommodate truck movement.	$12,350,000	$30,439,237	2026-2035	Industrial area
10075	Damascus	Damascus		Royer Rd. Connection	Royer Rd. North Segment End	Royer Rd. South Segment	Construct a roadway connection between the northern and southern sections of Royer Road.	$5,980,000	$14,738,999	2026-2035	Neighborhood
10077	Damascus	Damascus		222nd Ave.	Hwy. 212	Tillstrom Rd.	Widen 222nd Ave. from Highway 212 to Tillstrom Road to four lanes with turn pockets at intersections. All major arterials are to be designed with sidewalks, bike lanes, and a landscaped buffer between sidewalk and curb or on-street parking in town center.	$30,370,000	$74,853,411	2026-2035	Neighborhood
10079	Damascus	Damascus		Widen Tillstrom Rd.	Foster Rd.	242nd Ave.	Widen Tillstrom Rd to 4 lanes with turn pockets at intersections. Damascus/Boring Concept Plan identifies Tillstrom Rd as a transit street.	$18,480,000	$45,547,943	2026-2035	Town center
10082	Happy Valley		Clackamas Co.	Mt. Scott Blvd./King Rd. Improvements	Happy Valley City Limits	145th Ave.	Widen to three lanes.	$20,820,000	$51,315,378	2026-2035	Town center
10113	Milwaukie			River Rd. Sidewalks	99-E	City Limit	Construct sidewalks.	$2,400,000	$5,915,317	2026-2035	Town center
10166	Portland			NW Burnside at Skyline Rd.	Intersection NW Burnside/ Skyline Rd.		Intersection improvements.	$1,850,716	$4,561,488	2026-2035	Portland Central City
10181	Portland			Fifties Bikeway, NE/SE (Tillamook to Woodstock)	SE Woodstock	NE Tillamook	Curb extensions, median refuges, signal modifications, and striping changes to create a north-south bicycle boulevard, along various interconnected portions of 52nd-57th streets between NE Thompson and SE Woodstock Blvd.	$1,595,049	$3,931,342	2026-2035	
10199	Portland			SE 136th Ave. (Division to Powell) Bikeway	SE Division	SE Foster	From SE Division Street to SE Powell Boulevard: Improve to 36' curb-to-curb with 2-13' traffic lanes and 2-5' bike lanes; 6" curbs, 9' swales and 6' sidewalks on both sides.	$6,090,590	$15,011,572	2026-2035	
10221	Portland			Skyline, NW (Hwy 26 - City Limits): Shoulder Improvements	Hwy 26	City Limits	Widen existing 22' of pavement to 32', and add 2' shoulders adjacent to lanes.	$8,088,812	$19,936,621	2026-2035	
10222	Portland			Flavel Dr, SE	SE 45th	Clatsop	Fully improve street from SE 45th to Clatsop Street with travel lanes, curbs, swales, sidewalks, and some bike lanes.	$7,294,088	$17,977,852	2026-2035	
10223	Portland			122nd, SE (at Morrison): Pedestrian Overcrossing			Provide an at-grade improved pedestrian crossing on SE 122nd Ave..	$1,993,000	$4,912,178	2026-2035	
10224	Portland			Barbara Welch Rd., SE: Multimodal Improvements	SE Foster	City Limits	Widen existing 20' of pavement to new 34' roadway with travel lanes, bike lanes, curb and sidewalk.	$20,191,557	$49,766,444	2026-2035	
10225	Portland			Powellhurst/Gilbert Pedestrian Improvements to SE 122nd Ave.	SE Harold	SE Raymond	Add sidewalks to SE 122nd Ave. between SE Harold Street and SE Raymond Street.	$1,473,288	$3,631,236	2026-2035	
10226	Portland			Hamilton St., SW	SW Dosch Rd.	SW Scholls Ferry Rd.	Improve SW Hamilton Street between SW Dosch and Scholls Ferry Road.	$12,420,360	$30,612,654	2026-2035	
10227	Portland			Stephenson, SW (Boones Ferry - 35th): Multi-modal Improvements	SW Boones Ferry	SW 35th	Install bikeway, pedestrian facilities, and improve and signalize the intersection at SW Stephenson and SW Boones Ferry Road.	$3,813,000	$9,397,960	2026-2035	
10230	Portland			Twenties Bikeway, NE/SE (Lombard - Clinton)	NE Lombard	SE Clinton	Design & implement bikeway along SE 29th,30th/NE 26th/28th / NE Oregon, Wasco, from SE Clinton to NE Lombard using bike blvds. & bike lanes.	$1,837,573	$4,529,095	2026-2035	
10384	Multnomah Co.	Multnomah Co.		Reconstruct Scholls Ferry Rd.	US 26	Washington County	Widen roadway to add 4th lane for turns and uphill bicycle lanes and sidewalks.	$3,500,000	$8,626,504	2026-2035	Neighborhood
10390	Multnomah Co.	Multnomah Co.	Troutdale	Reconstruct Troutdale Rd.	Strebin Rd.	Cherry Park Rd.	Reconstruct to major collector standards with 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes. Requires new fish culvert at Beaver Creek.	$6,297,000	$15,520,314	2026-2035	Neighborhood
10391	Multnomah Co.	Multnomah Co.	Troutdale	Reconstruct Historic Columbia River Hwy.	244th Ave.	Halsey St.	Reconstruct to minor arterial standards with 2 travel lanes, center turn lane/median, bicycle lanes and sidewalk. Reconstruction of railroad bridge is not included in this project.	$6,151,000	$15,160,465	2026-2035	Other
10395	Multnomah Co.	Multnomah Co.	Troutdale	Replace RR over crossing.	Half mile east of 244th Ave.		Reconstruct railroad bridge to accommodate wider travel lanes, sidewalks and bike lanes.	$7,000,000	$17,253,009	2026-2035	Employment area
10396	Multnomah Co.	Multnomah Co.		Reconstruct Cornelius Pass Rd.	Hwy. 30	Mile Post 3	Reconstruct Cornelius Pass Road including passing lane, safety, shoulder and drainage improvements.	$37,000,000	$91,194,475	2026-2035	Other

DRAFT
2035 Regional Transportation Plan Project List

Metro Project ID	Nominating Agency	Facility Owner / Operator	Other Sponsors	Project/Program Name	Project Start Location (Identify starting point of project)	Project End Location (Identify terminus of project)	Description	Estimated Cost ($2007)	Estimated Cost (YOE $)	Time Period	2040 Land Use
10407	Multnomah Co.	Multnomah Co.	Fairview	Fish passage culvert replacement	Fairview and Arata Creeks		Replace 5 culverts with fish friendly structures allowing for passage to federally endangered species.	$1,511,000	$3,724,185	2026-2035	Other
10567	Washington Co.	Washington Co.		Taylors Ferry Extension	Oleson Rd.	Washington Dr.	Construct new two lane extension with bike lanes and sidewalks	$4,390,000	$10,820,101	2026-2035	Neighborhood
10571	Washington Co.	Washington Co.		West Union Rd. Improvements	185th Ave.	143rd Ave.	Widen from two to three lanes with bike lanes and sidewalks.	$34,870,000	$85,944,631	2026-2035	Neighborhood
10574	Washington Co.	Washington Co.		Farmington to 198th Improvements	185th Ave.	198th Ave.	Widen from two to three lanes with bike lanes and sidewalks.	$17,326,000	$42,703,662	2026-2035	Neighborhood
10583	Washington Co.	Washington Co.		185th to Bany Rd. Improvements	Farmington Rd.	Bany Rd.	Widen to three lanes with bike lanes and sidewalks	$7,706,000	$18,993,098	2026-2035	Neighborhood
10632	Beaverton	Beaverton		Allen Blvd. safety, bicycle and pedestrian improvements	Highway 217	Murray Blvd.	Widen street adding turn lanes and signals where needed, construct bike lanes and sidewalks.	$41,600,000	$102,532,167	2026-2035	2040 corridor
10648	Beaverton	Beaverton		Denney Rd. sidewalks	Nimbus Rd.	Scholls Ferry Rd.	Construct sidewalks.	$2,200,000	$5,422,374	2026-2035	Industrial area
10693	Sherwood	Sherwood		Ladd Hill Rd.	Sunset Blvd	UGB	Upgrade street to arterial standards.	$6,340,000	$15,626,297	2026-2035	Other
10699	Sherwood	Sherwood		Oregon Street	Murdock	Railroad Crossing	Construct road to 3 lane collector standards.	$6,712,000	$16,543,171	2026-2035	Industrial area
10702	Sherwood	Sherwood		2040 Corridor Signal & Intersection Improvements	Borcher Dr	Century	Improve 3-leg intersection at Edy & Borchers; remove traffic signal at Baler; remove traffic signal at Langer; add traffic signal at Century.	$2,812,000	$6,930,780	2026-2035	2040 corridor
10720	Tualatin	Tualatin		Boones Ferry	Tualatin-Sherwood	Ibach	Widen to 5 lanes from Tualatin-Sherwood to Ibach.	$16,500,000	$40,667,806	2026-2035	Main street
10721	Tualatin	Tualatin		McEwan	65th	Lake Oswego	Widen to 3 lanes from 65th to Lake Oswego.	$3,520,000	$8,675,799	2026-2035	Employment area
10722	Tualatin	Tualatin		65th	Nyberg	Childs Rd	Extension across the Tualatin River from Nyberg to Childs Road.	$15,000,000	$36,970,733	2026-2035	Main street
10725	Tualatin	Tualatin		65th	Sagert	Nyberg	Widen to 5 lanes from Sagert to Nyberg.	$19,000,000	$46,829,595	2026-2035	Main street
10729	Tualatin	Tualatin		Loop Rd	Martinazzi	Boones Ferry	Construct street from Tualatin-Sherwood to Boones Ferry Rd to Martinazzi.	$6,900,000	$17,006,537	2026-2035	Main street
10738	Tualatin	Tualatin		Teton	Herman	Tualatin-Sherwood	Add bikelanes to Teton from Avery to Tualatin Rd.	$3,800,000	$9,365,919	2026-2035	Industrial area
10739	Tualatin	Tualatin		Nyberg	Tualatin-Sherwood	65th	Add bikelanes on Nyberg from I-5 to 65th.	$7,000,000	$17,253,009	2026-2035	Main street
10740	Tualatin	Tualatin		65th Ave.	Borland	Childs Rd	Add bikelanes on 65th Ave from Sagert to Nyberg. Construct a pedestrian bridge over the River from Tualatin to Childs Rd.	$8,000,000	$19,717,724	2026-2035	Employment area
10741	Tualatin	Tualatin		95th Ave.	Avery	Tualatin-Sherwood	Add bikelanes from Avery to Tualatin-Sherwood Rd.	$2,400,000	$5,915,317	2026-2035	Main street
10742	Tualatin	Tualatin		108th Ave.			Pedestrian bridge over Tualatin River and connecting paths.	$2,000,000	$4,929,431	2026-2035	Other
10836	Hillsboro	Hillsboro		Evergreen Rd	Glencoe Rd	25th	Widen to 5 lanes with bike lanes and sidewalks.	$5,440,000	$13,408,053	2026-2035	2040 corridor
10846	Hillsboro	ODOT		TV Hwy.	185th	Brookwood	Expand to 7 lanes with bike/sidewalks.	$42,000,000	$103,518,053	2026-2035	2040 corridor
10927	TriMet			MAX LRT: Operational upgrades	N/A	N/A	Sidings, powered turnouts, block and signal control infill.	$18,862,000	$34,033,618	2008-2035	
11042	TriMet			Bus priority treatment	N/A	N/A	Traffic signal priority treatments, jump lanes, etc.	$5,000,000	$9,021,741	2008-2035	
11043	TriMet			Pedestrian access improvements	N/A	N/A	Sidewalks, crosswalks and ADA improvements to transit access.	$5,000,000	$9,021,741	2008-2035	
10928	TriMet			New MAX LRT vehicles	N/A	N/A	See below.	$49,000,000	$88,413,067	2008-2035	
10766	Tigard		Metro	Regional Trail Gap Closure	multiple sections on Fanno, Wash Sq Loop, and Westside Trails	Multiple sections on Fanno, Wash Sq Loop, and Westside Trails	Infill gaps in regional trail network. Affected trails include Fanno Creek, Washington Square Loop and Westside Trails.	$6,890,000	$8,382,738		2040 corridor

APPENDIX B – *Public Notice*



THE SUNDAY OREGONIAN • JANUARY 13, 2008

PUBLIC NOTICES

CLASSIFICATION 8

Public Notices 8

METRO

2035 Regional Transportation Plan (RTP) and 2008-2011 Metropolitan Transportation Improvement Plan (MTIP) Air Quality Conformity Determination Notice

Metro has prepared an Air Quality Conformity Determination for the 2035 Regional Transportation Plan (RTP) and Metropolitan Transportation Improvement Plan (MTIP) as required by state and federal law. The document shows that the Metro area, including the 25 cities and the urban portions of 3 counties of the greater Portland region, will continue to meet federal and state air-quality standards to the year 2035, even with the transportation improvements included in the 2035 Regional Transportation Plan (RTP) , Federal Component, as implemented through the 2008-11 MTIP.

The document is available for public review and comment beginning at noon on Friday, January 18, 2008, and ending at noon on Tuesday, February 19, 2008. Copies of the document may be obtained from the planning office at 600 NE Grand Avenue, Portland, Oregon, or downloaded from Metro's web site: *www.metro-region.org/airquality* You may also request a copy by phone at 503-797-1735.

The factors addressed in the Air Quality Conformity Determination are used to estimate future carbon monoxide emissions from cars and trucks operating within the greater Portland air shed to the year 2035. The estimated emissions must not exceed the "budget" established for mobile sources by plans approved for the region by the Oregon Environmental Quality Commission & the United States Environmental Protection Agency.

You may submit comments by mail to Metro Planning 600 NE Grand Ave, Portland, OR 97232, or by email: *rtp@metro.dst.or.us* Comments must be received by noon on Tuesday, Feb. 19, 2008.

The Metro Council will hold a hearing on Thursday, February 28, 2008, in the Council chamber to deliberate on the air quality conformity document, consider public comments received during the comment period, and act on a resolution to accept the federal component of the 2035 Regional Transportation Plan with the Air Quality Conformity Determination report.

IMPORTANT INFORMATION

Public Notices 8

PUBLIC NOTICE

ATTENTION ALL FLEXSTAFF EMPLOYEES

W-2 forms for 2007 will be available for pick up TUESDAY, JANUARY 29, 2008

FOR PORTLAND: 901 SE Oak Street, Suite 203

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Public Notices 8

GRAND RONDE Tribal Housi Authority is seeking respons from qualified professionals meet the organizations nee outlined in its Request for Pr posals. The RFP is advertised the 1/15/08 issue of the Da Journal of Commerce.

POLICE IMPOUNDED SEIZED VEHICLE AUCTION
See ad in Classification #567

INFORMATION & EDUCATION

CLASSIFICATIONS 10-3

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www.dovelewis.org
Cat Adoption Team:
503-925-8803
Animal Aid, Inc.
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DOCUMENT 00010
ADVERTISEMENT FOR BIDS

1.01 NOTICE TO BIDDERS
A. Sealed Bids will be received by South Umpqua School District at the District office, 558 SW Chadwick Lane, Myrtle Creek, 97457, until 10:00 a.m. local time, Tuesday, February 5, 2008, for general construction of the Coffenberry Gymnasium Building. T bids will then be publicly opened at 3:00 p.m. local time, Tuesd February 5, 2008, and read aloud. Bids received after the time fix for receiving bids will be returned, unopened.

1.02 BIDDING DOCUMENTS
A. Briefly, the work for this project shall be executed under a sin general construction contract including General, Civil, Mechanic Electrical work for the Gymnasium Building; South Umpqua Sch District Public Schools.
B. Bidding documents for the work are those prepared by the En neer, Pinnacle Engineering, Inc., 3319 NE Stephens St, Roseburg OR 97470 (541 440-4871). Bona fide General Bidders may obtai maximum of two sets of the bid documents at the office of Engine upon deposit of a check in the amount of $100.00 per set, plus sh ping costs, to include clerical time; return of deposit to be in cordance with the instructions to Bidders.
C. Should a bidder wish additional sets or parts of sets, he may obt them by paying the cost of the reproduction thereof, plus handl and mailing costs, with no refund for the additional sets or pa thereof.
D. Bidding Documents will be available for examination during bidding period at the School District Administration Office, Pinna Engineering, Inc. and in the following organization offices:
Daily Journal of Commerce Plan Center, Rogue Valley Builders

APPENDIX C – *Federal Register Notice of Proposed Approval of State Implementation Plan for Portland Oregon – Portland Carbon Monoxide Second 10-Year Maintenance Plan* (September 6, 2005)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[Docket ID #: R10–OAR–2005–OR–0001; FRL–7964–7]

Approval and Promulgation of State Implementation Plans: Oregon; Portland Carbon Monoxide Second 10-Year Maintenance Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA proposes to approve the second 10-year maintenance plan for carbon monoxide (CO) for the Portland, Oregon CO Attainment Area. Specifically, in this action EPA

proposes to approve the following: Oregon's demonstration that the Portland CO Attainment Area will maintain air quality standards for CO through the year 2017; a revised CO motor vehicle emissions budget for transportation conformity purposes using the MOBILE6.2 emissions model and latest growth and planning assumptions; and revised state implementation plan (SIP) control strategies and contingency measures.

DATES: Comments must be received on or before October 6, 2005.

ADDRESSES: Submit your comments, identified by Docket ID No. R10–OAR–2005–OR–0001, by one of the following methods:

1. Federal eRulemaking Portal: *http://www.regulations.gov*. Follow the on-line instructions for submitting comments.

2. Agency Web site: *http://www.epa.gov/edocket*. EDOCKET, EPA's electronic public docket and comment system, is EPA's preferred method for receiving comments. Follow the on-line instructions for submitting comments.

3. Mail: Environmental Protection Agency, Office of Air, Waste and Toxics, Attn: Connie Robinson, Mail code: AWT–107, 1200 Sixth Avenue, Seattle, WA 98101.

4. Hand Delivery: Environmental Protection Agency Region 10, Attn: Connie Robinson (AWT–107), 1200 Sixth Ave., Seattle, WA 98101, 9th floor. Such deliveries are only accepted during EPA's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. R10–OAR–2005–OR–0001. EPA's policy is that all comments received will be included in the public docket without change, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through regulations.gov or e-mail. The EPA EDOCKET and the Federal regulations.gov Web site are "anonymous access" systems, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through EDOCKET or regulations.gov, your e-mail address will be automatically captured and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit EDOCKET on line or see the **Federal Register** of May 31, 2002 (67 FR 38102). For additional instructions on submitting comments, go to Section I. General Information of the **SUPPLEMENTARY INFORMATION** section of this document.

Docket: All documents in the docket are listed in the EDOCKET index at *http://www.epa.gov/edocket*. Although listed in the index, some information may not be publicly available, such as CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in EDOCKET or in hard copy at EPA Region 10, Office of Air, Waste, and Toxics, 1200 Sixth Avenue, Seattle, Washington, from 8 a.m. to 4:30 p.m. Monday through Friday, excluding legal holidays. Please contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection.

FOR FURTHER INFORMATION CONTACT: Connie Robinson, Environmental Protection Agency, Region 10, Office of Air, Waste, and Toxics, AWT–107, 1200 Sixth Ave., Seattle, WA 98101; phone: (206) 553–1086; fax number: (206) 553–0110; e-mail address: *robinson.connie@epa.gov*.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. General Information

A. What Should I Consider as I Prepare My Comments for EPA?

1. *Submitting CBI.* Do not submit this information to EPA through RME, regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD–ROM that you mail to EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

i. Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).

ii. Follow directions—The Agency may ask you to respond to specific questions or organize comments by referencing a CFR part or section number.

iii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

iv. Describe any assumptions and provide any technical information and/or data that you used.

v. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

vi. Provide specific examples to illustrate your concerns, and suggest alternatives.

vii. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

viii. Make sure to submit your comments by the comment period deadline identified.

II. What Is the Purpose of This Proposed Rulemaking?

The purpose of this proposed rulemaking is to solicit comment on the

State of Oregon's plan to replace the existing CO maintenance plan for the Portland area in Oregon with a second 10-year maintenance plan to demonstrate continued maintenance of the CO ambient air quality standard through 2017.

The State of Oregon presented a trend analysis of the historical CO monitored data for the Portland area demonstrating that since the Portland area was redesignated to attainment, CO concentrations have fallen steadily. That trend reflects a national pattern of new vehicles producing considerably reduced amounts of CO. Implementation of new national control measures including tighter standards for motor vehicle tailpipe emissions and cleaner fuel will result in significant improvements of air quality for the next 10-year period. EPA agrees with Oregon's analysis and proposes to approve the second 10-year maintenance plan through this rulemaking and notice in the **Federal Register**.

Federal transportation conformity regulations require that transportation agencies use the latest EPA mobile source emissions model for conformity determinations. EPA officially released a new version of motor vehicle emissions model (MOBILE6) on January 29, 2002. All SIPs that are adopted after that date must use the new model to estimate motor vehicle emissions. The release of MOBILE6 also began a 24-month grace period for conformity. All conformity determinations that are initiated after January 29, 2004 must use a MOBILE6 model. The Oregon Department of Environmental Quality (ODEQ) used MOBILE6.2 to estimate CO emissions for the Portland area for the next 10-year maintenance period through 2017 and conducted a technical analysis with MOBILE6.2 that showed new motor vehicle emissions will not cause or contribute to violations of the air quality standards. EPA agrees with this analysis and proposes to approve revised motor vehicle emissions budgets for conformity determinations.

The State of Oregon took this rulemaking opportunity to change several of the emission control strategies and contingency measures. EPA finds these changes acceptable and proposes to approve them in this rulemaking.

III. What Is the Background for This Action?

In a March 15, 1991 letter to the EPA Region 10 Administrator, the Governor of Oregon recommended the Portland area be designated as nonattainment for CO as required by section 107(d)(1)(A) of the Clean Air Act (the "Act"). The area was designated by EPA as nonattainment for CO and classified as "moderate" with a design value less than or equal to 12.7 parts per million (ppm) under the provisions outlined in sections 186 and 187 of the Act.

The State of Oregon, following the requirements of the Act, prepared and submitted revisions to the Oregon SIP that first included an attainment plan, and then developed a plan to demonstrate maintenance of the standard for a 10-year period beyond the statutory attainment date. EPA published approval of a redesignation request to attainment and the first 10-year maintenance plan on September 2, 1997.

The first 10-year CO maintenance plan included a commitment for periodic review of the plan and submission of the second 10-year maintenance plan to EPA during the last two years of the first 10-year maintenance period. The planning effort included detailed technical analyses such as preparation of base and future year emissions inventories, review of control measures for CO, etc. The results of this planning effort provide the basis of today's proposed approval by EPA.

IV. What Is the Status of Current CO Levels in the Portland Area and How Do They Compare With the Federal Standards?

The national 8-hour CO ambient standard is attained when the daily average 8-hour CO concentration of 9.0 ppm is exceeded no more than one time in a calendar year for two consecutive years. Since the redesignation of the Portland area to attainment for CO on October 2, 1997, the second highest concentration in a calendar year measured by the approved monitoring network was 7.3 ppm, which is less than 9.0 ppm.

V. How Have the Public and Stakeholders Been Involved in This Rulemaking Process?

ODEQ met directly with a variety of stakeholder groups, including representative of the petroleum and ethanol industries, the Oregon Environmental Council and with other state agencies to seek input on the CO maintenance plan. Those state agencies included the Oregon Department of Energy, Agriculture, and Economic and Community Development. Notices were published in the newspaper and public hearings were conducted by ODEQ. ODEQ responded to all comments and the Environmental Quality Commission adopted the revisions to the SIP under OAR 340–200–0040 on December 10, 2004, effective December 25, 2004.

VI. What Are the Sources and Magnitude of CO Emitted in the Portland Maintenance Area?

An emissions inventory was prepared for the Portland area for the base year of 1999. The year 1999 was selected for the inventory because that year reflected the highest ambient CO concentrations in Portland's recent history and therefore represented a conservative base for demonstrating future compliance with the CO NAAQS. The emissions inventory is a list, by source, of the air contaminants directly emitted into the Portland CO Area's air. The data in the emissions inventory is based on calculations and is developed using emission factors, which is a method for converting source activity levels into an estimate of emissions contributions for those sources. Because violations of the CO NAAQS are most like to occur on winter weekdays, the inventory prepared reflects a "design day" with ambient temperatures, traffic volumes and other emission source activity levels of a typical winter weekday in 1999.

In addition to the base year 1999 inventory, emission forecasts were prepared for 2005, 2010 and 2017. These projected inventories were prepared in accordance with EPA guidance. The projections in Table 1 below show that total calculated CO emissions, are not expected to exceed the level of the 1999 base year inventory during the second 10-year maintenance plan period.

TABLE 1.—1999 BASE YEAR ACTUAL EMISSIONS AND *2005, *2010 AND *2017 PROJECTED EMISSIONS

[Pounds CO/winter day]

Emissions	1999	*2005	*2010	*2017
Point Source	106,590	67,401	71,085	76,241
Area Source	809,454	872,852	925,684	999,648

TABLE 1.—1999 BASE YEAR ACTUAL EMISSIONS AND *2005, *2010 AND *2017 PROJECTED EMISSIONS—Continued
[Pounds CO/winter day]

Emissions	1999	*2005	*2010	*2017
Non-Road Mobile	372,098	530,435	619,753	690,469
On-Road Mobile	1,525,114	1,226,323	975,074	834,301
Total	2,813,256	2,697,011	2,591,596	2,600,659

* Without oxy fuel program and without enhanced Inspection and Maintenance (I/M) testing.

The large decrease in point source emissions between 1999 and 2005 is the result of permanent closure of a large aluminum company. The emissions inventory predicts substantial future reductions in CO emissions, largely as a result of a decrease in on-road emissions, which are expected to continue to decline as older motor vehicles are replaced by newer vehicles that meet Federal Tier II emission standards and operate on low sulfur fuels.

VII. How Does the State Demonstrate Maintenance of the CO Standard for the Second 10-Year Period?

The current, EPA-approved first 10-year CO maintenance plan used a rollforward approach to demonstrate maintenance of the CO standard. A review and update of this methodology to a probabilistic rollback approach using more recent monitored air quality and projected emissions data was conducted to demonstrate continued maintenance of the CO standard for a second 10-year period. The probabilistic analysis showed that the CO standard was maintained on all three permanent monitoring sites in 1999 with at least 99% probability. The probabilistic rollback approach demonstrated regional, long-term maintenance by demonstrating that maintenance at the monitoring site with the highest design value (82nd and Division) will be maintained for a second 10-year period with the same level of assurance.

VIII. What Control Measures Are Being Proposed for This Second 10-Year Plan?

The second 10-year plan changes the I/M program requirement for CO from the current Enhanced I/M program to a basic I/M program for CO. Moderate CO Attainment areas were only required to implement a basic I/M program. This is a change to the CO SIP only. The Ozone Maintenance Plan continues to require the Enhanced I/M Program. ODEQ will consider vehicles that meet the enhanced test requirement as also meeting the basic test requirement. If the Ozone Plan is changed to a basic I/M program, it will already be approved for CO.

The Oxygenated Fuel Program remains a control measure in the Portland CO maintenance area until October 31, 2007 when it will be discontinued. It will then become a contingency measure in the second 10-year maintenance plan as required by 175A(d).

Best Available Control Technology (BACT) continues to be required. The plan also continues to offer an industrial Growth Allowance that may be used by new or expanding sources instead of securing emission offsets.

The Transportation Control Measures (TCMs) in this plan replace the TCMs specified in the first Portland Area CO Maintenance Plan. The emission reduction benefits of these TCMs are included in the emission projections on which the Portland Area CO Maintenance Plan is based. The revised TCMS are:

Transit Service Increase: Region transit service revenue hours (weighted by capacity) shall be increased 1.0% per year. The increase shall be assessed on the basis of a 5-year rolling average of actual hours for assessments conducted between 2006 and 2017.

Bicycle Paths: Jurisdictions and government agencies shall program a minimum of 28 miles of bikeways or trails within the Portland metropolitan area between the years 2006 through 2017.

Pedestrian Paths: Jurisdictions and government agencies shall program at least nine miles of pedestrian paths in mixed use centers between the years 2006 through 2017.

Oregon has a TCM substitution policy under which identified TCMs may be substituted in whole, or in part, with other TCMs providing equivalent emission reductions. See 62 FR 4621, September 2, 1997. Appendix D9–2 of the second 10-year maintenance plan identifies the requirements for TCM substitutions.

IX. What Contingency Measures Are Considered, in Case of the Monitored Exceedance or Violation of the Federal Standard?

The maintenance plan is to contain contingency measures to ensure that the State will promptly correct any violation of the standard that occurs during the maintenance period. The contingency measures in the second 10-year maintenance plan for the Portland area are based on risk of violation and actual violation.

If monitored CO levels at any monitoring site register a second high concentration equaling or exceeding 8.1 ppm during a calendar year, ODEQ will form a planning group to evaluate the implementation of additional emission strategies. Additional strategies to be considered include, but are not limited to: Increased parking pricing in the Central City, increased funding for transit, value pricing on major roadways that increase vehicle travel capacity, a trip reduction program, modified regional parking ratios, and accelerated implementation of bicycle and pedestrian networks.

If the Portland area violates the NAAQS for CO, the following contingency measures will automatically be implemented. New Source Review requirements will be changed. The requirement to install Best Available Control Technology will be replaced with Lowest Achievable Emissions Rate technology. The downtown parking lid will be reinstated if the violation occurs in the downtown area formerly subject to the parking lid requirement. If the violation occurs in 2007 or later, the Oxygenated Fuel Program will be reinstated.

X. How Does This Action Affect Transportation Conformity?

Under Section 176(c) of the Act, transportation plans, programs, and projects in nonattainment or maintenance areas that are funded or approved under the Federal Transit Act, must conform to the applicable SIP. In short, a transportation plan is deemed to conform to the applicable SIP if the emissions resulting from

implementation of that transportation plan are less than or equal to the motor vehicle emission level established in the SIP for the maintenance year and other analysis years.

In this maintenance plan, procedures for estimating motor vehicle emissions are well documented. The regional motor vehicle emissions calculated by MOBILE6.2 were used in the probabilistic rollback method to compute a threshold level of regional emissions inventory that would provide maintenance of the CO standard with 99% certainty and confidence through the second 10-year maintenance period. The computed attainment threshold of regional motor vehicle emissions can be used to assess the long term attainment prospects. The total on-road motor vehicle CO emissions in the Portland area for 2005, 2010 and 2017 are shown in Table 2.

TABLE 2.—PORTLAND MAINTENANCE AREA CO MOTOR VEHICLE EMISSIONS BUDGETS

[Pounds per winter day]

Year	2005	2010	2017
Budget	1,238,575	1,033,578	1,181,341

For the purpose of demonstrating transportation conformity in the timeframe of the area's transportation plan for all years beyond 2017, motor vehicle emissions must be less than or equal to the maintenance plan's motor vehicle emissions budget for 2017.

XI. In Conclusion, How Would This EPA Approval Affect the General Public and Citizens of the Portland Area?

This action proposes to approve measures adopted by ODEQ to ensure maintenance of the Federal air quality standards for CO in the Portland area for a second 10-year period and protect the health and welfare of the area citizens from adverse effects of degraded air quality levels.

XII. Statutory and Executive Order Reviews

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this proposed action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This proposed action merely proposes to approve state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule proposes to approve pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4).

This proposed rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely proposes to approve a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This proposed rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This proposed rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: August 23, 2005.

Julie M. Hagensen,

Acting Regional Administrator, EPA Region 10.

[FR Doc. 05–17537 Filed 9–2–05; 8:45 am]

BILLING CODE 6560–50–P

APPENDIX D - *EPA approval of the Portland Carbon Monoxide Second 1- Year Maintenance Plan* (January 24, 2006)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[Docket No.: EPA–R10–OAR–2005–OR–0001; FRL–8015–3]

Approval and Promulgation of State Implementation Plans: Oregon; Portland Carbon Monoxide Second 10-Year Maintenance Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes our approval of the State Implementation Plan (SIP) revisions submitted by the Oregon Department of Environmental Quality on January 3, 2005. EPA is approving the State of Oregon's second 10-year carbon monoxide (CO) maintenance plan for the Portland maintenance area. Specifically, EPA is approving the following: Oregon's demonstration that the Portland CO Attainment Area will maintain air quality standards for CO through the year 2017; a revised CO motor vehicle emissions budget for transportation conformity purposes using the MOBILE6.2 emissions model and latest growth and planning assumptions; and revised state implementation plan (SIP) control strategies and contingency measures.

DATES: This final rule is effective on February 23, 2006.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–R10–OAR–2005–OR–0001. All documents in the docket are listed on the *http://www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *http://www.regulations.gov* or in hard copy at the EPA, Region 10, Office of Air, Waste and Toxics (AWT–107), 1200 Sixth Avenue, Seattle WA. EPA requests that if all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30 excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: Gina Bonifacino, Office of Air, Waste and Toxics (AWT–107), EPA Region 10,

1200 Sixth Avenue, Seattle WA 98101; telephone number: (206) 553–2970; fax number: (206) 553–0110; e-mail address: *bonifacino.gina@epa.gov*.

SUPPLEMENTARY INFORMATION:

Throughout this document, wherever "awe," "aus," or "aour" is used, we mean the EPA. Information is organized as follows:

I. What Is the Background of This Rulemaking?

On September 6, 2005, EPA published in the **Federal Register**, a detailed description of our proposed action to approve the Portland, Oregon, CO Second 10-year maintenance plan. See 70 FR 52956.

The air quality data shows that the Portland CO maintenance area has not recorded a violation of the primary or secondary CO air quality standards since 1989. EPA believes the area will continue to meet the National Ambient Air Quality Standards (NAAQS or standards) until at least 2017 as required by the Clean Air Act.

II. What Comments Did We Receive on the Proposed Action?

EPA provided a 30-day review and comment period to solicit comments on our proposal published in the September 6, 2005 **Federal Register.** We received one comment letter on the proposed rulemaking. This comment letter was from Pacific Environmental Advocacy Center on behalf of the Northwest Environmental Defense Center. In general, the letter opposed the proposed SIP revision. The comments and our responses are summarized as follows:

Comment: The commenter states that EPA cannot approve Oregon's proposed CO Maintenance Plan because it does not account for agricultural sources' contributions to CO in the Portland area.

Response: The Portland Area Carbon Monoxide Maintenance Plan Emission Inventory and Forecast was prepared using current and applicable EPA procedure and guidance documents and computer software programs. The primary procedure and guidance documents are Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I, and Emission Inventory Requirements for Carbon Monoxide State Implementation Plans. Emission factors were taken from the supplemental Short List of AMS SCCS and Emission Factors, and Compilation of Air Pollutant Emission Factors (AP–42).

By letter dated November 15, 2005, as corrected on November 21, 2005, the Oregon Department of Environmental Quality (ODEQ) provided specific information in response to the comment. As part of the Portland carbon monoxide maintenance plan, agricultural activity was inventoried per EPA guidance. The types of agricultural activity inventoried by ODEQ were orchard pruning burning (11 tons/year), agriculture field burning (61 tons/year) and non-road agriculture equipment (298.9 tons/year) for a total of 370.8 tons/year. The 370.8 tons of CO that ODEQ calculates are generated by agriculture in the Portland area represents .07% of the region's total. ODEQ informed EPA that there are no Concentrated Animal Feeding Operations (CAFOs) within the boundary of the Portland CO Maintenance Area.

CO is not a pollutant where transport is a concern and there is no information to suggest that CO emissions from CAFOs outside of the Portland CO Maintenance Area impact CO levels within the maintenance area. For these reasons, EPA finds the State of Oregon's second 10-year CO maintenance plan for the Portland CO Maintenance Area adequately accounts for emissions from agricultural sources.

Comment: The commenter states ODEQ cannot properly implement the maintenance plan as a result of budget cuts. Specifically, the commenter is concerned because the ODEQ air program is expected to lose nearly 20 staff members and 4 of the 5 air quality monitors that were installed in the Portland area several years ago are being decommissioned.

Response: ODEQ has informed EPA that the four air quality monitors which are to be decommissioned by ODEQ due to budget cuts are part of a temporary effort to investigate toxic air pollutants in the Portland airshed. The monitors to be removed do not measure CO and are not required by EPA for monitoring of CO. As stated in the maintenance plan submitted by ODEQ, three CO monitors operating in the Portland CO maintenance area will continue to operate throughout the second 10-year period. For these reasons, EPA believes that ODEQ will continue to fulfill the monitoring commitments set forth in the Maintenance Plan.

III. What Is Our Final Action?

EPA is taking final action to approve the Portland, Oregon CO Second 10-Year Maintenance Plan consistent with the published proposal. A Technical Support Document on file at the EPA Region 10 office contains a detailed analysis and rationale in support of the plan.

IV. Statutory and Executive Order Reviews

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4).

This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have federalism implications because it does not have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 27, 2006. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: December 8, 2005.

L. Michael Bogert,

Regional Administrator, EPA Region 10.

■ Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart MM—Oregon

■ 2. Section 52.1970 is amended by adding paragraph (c)(145) to read as follows:

§ 52.1970 Identification of plan.

* * * * *

(c) * * *

(145) On December 27, 2004, the Oregon Department of Environmental Quality submitted to the Regional Administrator of EPA, the Second Portland Area Carbon Monoxide Maintenance Plan that demonstrates continued attainment of the NAAQS for carbon monoxide through the year 2017.

(i) Incorporation by reference.

(A) Oregon Administrative Rules, Chapter 340: 200–0040, 204–0090 and 242–0440, as effective December 15, 2004.

■ 3. Paragraph (a) of § 52.1973 is revised to read as follows:

§ 52.1973 Approval of plans.

(a) Carbon monoxide.

(1) EPA approves as a revision to the Oregon State Implementation Plan, the Second Portland Area Carbon Monoxide Maintenance Plan, effective December 15, 2004, and submitted to EPA on December 27, 2004.

(2) [Reserved]

* * * * *

[FR Doc. 06–636 Filed 1–23–06; 8:45 am]

BILLING CODE 6560–50–P

APPENDIX E

Summary of Non-Applicable State and Federal Regulations and Why They Are Not Addressed

In some cases there are sections of federal statutes or state administrative rule that do not apply or do not apply directly and are not addressed.

Sections not addressed directly and reasons for not addressing them include:

Purpose (OAR 340-252-0010 and 40 CFR 93.100 - handled by addressing all sections with specific requirements);

Definitions (OAR 340-252-0030 and 40 CFR 93.101 - this conformity determination uses these definitions when addressing requirements in other sections);

Priority (OAR 340-252-0040 and 40 CFR 93.103 - this applies to the priorities that the Federal Highway Administration and Federal Transit Administration place on transportation improvements that have been prepared to attain or maintain air quality standards.);

Projects from a Plan and TIP (OAR 340-252-0160 and 40 CFR 93.115 - this is a project level requirement and must be satisfied by the project, but is not needed in a regional emissions conformity determination.);

Localized CO and PM_{10} Violations (OAR 340-252-0170 and 40 CFR 93.116 – this determination is a region-wide analysis. This section concerns local project conditions. Individual projects are responsible for independent hot spot, or localized CO analyses. The region has always been in compliance with PM_{10} standards. Accordingly, this section does not apply);

Compliance with PM_{10} Control Measures (OAR 340-252-0180 and 40 CFR 93.117 – as noted, the region has always been in compliance with PM_{10} standards, so this section does not apply);

Emission Reductions in Areas without Motor Vehicle Emissions Budgets (OAR 340-252-0200 and 40 CFR 93.119 - the Metro region has EPA approved emission budgets, so this section does not apply);

Consequences of Control Strategy Implementation Plan Failures (OAR 340-252-0210 and 40 CFR 93.120 – EPA has approved implementation plans for the Metro region, so this section does not apply);

Requirements for Adoption or Approval of Project by Other Recipients of Funds Designated under Title 23 USC or the Federal Transit Laws (OAR 340-252-0220 and 40

CFR 93.121- this conformity determination is being conducted to ensure that all federally funded transportation projects, as well as regionally significant locally funded projects, are assessed and no exception is being sought under this section);

Procedures for Determining Localized CO and Pm_{10} Concentration (OAR 340-252-0240 and 40 CFR 93.123 – as noted above, this is a region-wide analysis of CO. Individual projects are responsible for local CO hot spot analyses independent of this region-wide analysis);

Using the Motor Vehicle Emissions Budget in the Applicable Implementation Plan or Implementation Plan Submission (OAR 340-252-0250 and 40 CFR 93.124 – this regulation concerns the implementation plan, not the conformity determination directly, accordingly it is not addressed);

Enforceability of Design Concept and Scope and Project-Level Mitigation and Control Measures (OAR 340-252-0260 and 40 CFR 93.125 – this is a individual project level requirement that each project must address and is not a region-wide requirement).

APPENDIX F – Pre-Conformity Plan

Metro
2035 Regional Transportation Plan (federal component)
and Reconforming the
2008-2011 Metropolitan Transportation Improvement Plan (MTIP)
Air Quality Conformity Plan

December 6, 2007

Background

The Metro region is proposing the following procedures to conduct an air quality conformity analysis of the federal component of the Metro 2035 Regional Transportation Plan (2035 RTP) as well as reconforming the Fiscal Year 2008-2011 Metropolitan Transportation Improvement Plan (MTIP).

This air quality conformity plan is intended to follow the requirements set forth in Oregon Administrative Rules, Chapter 340, Division 252 (OAR 340-252 "Transportation Conformity"), which, in turn, is intended to implement the Federal Clean Air Act (42 U.S.C 7401 and 23 U.S.C 109j, as amended). These conformity determinations must be periodically updated and the proposed air quality conformity determination of the 2035 RTP and reconforming the 2008-2011 MTIP is meant to comply with these updating requirements.

The Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council are scheduled to adopt a resolution for the federal component of the 2035 Regional Transportation Plan and the FY08-FY011 MTIP, including the results of the air quality analysis, following a 30 day technical and public review period. JPACT and the Metro Council, in concert, are the Metropolitan Planning Organization for the greater Portland, Oregon metropolitan area including 25 cities and portions of three counties. The conformity determination will then be submitted to the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) (see attached schedule). After consultation with the US Environmental Protection Agency, the region will be notified by FHWA and FTA as to whether the 2035 RTP and MTIP conformity determination is approved. Such approval would allow the transportation improvements included in the MTIP, to proceed.

This Metro air quality conformity plan is being submitted to the interagency consultation partners for comments and to seek consensus. Both federal and state law require interagency consultation. State law requires that the Transportation Policy Advisory Committee (TPAC) be the interagency consultation body for the Metro area. In order to meet federal requirements, representatives of the following agencies coordinate for interagency consultation:

- Federal Highway Administration, Oregon Division
- Federal Transit Administration, Region 10
- US Environmental Protection Agency, Region 10
- Oregon Department of Transportation

- Oregon Department of Environmental Quality
- TriMet
- Metro

In addition, the Clean Air Agency from Southwest Washington has also been invited to participate in order to ensure coordination between the two parts of the greater metropolitan airshed.

Early notification of the procedures and schedule will assist in the interagency consultation requirements of OAR 340-252-0060. The procedures may be revised as Metro proceeds with the analysis. If changes are sought, there will be notification of interagency consultation partners about such changes, and, if needed, additional consultation and opportunity for comment will be provided.

Air Quality Regulatory Status of the Metro area

As of November 2007, the Metro area is a maintenance area for carbon monoxide (CO), meaning that while the region meets federal CO standards, it must continue to monitor CO levels through a air quality conformity determination comparing forecast levels of air quality assuming proposed transportation investments with motor vehicle emission budgets, or maximum allowed levels of the pollutant from the on road and transit elements of the region's transportation system. In 2006, the EPA approved a new CO State Implementation Plan (SIP) finding new CO motor vehicle emission budgets adequate for transportation conformity purposes in the Second Portland Area Carbon Monoxide Maintenance Plan.

Another possible air pollutant of concern within the Metro region is ground level ozone, which is comprised of volatile organic compounds, or VOC, (also known as hydrocarbons) and oxides of Nitrogen (NOx) that are emitted from a variety of sources, including on-road motor vehicles and some transit vehicles. In June 2005, the EPA revoked the 1 hour ozone standard and an 8 hour ozone standard was promulgated. For the Metro area, this meant that the maintenance status for the 1 hour ozone standard to which the Metro area previously had to demonstrate air quality conformity was no longer required. Further, the Metro area was in attainment with the 8 hour ozone standard. Accordingly, for this Metro 2035 RTP conformity determination, only CO is formally assessed.

However, in accordance with a memorandum of understanding between the Oregon Department of Environmental Quality and Metro, ozone, air toxics and greenhouse gas emissions will be estimated for the years 2005, 2010, 2017 and 2035. (Note: the 2005 baseline is an estimate from the model, not actual measurement.) These data will be made available on the Metro website (http://www.metro-region.org, - see air quality page) after the CO emissions are estimated and will be used to begin monitoring air quality trends in the region.

Air Quality Forecasting Overview
Assessing air quality from surface transportation sources is achieved by first running Metro's travel demand computer model that uses forecasts of households and jobs as well as the characteristics of the future transportation system. The results of the transportation model are then used in an air quality computer model to estimate the amount of air pollutants that would be generated under these conditions, comparing these amounts to maximums set for the surface, on-road transportation system. More specific information about these models and assumptions are listed below.

Travel Demand Model Specifications
The Metro travel demand model (Ivan) will be used in the 2035 RTP and 2008-2011 MTIP conformity process. The specifications for this model are documented in the report *Technical Specifications- March 1998 Travel Demand Model, as revised.*

The generation of person trips, the distribution patterns of the trips, the mode selection, and the time of day profile will be forecasted using the above Metro model. The vehicle trips from this model will be assigned to the conformity networks to determine speeds and VMT.

Project Listing
A listing of all projects included in the financially constrained system of the Regional Transportation Plan will be provided in the air quality conformity determination report along with their status with regard to:

a. whether the project was an input to the travel forecasting model;
b. the earliest year the project was forecast to be operational.

Exempt Projects
The air quality conformity determination report will identify exempt projects in the 2035 RTP and MTIP.

Demographics
The following demographic data will be used in the transportation model:

a. Population/Housing: Census data was used to validate the 2000 population and housing data. Population forecasts to the year 2035 were derived by projections to the year 2030 completed by the Metro economist and extended to the year 2035. These forecasts were allocated to transportation analysis zones after review and comment by local government technical staffs.

b. Employment: Oregon Employment Department ES-202 was used for the 2000 employment base and further detailed by Metro estimates of self-employed. Employment forecasts to the year 2035 were derived under a similar process as the population and housing forecasts, included in the 2035 RTP (Federal Component) after review and comment by local government technical staff.

c. Socio-economics: Metro uses socio-economic data issued by the Census Bureau from the 2000 Census, including household size, incomes, age and head of household. In addition, the population, housing and job forecasts use data from the State of Oregon concerning birth and death rates as well as forecasts from Global Insight that was used in the regional economic forecast.

Validation year: The base year for the Metro transportation model (Ivan) is the year 2005. The model was last validated for that base year in 2005.

RTP Horizon: 2035.
MTIP years: FY 2008-2011

Transportation Networks
The Metro year 2005 transportation network will be the base year network from which all future year networks are developed. The 2005 network includes the highway and transit system as of January 2005.

Future transportation networks include completion of all regionally significant projects and other projects that can be modeled, as included in the MTIP and the Financially Constrained System of the 2035 Federal Component of the Regional Transportation Plan. Future year networks will also include a transit system from the TriMet *Transit Investment Plan* (2004), which is consistent with the proposed Metro 2035 RTP (federal component).

Air Quality Model Assumptions
The following provides information on the Metro transportation network model and the EPA approved MOBILE6.2 air quality emissions model that will be used in the emissions analysis. Metro will use the following inputs for the MOBILE6.2. computer model to complete the 2035 RTP and 2008-2011 MTIP conformity analysis:

	Parameter	Details	Data Source
a.	Emission Model Version:	MOBILE6.2	EPA
b.	Emission Model Runs:	See Analysis Years table, below	EPA, DEQ
c.	Time Periods:	Seven - 2200hrs-0559; 0600-0659;0700-0859; 0900-1359; 1400-1459, 1800-1859 (PM shoulder); 1500-1759 and 1900-2159.	
d.	Pollutants Reported:	CO	
e.	Vehicle Class:	As per MOBILE6.2	EPA
f.	Functional Class:	MOBILE6.2 default (freeways, arterials, local and ramp)	
g.	Temperatures:	Minimum and Maximum temperatures for January	OR DEQ
h.	VMT mix:	MOBILE6.2 default	
i.	Speed:	3-65 MPH	
j.	Vehicle Registration:	All runs using 2004 fleet data from DEQ and ODOT, except for trips originating in Washington State which are provided through the SW Clean Air Agency.	OR DEQ / ODOT DMV
k.	I/M Program:	Assumes On-Board Diagnosticincluding the 2-speed idle test for 1975 through 1995 model-year vehicles and the Onboard Diagnostics test for all vehicle that are 1996 and newer. For year 2035, analysis will be calculated without On-Board Diagnostic as the more conservative assumption.	OR DEQ
l.	Reid Vapor Pressure:	Winter - 13.6psi	OR DEQ

Conformity Criteria

Conformity will be based on the requirements of OAR 340-252-0190 (Criteria and Procedures: Motor Vehicle Emissions Budget). Specifically, 252-0190 (b)(A) states that for each analysis year, the emission analysis must demonstrate that the emissions from the Action scenario is less than or equal to the motor vehicle emissions budget(s) established for the last year of the maintenance plan, and for any other years for which the maintenance plan establishes motor vehicle emission budgets. In addition, the regional emissions analysis must be performed for the last year of the transportation plan's forecast period.

Motor Vehicle Emission Budgets and Analysis Years

Based on the Second Portland Area Carbon Monoxide Maintenance Plan, as found adequate for transportation conformity purposes by the EPA on February 15, 2005, the following are the motor vehicle emission budgets to be used in the analysis.

Motor Vehicle Emission Budgets for Carbon Monoxide

2010 – 1,033,578 lbs. per winter day
2017 – 1,181,341 lbs. per winter day
Beyond 2017 – same as 2017

Based on these required emission budget years, the requirements in OAR 340-252-0190 and data availability, the following are the years in which the Metro transportation model will be run and MOBILE6.2 software for this conformity determination.

Air Quality Emission Modeling Year and Process Assumptions

Year	2005	2007	2010	2017	2025	2035
Carbon Monoxide Budget Years			✓	✓		✓*
Modeling Tasks	- Full Transportation Model run (already run)	Interpolate 2005 and 2017 trip tables, assign to 2007 transportationn etwork MOBILE6.2 run	- Interpolate 2007 and 2017 emissions	- Full Transportation Model run MOBILE6.2 run	- Interpolate emissions between 2017 and 2035	- Full Transportation Model run MOBILE6.2 run
Transportation Network	2005	2007	-	2017	-	2035

* The Second Portland Area CO Maintenance Plan (DEQ 2004) provides for conformity determinations out to the year 2037, though the budget amount does not change after 2017. OAR 340-252-0190 and elsewhere and federal Clean Air Act and other federal regulations upon which OAR 340-252 are based, call for regional emissions for the last year of the RTP.

Major Project Assumptions

For the Columbia River Crossing, Sunrise Project, I-5/I-84 Interchange and the I-5/99W Connector, the following approach is proposed:
1) These projects have, at a minimum, identified sufficient funding to complete right-of-way acquisition making them eligible for inclusion in the financially constrained project list and air quality conformity determination.

2) These projects are in various stages of project development and planning at this time. Locally preferred alternatives have not yet been determined, therefore, the proposed modeling assumptions for air quality conformity represent potential air quality impacts only, and are not alignment or facility type determinations. Federal guidelines dictate the circumstances under which an additional air quality conformity determination may or may not be required once the project development process reaches a conclusion on project specifications, For the purposes of air quality conformity, we propose to use the following assumptions, consistent with an ODOT request, after consultation with FHWA and continuing past policy for air quality modeling, as representative of potential project impacts to air quality in the region: For CRC, it is proposed that the replacement bridge with LRT and tolling be modeled for completion in the year 2017. For the Sunrise Project

is assumed to be a 6 lane throughway between I-205 and 172nd Avenue without tolling completed in the year 2017., For the I-5/Highway 99W Connector, it is assumed to be a four lane expressway without tolls at the southern corridor to be completed in the year 2025. For the I-5/I-84 Interchange it is assumed to be improvements consistent with the Greeley/Banfield project.

Project	Project Description and Extent	2035 Financially Constrained System Assumption
Columbia River Crossing	Preliminary Engineering and Right-of-Way from Victory Blvd. to Washington State	Replacement Bridge with 10,000 vehicles per hour each direction with $2 tolls and light rail transit with termini at the Lincoln Park and Ride lot near Main Street and I-5. To be completed by 2017.
Sunrise (I-205 to 172nd Avenue)	Preliminary Engineering, Right-of-Way purchase and some construction funds from I-205 to 172nd Ave.	Assumes full build, 6 lanes, without Tolls. To be completed by 2017.
I-5/I-84 Interchange	Preliminary Engineering and Right-of-Way for the interchange at I-5 and I-84 as well as the area around I-5 and Greeley Street.	Assumes full build of the interchange. The air quality assumptions for 2025 and beyond reflect capacity increases for I-5 resulting from braiding of ramps at both ends of the Broadway interchange. Northbound I-5 will increase from 3500 capacity across the three lanes to 6000 capacity as a result of the interchange improvements. Southbound I-5 capacity will increase from 3500 to 6000 across 3 lanes as it approaches the I-405 loop, an increase from 4500 to 6000 over three lanes just beyond the loop, and an increase from 6000 to 7000 across 3.5 lanes as I-5 approaches I-84. To be completed by 2025.
I-5/Highway 99W Connector	Preliminary Engineering and Right-of-Way purchase for the entire facility from 99W to I-5.	Assumes 4 lanes, without Tolls, to be completed by 2025.

Transportation Control Measures

The Second Portland Area CO Maintenance Plan approved by the EPA includes several TCM which must be shown to be addressed. These TCM include the following:

1. Transit Service Increase: Regional transit service revenue hours (weighted by capacity) shall be increased 1.0% per year. The increase shall be assessed on the basis of a 5 year rolling average of actual hours for assessments conducted between 2006 and 2017. Assessments made for the period through 2008 shall include the 2004 opening of Interstate MAX.

2. Bicycle Paths: Jurisdictions and government agencies shall program a minimum total

of 28 miles of bikeways or trails within the Portland metropolitan area between the years 2006 through 2017. Bikeways shall be consistent with state and regional bikeway standards. A cumulative average of 5 miles of bikeways or trails per biennium must be funded from all sources in each Metropolitan Transportation Improvement Program (MTIP). Facilities subject to this TCM must be in addition to those required for expansion or reconstruction projects under ORS 366.514.

3. Pedestrian Paths: Jurisdictions and government agencies shall program at least nine miles of pedestrian paths in mixed use centers between the years 2006 through 2017, including the funding of a cumulative average of 1½ miles in each biennium from all sources in each MTIP. Facilities subject to this TCM must be in addition to those required for expansion or reconstruction projects under ORS 366.514.except where such expansion or reconstruction is located within a mixed-use center.

The air quality conformity determination for the 2035 RTP and 2008-2011 MTIP will include an analysis of whether these TCM have been addressed.

METRO

Air Quality Conformity Determination Schedule for the Adoption of the 2035 Regional Transportation Plan and 2008-11 Metropolitan Transportation Improvement Plan (MTIP)

The following is the proposed schedule for air quality analysis, public and technical review and approval of the air quality conformity determination for the 2035 Regional Transportation Plan (RTP) update. This schedule identifies key milestones and decision points, and was developed to receive public and local technical review, Environmental Protection Agency review and Federal Highway Administration and Federal Transit Administration approval by March 5, 2008. Under federal regulations, a revised conformity determination for the 2008-11 MTIP must occur within six months of the 2035 RTP conformity determination. This schedule includes the revised conformity analysis and determination for the 2008-11 MTIP with the 2035 RTP conformity analysis and determination.

November 19, 2007	Interagency consultation on detailed air quality conformity determination assumptions, methods, etc. for 2035 RTP and 2008-11 Metropolitan Transportation Improvement Program (MTIP).
November 30, 2007	TPAC action on 2035 RTP and introduction to upcoming air quality analysis for 2035 RTP and 2008-11 MTIP.
December 13, 2007	**JPACT action on 2035 RTP - pending air quality analysis.**
December 13, 2007	**Metro Council action on 2035 RTP - pending air quality analysis.**
December 14, 2007	Air quality conformity determination emission analysis begins for 2035 RTP and 2008-11 MTIP.
January 18, 2008	Joint 2035 RTP and 2008-11 MTIP air quality conformity modeling and draft report complete. 30-day public review period begins of complete air quality conformity analysis, including emission results. Analysis also sent to TPAC members, federal air quality partners (EPA, FHWA, FTA).
January 22-25, 2008	Federal interagency consultation concerning air quality analysis results, recommendations.

Air Quality Conformity Determination Schedule for the Adoption of the 2035 Regional Transportation Plan and 2008-11 Metropolitan Transportation Improvement Plan (MTIP)
(Continued)

January 25, 2008	TPAC consultation on air quality analysis results and recommendations.
February 14, 2008	JPACT consultation on air quality analysis results and recommendations, pending closing of comment period
February 19, 2008 (noon)	end of 30-day public review of air quality analysis of 2035 RTP and 2008-11 MTIP.
February 22, 2008	TPAC final adoption of air quality conformity determination and 2035 RTP
February 26, 2008	JPACT final adoption of air quality conformity determination and 2035 RTP. (electronic ballot)
February 28, 2008	Metro Council final adoption of air quality conformity determination and 2035 RTP.
February 29, 2008	Submit conformity determination for 2035 RTP and 2008-11 MTIP to USDOT and US EPA.
March 5, 2008	Joint 2035 RTP and 2008-11 MTIP conformity determination approval from FHWA/FTA.

*****

APPENDIX G – Ozone Information

Ozone

The Oregon DEQ describes ozone and its threat as follows:
"Ozone (a component of smog) is a pungent, toxic, highly reactive form of oxygen. A new eight hour standard protects the public against lower level exposures over a longer time period which has been found to be more detrimental than shorter peak levels. The long term exposure effects cause significant breathing problems, such as loss of lung capacity and increased severity of both childhood and adult asthma.

Ozone causes irritation of the nose, throat, and lungs. Exposure to ozone can cause increased airway resistance and decreased efficiency of the respiratory system. In individuals involved in strenuous physical activity and in people with pre-existing respiratory disease, ozone can cause sore throats, chest pains, coughing, and headaches. Plants can also be affected. Reductions in growth and crop yield have been attributed to ozone. Ozone can affect a variety of materials, resulting in fading of paint and fiber, and accelerated aging and cracking of synthetic rubbers and similar materials. It is also a major contributor to photochemical smog.

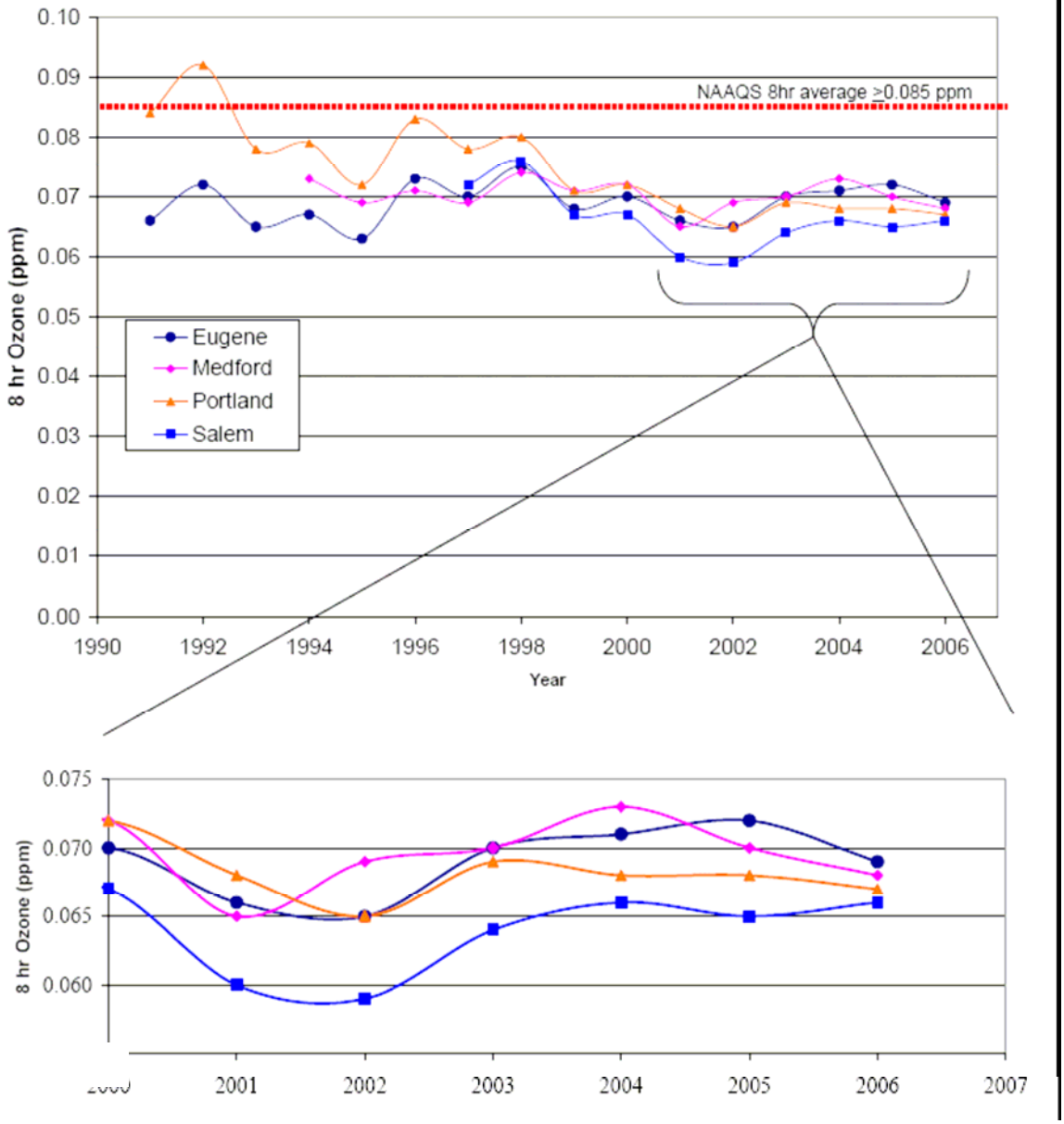
Ozone is not emitted directly into the air. It is formed through a series of photochemical (sunlight requiring) reactions between other pollutants and oxygen (O_2) during hot weather. Most important are nitrogen oxides and volatile organic compounds. To control ozone pollution, it is necessary to control emissions of these other pollutants. It is primarily caused by chemicals from car and small engine exhaust, and business and industry emissions on hot sunny days.

The Portland region has attained the one hour ozone standard and in 1996 EPA approved a 10-year plan to maintain good air quality."

In February 2007, the Oregon Environmental Quality Commission adopted an updated Portland Ozone Maintenance Plan and the US EPA has approved it. This document no longer requires air quality conformity determinations for ozone. However, Metro and DEQ have agreed that ozone levels will continue to be projected to assess future trends, although no motor vehicle emission budgets, or maximum levels of ozone precursors from on road transportation sources are available for comparison.

Below is a chart showing the historic rates of Ozone levels in the Metro region as compared with the federal and state standards.

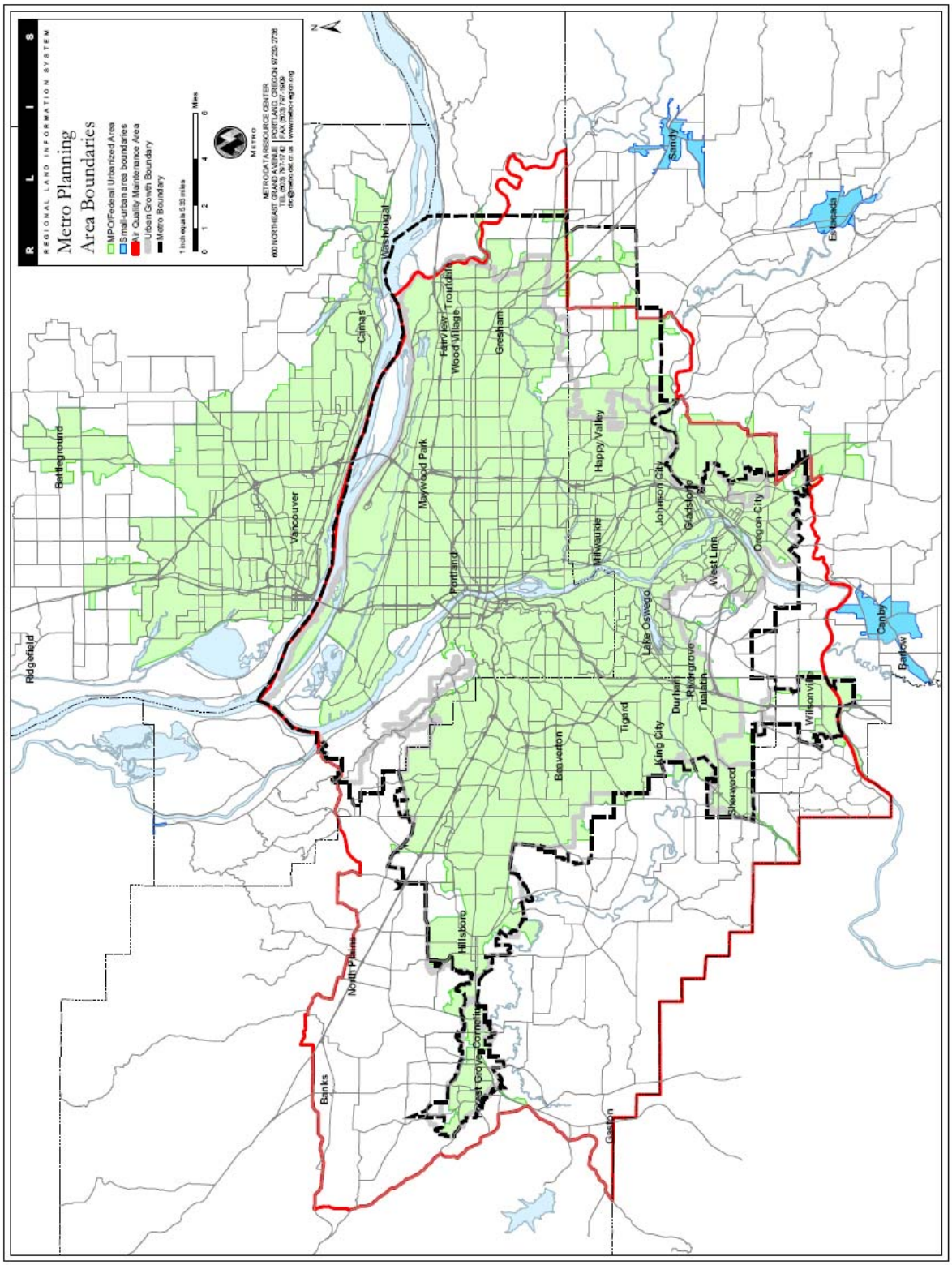
Figure 3. Ozone Trends – Total Emissions, All Sources



Source: 2006 Oregon Air Quality Data Summaries, Oregon Department of Environmental Quality see

http://www.deq.state.or.us/aq/forms/2006ar/2006ar.pdf, - page 21

Figure 4 Ozone - Air Quality Maintenance Area



The 1996 Portland Ozone Maintenance Plan includes the following MOBILE5 based motor vehicle emission budgets:

Year	Hydrocarbon Motor Vehicle Emission Budget (tons/summer day)	Oxides of Nitrogen MotorVehicle Emission Budget (tons/ summer day)
2010	40	52
2015	40	55
2020	40	59
2025	40	59

NONDISCRIMINATION NOTICE TO THE PUBLIC

Metro hereby gives public notice that it is the policy of the Metro Council to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, sex, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which Metro receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with Metro. Any such complaint must be in writing and filed the Metro's Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discrimination Complaint Form, see the web site at www.metro-region.org or call 503-797-1536.

STAFF REPORT

In consideration of Resolution No. 08-3911, FOR THE PURPOSE OF APPROVING THE AIR QUALITY CONFORMITY DETERMINATION FOR THE FEDERAL COMPONENT OF THE 2035 REGIONAL TRANSPORTATION PLAN AND RECONFORMING THE 2008-2011 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM

Date: February 6, 2008 Prepared by: Mark Turpel

BACKGROUND

Overview

Federal regulations require that at least every four years the transportation plan be updated with a new time horizon, updated jobs and housing forecasts and updated information about available funds, including federal funds, for the new time period. The updated transportation plan, (know as the Regional Transportation Plan, or RTP, in the Metro area) with these new factors taken into consideration, must then be tested to see if it meets the federal Clean Air Act and state air quality regulations. In addition, the transportation improvement program (called the Metropolitan Transportation Improvement Program, or MTIP in the Metro area) must be re-conformed, or re-tested, against the air quality standards within six months of the adoption of the new transportation plan. These air quality analyses – known as air quality conformity determinations - must demonstrate compliance with all federal and state determined air pollutants for the area so that the region, the Oregon Department of Transportation and local jurisdictions can continue to be eligible to receive federal funds for transportation projects within the region.

The Metro area is in compliance with the standards for all air pollutants regulated by federal and state regulations. However, the current status of air quality in the Metro region is that it is a "maintenance" area for Carbon Monoxide. That is, while the region has greatly reduced Carbon Monoxide levels and has not exceeded maximum levels since 1989, it still must monitor Carbon Monoxide levels and complete air quality conformity determinations for Carbon Monoxide emissions from on-road transportation sources. The way that this analysis is done is that the region's projected growth to the transportation plan horizon year (2035) and the transportation investments included in the financially constrained RTP (of which the MTIP is a subset) are estimated in Metro's travel forecast model. These travel results are then used with the Environmental Protection Agency's approved MOBILE6.2 air quality model to determine air pollutant levels from on-road sources. These emission levels are then compared with the motor vehicle emission budgets, or maximum air pollution levels of Carbon Monoxide from on-road transportation sources, as determined by the Oregon Environmental Quality Commission based on the analysis and recommendations of the Oregon Department of Environmental Quality.

Carbon Monoxide Conformity Determination

Exhibit "A" to Resolution No. 08-3911, FOR THE PURPOSE OF APPROVING THE AIR QUALITY CONFORMITY DETERMINATION FOR THE FEDERAL COMPONENT OF THE 2035 REGIONAL TRANSPORTATION PLAN AND RECONFORMING THE 2008-2011 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM, includes a Carbon Monoxide emission analysis of on-road transportation sources from the region based on the 2035 RTP and 2008-2011 MTIP.

The analysis shows that federal and state air quality standards for Carbon Monoxide can easily be met no and in the future in the Metro region even with: 1) the existing transportation system, and, 2) the projects

included in the 2008-2011 Metropolitan Transportation Improvement Program; and, 3) all of the other improvements included in the financially constrained system of the 2035 Regional Transportation Plan; and 4) all other local transportation projects that are considered regionally significant.

Accordingly, approval of the air quality conformity determination can be considered.

If approved, the conformity determination must be forwarded to the Federal Highways Administration and Federal Transit Administration, who, after conferring with the EPA, may approve the conformity determination.

Compliance with SAFETEA-LU

In December 2007 with the Metro Council adoption of Resolution No. 07-3831B: FOR THE PURPOSE OF APPROVING THE FEDERAL COMPONENT OF THE 2035 REGIONAL TRANSPORTATION PLAN (RTP) UPDATE, PENDING AIR QUALITY CONFORMITY ANALYSIS, the region took action, in part, based on following the requirements of the federal transportation act, SAFTETEA-LU. The lone outstanding gap was the air quality conformity determination.

Now that the air quality conformity analysis has been completed by the region, a complete set of findings of compliance with SAFTEA-LU is possible. These findings are included as Attachment 1 to this staff report. These findings demonstrate that the region has complied with all relevant federal requirements and will be provided to the Federal Highway Administration and the Federal Transit Administration as an aid in their review of the region's request for approval of the air quality conformity of the 2035 RTP and 2008-2011 MTIP.

ANALYSIS/INFORMATION

1. **Known Opposition** None.

2. Legal Antecedents

Federal: 40 CFR 93, as amended. (transportation air quality conformity)

State: OAR 340-252 (transportation air quality conformity)

Metro:

Resolution No. 03-3381A, FOR THE PURPOSE OF ADOPTING THE 2004-2007 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA.

Resolution No. 03-3382A-02, FOR THE PURPOSE OF ADOPTING THE PORTLAND AREA AIR QUALITY CONFORMITY DETERMINATION FOR THE 2004 REGIONAL TRANSPORTATION PLAN AND 2004-2007 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM.

Resolution No. 05-3529A, FOR THE PURPOSE OF ALLOCATING $62.2 MILLION OF TRANSPORTATION PRIORITIES FUNDING FOR THE YEARS 2008 AND 2009, PENDING AIR QUALITY CONFORMITY DETERMINATION.

Resolution No. 05-3589A, FOR THE PURPOSE OF AMENDING THE REGIONAL TRANSPORTATION PLAN TO MOVE THE I-205 NORTHBOUND ONRAMP/AIRPORT WAY

INTERCHANGE IMPROVEMENT FROM THE ILLUSTRATIVE LIST TO THE FINANCIALLY CONSTRAINED LIST.

Resolution No. 07-3824: FOR THE PURPOSE OF APPROVING AN AIR QUALITY CONFORMITY DETERMINATION FOR THE 2008-2011 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM.

Resolution No. 07-3831B: FOR THE PURPOSE OF APPROVING THE FEDERAL COMPONENT OF THE 2035 REGIONAL TRANSPORTATION PLAN (RTP) UPDATE, PENDING AIR QUALITY CONFORMITY ANALYSIS

3. Anticipated Effects Approval of this resolution allows for funding of proposed transportation projects in the 2008-2011 MTIP and advancing the goals of the 2035 Regional Transportation Plan.

4. **Budget Impacts** None directly by this action. Upon approval of this action, the some of the projects included in the 2008-2011 Metropolitan Transportation Improvement Program would provide partial funding support for some of the region's transportation planning activities that might otherwise have a reduced scope, be delayed or not be undertaken.

RECOMMENDED ACTION

Approve Resolution No. 08-3911, FOR THE PURPOSE OF APPROVING THE AIR QUALITY CONFORMITY DETERMINATION FOR THE FEDERAL COMPONENT OF THE 2035 REGIONAL TRANSPORTATION PLAN AND RECONFORMING THE 2008-2011 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM

METRO

Findings of Compliance with SAFETEA-LU

TITLE 23 - UNITED STATES CODE
SECTION 134 - METROPOLITAN PLANNING

The Regional Transportation Plan (RTP) is the long-range metropolitan transportation plan for the Portland metropolitan region. The RTP establishes the blueprint to guide the design, management and governance of all regional transportation investments. The RTP is updated regularly to ensure compliance with state and federal regulations, and to reflect changing demographic, financial, travel and economic trends and any subsequent changes in the region's transportation needs.

The following findings are intended to explain how the federal component of the 2035 Regional Transportation Plan ("RTP") complies with applicable requirements of Section 134 in general. These findings are a roadmap to the decision record for the federal component of the 2035 RTP update. Inapplicable subsections of Section 134 and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) are not cited in these findings.

134(f)(2)(A-B) Interstate Compacts

> *"The consent of Congress is granted to any 2 or more States to enter into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under this section as the activities pertain to inter-state areas and localities within the States and to establish such agencies, joint or otherwise, as the States may determine desirable for making the agreements and compacts effective."*

Metro has entered into an intergovernmental agreement with the Regional Transportation Commission ("RTC"), the MPO for Clark County, Washington. The RTC is represented on Metro's Transportation Policy Alternatives Committee ("TPAC") and Joint Policy Advisory Committee on Transportation ("JPACT"). Likewise, Metro is represented on RTC technical and policy advisory committees. The function of Metro's interagency coordinating committees is described in Section 1.2 of the 2035 Regional Transportation Plan ("RTP").

134(g)(2) Transportation Improvements Located in Multiple MPOs

> *"If a transportation improvement is located within the boundaries of more than 1 metropolitan planning organization, the metropolitan planning organizations shall coordinate plans and TIPs regarding the transportation improvement."*

Based on a recommendation from the I-5 Partnership Governors Task Force, the Bi-State Transportation Committee became the Bi-State Coordination Committee in early 2003. This joint committee advises the region, state and local jurisdictions on transportation and land use issues of bi-state significance. The intergovernmental agreement between the RTC and Metro states that JPACT and the RTC Board "shall take no action on an issue of bi-state

significance without first referring the issue to the Bi-State Coordination Committee for their consideration and recommendation."

Several projects in the I-205 and I-5 highway corridors, including transit improvement, are near the Metropolitan Planning Organization (MPO) boundary, or span the Metro and RTC MPOs. These projects are listed in Appendix 1.1 of the 2035 RTP. Metro has coordinated these projects with the RTC through the membership of TPAC, JPACT and the Bi-State Coordination Committee, which advises the RTC, and JPACT/Metro on issues of bi-state significance.

134(g)(3) Relationship with Other Planning Officials

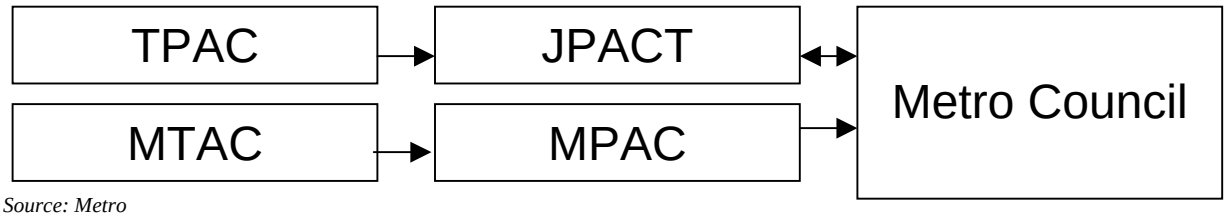
> *'The Secretary shall encourage each metropolitan planning organization to consult with officials responsible for other types of planning activities that are affected by transportation in the area (including State and local planned growth, economic development, environmental protection, airport operations, and freight movements) or to coordinate its planning process, to the maximum extent practicable, with such planning activities. Under the metropolitan planning process, transportation plans and TIPs shall be developed with due consideration of other related planning activities within the metropolitan area."*

The 2035 RTP update coordinated and consulted with other planning officials through a variety of methods, including one-on-one meetings with planning officials, 5 stakeholder workshops that included environmental, business, freight, economic development, public health, and other interests affected by transportation. Metro also coordinates with freight, rail, airport operations and business interests through the Regional Freight and Goods Movement Task Force and Regional Freight and Goods Movement Technical Advisory Committee. Metro is a member of Regional Partners for Economic Development and endorsed the Consolidated Economic Development Strategy (CEDS).

Metro's jurisdictional boundary encompasses the urban portions of Multnomah, Washington and Clackamas counties. Metro's planning partners include the 25 cities, three counties and affected special districts of the region, ODOT, Oregon Department of Environmental Quality (DEQ), Port of Portland, South Metro Area Rapid Transit (SMART), TriMet and other interested community, business and advocacy groups as well as state and federal regulatory agencies such as the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). Metro also coordinates with the City of Vancouver, Clark County Washington, the Port of Vancouver, the Southwest Washington Regional Transportation Council (RTC), C-Tran, the Washington Department of Transportation, the Southwest Washington Air Pollution Control Authority and other Clark County governments on bi-state issues. The Southwest Washington Regional Transportation Council is the federally designated MPO for the Clark County portion of the Portland-Vancouver metropolitan region. Metro consults with planning officials from each of these agencies.

Metro facilitates this consultation, coordination and decision-making through four advisory committee bodies –the Joint Policy Advisory Committee on Transportation (JPACT), the Metro Policy Advisory Committee (MPAC), the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC). In addition, the Metro Committee for Citizen Involvement (MCCI) provides advice to the Metro Council on how to best engage residents in regional planning activities. **Figure 1.1** displays the regional transportation decision-making process.

Figure 1.1
Regional Transportation Decision-Making Process



Source: Metro

All transportation-related actions (including federal MPO actions) are recommended by JPACT to the Metro Council. The Metro Council can approve the recommendations or refer them back to JPACT with a specific concern for reconsideration. Final approval of each item, therefore, requires the concurrence of both bodies. Under state law, the RTP serves as the region's transportation system plan (TSP). As a result, the Metro Policy Advisory Committee (MPAC) also has a role in approving the regional transportation plan as a land use action, consistent with statewide planning goals and the Metro Charter. In addition, Metro has implemented a fish and wildlife habitat protection program through regulations, property acquisition, education and incentives in coordination with MPAC.

In addition, the Bi-State Coordination Committee advises the RTC, and JPACT/Metro on issues of bi-state significance. On issues of bi-state land use and economic significance the Committee advises the local and regional governments appropriate to the issue. Since formation in 1999, the committee has reviewed Federal transportation funding reauthorization, Columbia River Channel deepening and projects and studies focused on the I-5 Corridor. Restructuring in 2004, expanded this role to include examining the connection between land use and transportation in the I-5 corridor and taking a multi-modal approach – including freight and transit – in considering the impacts of land use and transportation decisions within the context of economic development and environmental justice issues. JPACT and the RTC Board cannot take action on an issue of major bi-state transportation significance without first referring the issue to the Bi-State Coordination Committee for their consideration and recommendation.

Goal 10 in the 2035 RTP calls for the region's government, business, institutional and community leaders work together in an open and transparent manner so the public has meaningful opportunities for input in transportation decisions and experiences an integrated, comprehensive system of transportation facilities and services that bridge governance, institutional and fiscal barriers.

134(h)(1) Scope of Planning Process - Metropolitan Planning Factors

This section requires that the metropolitan transportation planning process for a metropolitan area under this section shall provide for consideration of projects and strategies that will satisfy the planning factors (A) through (H), below.

134(h)(1)(A) Plan Supports Economic Viability

"Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency."

The policy component of the RTP is structured around the implementation of the Region 2040 Growth Concept through strategic transportation improvements. As the economic engines of the region's economy, the Portland central city, six regional centers, the region's industrial areas and intermodal facilities are identified as the primary areas for transportation investments (2035 RTP Section 3.2 and Table 3.1).

Transportation improvements in these primary components of the 2040 Growth Concept are also guided by a set of functional maps that establish a series of efficient, high-quality motor vehicle, freight, transit, bicycle and pedestrian systems that are similarly designed to reinforce the growth concept (2035 RTP Section 3.4.3). The RTP recognizes that new transit and road capacity are needed to achieve the Region 2040 vision and support the region's economic vitality. In addition, the plan considers transportation and the economy as inextricably linked, and recognizes investments that serve certain land uses or transportation facilities may have a greater economic return on investment than others. The plan also recognizes that focusing transportation investments and other strategies to support the gateway function of our transportation system is the primary way in which to strengthen that gateway role for the region and the rest of the state. This means ensuring reliable and efficient connections between intermodal facilities and destinations in, beyond, and through the region to promote the region's function as a gateway for trade and tourism. In addition, other elements of the 2035 RTP include:

- RTP policies that are linked to land use strategies that promote economic development (Goal 1 and Goal 2).
- Comprehensive, multimodal freight improvements that link intermodal facilities to industry are detailed for the plan period. (Chapter 6)
- Highway LOS policy tailored to protect key freight corridors. (Table 3.16)
- RTP recognizes need for freight linkages to destinations beyond the region by all modes. (Sections 2.4.7.1 and 3.4.2.3)

Several corridor studies have also been completed since 2000, such as the I-5 Trade Partnership Study, and project recommendations have been included in the 2035 RTP to address the movement of freight in the region. Among the projects aimed at maintaining a robust economy are a number of highway corridor improvements, freight and passenger terminal access improvements, bridge improvements, rail crossing upgrades and channel deepening of the Columbia River. These projects are included in the RTP financially constrained system in Chapter 6.

134(h)(1)(B) Plan Increases Safety

"Increase the safety of the transportation system for motorized and non-motorized users."

Safety issues and activities are summarized in Section 2.4.7.3 of the 2035 RTP. In addition, the policy framework in Section 3.3 of the 2035 RTP includes, "Goal 5: Enhance Safety and Security," and specific safety objectives and potential actions to increase safety of the transportation system for all users. A background research paper was also developed during Phase 2 of the update to document current safety issues and planning efforts in the region. This research is included Appendix 6.0 was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP. The RTP includes a number of investments and actions aimed at further improving safety in the region, including:

- Investments targeted to address known safety deficiencies and high-crash locations.
- Completing gaps in regional bicycle and pedestrian systems.
- Retrofits of existing streets in downtowns and along main streets to include on-street parking, street trees marked street crossings and other designs to slow traffic speeds to follow posted speed limits.

- Intersection changes and ITS strategies, including signal timing and real-time traveler information on road conditions and hazards.
- Expanding safety education, awareness and multi-modal data collection efforts at all levels of government.
- Expand safety data collection efforts and create a better system for centralized crash data for all modes of travel.

This emphasis on safety is also mirrored in Metro's MTIP funding process, where safety improvements are given a priority.

134(h)(1)(C) Plan Increases Security

"Increase the security of the transportation system for motorized and non-motorized users."

Security and emergency management activities are summarized in Section 2.4.7.4 of the 2035 RTP. In addition, the policy framework in Section 3.3 of the 2035 RTP includes, "Goal 5: Enhance Safety and Security," and specific security objectives and potential actions to increase security of the transportation system for all users. A background research paper was also developed during Phase 2 of the update to document current security planning efforts in the region, including: the role of the Regional Emergency Management Group (REMG), which has expanded its scope to include anti-terrorism preparedness, TriMet's responsibility for transit security plans, ODOT's responsibility for coordination of state security plans, Port of Portland's responsibility for air, marine and other Port facilities security plans and implementation of system management strategies to improve security of the transportation system (e.g., security cameras on MAX and at transit stations). This research is included Appendix 6.0 and was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP.

The RTP calls for implementing investments that increase system monitoring for operations, management and security of the regional mobility corridor system. These types of investments would enhance existing coordination and communication efforts in the region, and recognize these facilities would serve as the primary transportation network in the event of an evacuation of the region. The plan also directs Metro to work with local, state and regional agencies to identify critical infrastructure in the region, assess security vulnerabilities and develop coordinated emergency response and evacuation plans. In addition, transportation providers are directed to monitor the regional transportation and minimize security risks at airports, transit facilities, marine terminals and other critical infrastructure. Future RTP updates will consider expanding Metro's role, as the MPO, to increase existing coordination and planning efforts in the region and funding of initiatives to address these issues.

134(h)(1)(D) Plan Increases Accessibility and Mobility

"Increase the accessibility and mobility of people and for freight."

The transportation vision that guides the RTP (2035 RTP Section 3.1) is based on the premise that the system must become more multi-modal in design and function in order to fully implement the 2040 Growth Concept, sustain the region's economic competitiveness, and reduce dependency on the automobile as a sole mode of travel. The vision is translated into motor vehicle, transit, freight, bicycle and pedestrian policies that emphasis mobility and access to 2040 centers, industrial areas, and intermodal facilities (2035 RTP Section 3.2). The RTP policies are organized on the principle of providing accessibility to centers and employment areas with a balanced, multi-modal transportation system. The policies also identify the need for freight mobility in key freight corridors and to provide freight access to industrial areas and intermodal facilities.

The plan emphasizes accessibility and reliability of the system, particularly for commuting and freight, and includes a new, more customized approach to managing and evaluating performance of mobility corridors. This new approach builds on using new, cost-effective technologies to improve safety, optimize the existing system, and ensure that freight transporters and commuters have a broad range of travel options in each corridor. Improving access to and within 2040 Target Areas and completing gaps in pedestrian, bicycle and transit systems is also a critical part of this strategy. The policies resulted in a multi-modal set of recommended projects and programs to increase access and mobility options to people and for freight in Chapter 6. The projects are listed in the Technical Appendix to the 2035 RTP.

134(h)(1)(E) Plan Protects Environment

"Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State an local planned growth and economic development patterns."

A background research paper was also developed during Phase 2 of the update to document current environmental issues and planning efforts in the region. The research is summarized in Section 2.4.7.5 of the 2035 RTP. This research is also included Appendix 6.0 and was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP. The policy component of the RTP seeks to protect sensitive environmental areas and resources from the potentially negative effects of transportation improvements (2035 RTP Goal 6). The transit, bicycle and pedestrian systems envisioned in the plan (2035 RTP Section 3.2) and corresponding projects that implement these systems, promote energy conservation and enhance air quality by reducing the use of motor vehicles. The region's parking policies (Title 2 of the Urban Growth Management Functional Plan) are also designed to encourage the use of alternative modes, and reduce reliance on the automobile, thus promoting energy conservation and reducing air quality impacts. In addition:

- The region has developed an environmental street design guidebook to facilitate environmentally sound transportation improvements in sensitive areas, and to coordinate transportation project development with regional strategies to protect endangered species.
- The RTP conforms to the Clean Air Act and State Implementation Plan.

- Many new transit, bicycle, pedestrian and TDM projects have been added to the plan to provide a more balanced multi-modal system that maintains livability.
- RTP transit, bicycle, pedestrian and TDM projects planned for the plan period will complement the compact urban form envisioned in the 2040 growth concept by promoting an energy-efficient transportation system.
- Metro coordinates its system level planning with resource agencies to identify and resolve key issues.

134(h)(1)(F) Plan is Multi-modal

"Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight."

The RTP establishes integrated modal systems for motor vehicles, transit, freight, bicycles and pedestrians through a series of functional classification maps and accompanying narrative (2035 RTP Section 3.4.2). The street design classifications (2035 RTP Section 3.4.2.1) serve as the policy tool for integrating these modal systems, and linking them to the 2040 land use components. These modal systems and design classifications emphasize regional travel, as they apply only to the regional transportation system, which includes regional, statewide and interstate travel routes, and intermodal facilities for people and freight. The regional street design classifications (2035 RTP Section 3.4.2.1) link transportation and 2040 land use considerations for all portions of the regional transportation system.

The design classifications establish a modal-orientation on detailed segments of the major street system, reflecting future travel demand that is expected for individual 2040 land use components. In compact, mixed-use areas, the street design classifications emphasize transit, bicycle and pedestrian elements, as well as calmed motor vehicle travel speeds and on-street parking that supports storefront development. In industrial and employment areas, the street design classifications emphasize motor vehicle travel, including freight, with an emphasis on motor-vehicle mobility. However, all of these classifications are multi-modal in design, and embrace the principle that all streets should serve all modes of travel in some manner. The exception to this strategy are limited-access freeway and highway facilities, that are not intended to include pedestrian and bicycle access, due to safety concerns.

The modal systems are also complemented by connectivity provisions that will increase local and major street connectivity in the region. The RTP freight policies and projects address the intermodal connectivity needs at major freight terminals in the region. These policies were considered in the development of investment priorities in Chapter 6 of the 2035 RTP.

134(h)(1)(G) Plan Promotes System Management

"Promote efficient system management and operation."

A background research paper was also developed during Phase 2 of the update to document current system management efforts in the region. The research is summarized in Section 2.4.6 of the 2035 RTP. This research is also included Appendix 6.0 and was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP. The plan implements recent policy direction from the federal and state governments to better link system management with planning for the region's transportation system as well as a growing body of research demonstrates that adding road capacity alone is not a sustainable solution to congestion. The

policy component of the 2035 RTP includes specific provisions for efficient system management and operation (2035 RTP Goal 4), with an emphasis on TSM, ATMS and the use of non-auto modal targets (Table 3.17) to optimize the existing and planned transportation system. The regional congestion management process also requires local jurisdictions to explore system management solutions before adding roadway capacity to the regional system (2035 RTP Section 7.6.3). The plan also calls for consideration of value pricing in the region to better manage capacity and peak use of the throughway system. However, more work is needed to gain public acceptance of this tool. RTP projects in Chapter 6 include many system management improvements along regional mobility corridors and the supporting arterial system.

134(h)(1)(H) Plan Emphasizes System Preservation

"Emphasize the preservation of the existing transportation system."

A background research paper was also developed during Phase 2 of the update to document current operations, maintenance and preservation (OM&P) efforts and costs in the region in addition to other financial trends in the region. The research is summarized in Section 2.5 and Chapter 5 of the 2035 RTP. This research is also included Appendix 6.0 and was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP. RTP policies (Goal 9 and related objectives) emphasize the preservation of the existing transportation system and ensuring land use decisions support preserving the functional integrity of the transit and roadway elements of the transportation system. The asset management policy resulted in a number of major reconstruction and preservation improvements in the projects and programs included in the financially constrained system in the plan. The plan recognizes more work is needed to improve data collection and reporting on OM&P costs and expenditures in the region. Finally, Metro's MTIP process provides funding for reconstruction and preservation improvements that are included in the RTP financially constrained system.

134(i)(1) Timing for Development of Transportation Plan

"Each metropolitan planning organization shall prepare and update a transportation plan for its metropolitan area in accordance with the requirements of this subsection."

The 2035 RTP serves as the long-range transportation plan for the purposes of this section and has been updated within the required 4-year time period required in this section.

134(i)(2) Transportation Plan Required

"A transportation plan under this section shall be in a form that the Secretary determines to be appropriate and shall contain, at a minimum, (A) through (D), below."

134(i)(2)(A) Identify Transportation Facilities

"An identification of transportation facilities (including major roadways, transit, multi-modal and intermodal facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions. In formulating the transportation plan, the metropolitan planning organization shall consider factors described in subsection (h) as such factors relate to a 20-year forecast period."

Section 3.4.1 defines the regional transportation system. The plan also establishes integrated modal systems for motor vehicles, transit, freight, bicycles and pedestrians through a series of functional classification maps and accompanying narrative (2035 RTP Section 3.4.2). The street design classifications (2035 RTP Section 3.4.2.1) serve as the policy tool for integrating these modal systems, and linking them to the 2040 land use components. These modal systems and design classifications emphasize regional travel, as they apply only to the regional transportation system, which includes regional, statewide and interstate travel routes. The previously established findings of compliance with the eight planning factors in subsection (f) were based on a 28-year planning period, and were considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and Chapter 6 of the 2035 RTP.

134(i)(2)(B) Mitigation Activities

> *"A long-range transportation plan shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan. The discussion shall be developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies."*

SAFETEA-LU provisions for additional consultation with state and federal resource agencies, and tribal groups that were not already part of Metro's existing committee structure were met through a consultation meeting held on October 16, 2007 with the Collaborative Environmental Transportation Agreement for Streamlining (CETAS) work group, consisting of the Oregon Department of Transportation and ten state and federal transportation, natural resource, cultural resource and land-use planning agencies. A background research paper was also developed during Phase 2 of the update to document current environmental trends, issues and current mitigation strategies in the region. This research was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP. In addition, staff conducted an analysis of the potential environmental effects of transportation investments. The background research report and environmental considerations analysis is included in Appendix 6.0.

134(i)(2)(C) Develop a Financial Plan

> *"A financial plan that demonstrates how the adopted transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs. The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted transportation plan if reasonable additional resources beyond those identified in the financial plan were available. For the purpose of developing the transportation plan, the metropolitan planning organization, transit operator and State shall cooperatively develop estimates of funds that will be available to support plan implementation."*

As required by Metro's 2004 Federal Review the update addressed operating and maintenance costs paid by member jurisdictions. The 2035 RTP revenue forecast and financial analysis for operations and maintenance costs was based on a thorough evaluation of city and county, ODOT, TriMet and SMART cost projections (2035 RTP Sections 5.1 through 5.3). The financially constrained system described in Chapter 6 of the 2035 RTP was specifically developed to comply with SAFETEA-LU planning requirements. The system was developed based on a forecast of expected revenues that was formulated in partnership with the Oregon Department of Transportation, cities and counties in

the Metro region, TriMet and the South Metro Area Rapid Transit (SMART) district. A background research report was also developed during Phase 2 of the update to document current funding trends and sources. The subsequent financial analysis and the background report are included in Appendix 4.3 and Appendix 6.0, respectively.

The projects and programs recommended in the financially constrained system were developed cooperatively with local jurisdictions, ODOT and, port and transit districts, and through workshops sponsored by TPAC. The financially constrained system is intended as the "federal" system for purposes of demonstrating air quality conformity, and allocating federal funds through the MTIP process (2035 RTP Sections 7.1 and 7.5). The RTP financial plan and revenue forecast assumptions are described in Chapter 5 of the 2035 RTP. The total reasonably expected revenue base assumed in the 2035 RTP for the road system is approximately $ 9.07 billion.

In addition to the financially constrained system, the 2035 RTP identifies a larger set of projects and programs for the "Illustrative System," which is double the scale and cost of the financially constrained system. The illustrative system represents the region's objective for implementing the Region 2040 Plan and will be further refined during the state component of the 2035 RTP update in 2008.

134(i)(2)(D) Operational and management strategies

> *"Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods."*

See also findings under 134(h)(1)(G). The system management policies in the RTP (2035 RTP Section 3.4.4) and resulting projects and programs are intended to maximize the use of existing facilities. The regional congestion management process (CMP) also requires local jurisdictions to explore system management solutions before adding roadway capacity to the regional system (2035 RTP Section 7.6.3). These provisions are implemented through potential actions included in Section 3.3 (particularly Goals 4 and 5), and a number of projects and programs recommended in the updated plan, and are listed in Chapter 6 of the 2035 RTP. In addition, Metro has established a Regional Transportation Options Committee as a subcommittee of TPAC to address demand management. The TransPort Committee is a subcommittee of TPAC to address ITS and operations. The regional congestion management process also requires local jurisdictions to explore system management solutions before adding roadway capacity to the regional system (2035 RTP Section 7.6.3). The plan also calls for consideration of value pricing in the region to better manage capacity and peak use of the throughway system. However, more work is needed to gain public acceptance of this tool. RTP projects in Chapter 6 include many system management improvements along regional mobility corridors and the supporting arterial system. Work will continue in the state component of the RTP update to further expand implementation of these strategies.

134(i)(2)(E) Capital investment and other strategies

> *"Capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs."*

See also findings under 134(h)(1)(F), 134(h)(1)(G) and 134(h)(1)(H). In addition, during the plan period, approximately $9.07 billion in forecasted revenue was allocated for capital improvements. This amount represents a major shortfall when compared to the total capital cost to implement the pool of investments identified by local agencies, ODOT, TriMet and Metro in Chapter 4. As a result, the financially constrained system does not attempt to address all transportation needs. Instead, the financially constrained system attempts to focus limited revenue in key 2040 target areas throughout the region, including the central city, industrial areas and intermodal facilities and regional and town centers. Chapter 3 of this plan identifies specific transportation needs for each 2040 Growth Concept land-uses and policies for defining a balanced regional transportation system. Other considerations in developing the financially constrained system included:

- a focus on system and demand management investments and implementation of transportation control measures to meet air quality requirements;
- investments that met multiple goals identified in Chapter 3 of this plan;
- smaller, key phases of larger projects; and
- projects that would complete gaps or address existing deficiencies in the components of the regional transportation systems identified in Chapter 3 of this plan.

This system contains many "placeholder" projects for larger mobility corridor investments, where a specific transportation need is identified, but more work is needed to develop refined projects or programs that serve the identified need. In some cases, work is under way as is the case for the Sunrise Project, Columbia River Crossing, Milwaukie LRT, Portand-to-Lake Oswego Street Car and the Sellwood Bridge. Other corridor work will be completed through future National Environmental Policy Act (NEPA) processes.

134(i)(2)(F) Transportation and transit enhancement activities

> *"Proposed transportation and transit enhancement activities."*

Transportation enhancement activities have been conducted within the MTIP process. As a funding issue, these activities are primarily addressed in the MTIP, not in the 2035 RTP. RTP projects in Chapter 6 include many transit enhancements.

134(i)(3) Coordination With Clean Air Act Agencies

> *"In metropolitan areas which are in non-attainment for ozone or carbon monoxide under the Clean Air Act, the metropolitan planning organization shall coordinate the development of a transportation plan with the process for development of the transportation control measures of the State implementation plan required by the Clean Air Act."*

The Portland Area Carbon Monoxide (CO) Maintenance Plan and Portland Area Ozone Maintenance Plan were prepared in 1996 and received Federal approvals on September 2, 1997 and May 19, 1997 (including corrections made April 17, 1996) respectively based on attainment with Clean Air Act standards for ozone and CO emissions. The CO maintenance plan was last updated in 2004. In 2006, the EPA approved a new CO State Implementation Plan (SIP) finding new CO motor vehicle emission budgets adequate for transportation conformity purposes in the Second Portland Area Carbon Monoxide Maintenance Plan. This second CO maintenance plan is effective through 2017, after which time conformity demonstration will no longer be necessary, if the area continues to not violate the CO National Ambient Air Quality Standards (NAAQS).

As Metro and the region have proposed a new 2035 RTP and 2008-2011 MTIP, an air quality conformity determination has been prepared for the transportation improvements proposed in this latest region-wide transportation plan and the implementing transportation improvement program. In order to demonstrate that the proposed 2035 RTP and 2008-2011 MTIP meet federal and state air quality planning requirements, Metro must complete a technical analysis, consult with relevant agencies and provide for public comment. In addition, the Transportation Policy Alternatives Committee (TPAC) is specifically named in the state rule as the standing committee designated for "interagency consultation," a technical review process. After TPAC review, the draft conformity determination report is then brought to the Joint Policy Advisory Committee on Transportation (JPACT – see http://www.metro-region.org/index.cfm/go/by.web/id=305 for more information about this committee) for consideration and then the Metro Council. A Metro Council (http://www.metro-region.org/index.cfm/go/by.web/id=28) approved air quality conformity determination is submitted to the United

States Department of Transportation (USDOT). In practice, this means review by the Federal Highway Administration and Federal Transit Administration. These USDOT agencies make a conformity determination after consultation with the Environmental Protection Agency. Upon USDOT approval, federal funding of transportation projects may commence. See the Air Quality Conformity Determination prepared for the 2035 RTP and 2008-11 MTIP further document how this provision is addressed.

134(i)(4) Consultation

> *"The metropolitan planning organization shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of a long-range transportation plan. The consultation shall involve, as appropriate—*
> *(i) comparison of transportation plans with State conservation plans or maps, if available; or*
> *(ii) comparison of transportation plans to inventories of natural or historic resources, if available."*

SAFETEA-LU provisions for additional consultation with state and federal resource agencies, and tribal groups that were not already part of Metro's existing committee structure were met through a consultation meeting held on October 16, 2007 with the Collaborative Environmental Transportation Agreement for Streamlining (CETAS) work group, consisting of the Oregon Department of Transportation and ten state and federal transportation, natural resource, historic, cultural resource and land-use planning agencies.

A background research paper was also developed during Phase 2 of the update to document current environmental trends, issues and mitigation strategies in the region. This research was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP. In addition, staff conducted an analysis of the potential environmental effects of transportation investments – this analysis included a comparison of the RTP investments with available State Conservation maps and inventories of historic resources. The background research report and environmental considerations analysis is included in Appendix 6.0.

134(i)(5) Participation by Interested Parties

> *"Each metropolitan planning organization shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan."*

Metro maintains a proactive public involvement process that provides complete information, timely public notice, and full public access to key decisions. Metro supports early and continuing involvement of the public in developing its policies, plans and programs. Public Participation Plans are designed to both support the technical scope and objectives of Metro studies and programs while simultaneously providing for innovative, effective and inclusive opportunities for engagement. Every effort is made to employ broad and diverse methods, tools and activities to reach potentially impacted communities and other neighborhoods and to encourage the participation of low-income and minority citizens and organizations.

The work program and PPP for the 2035 RTP update was developed with input from Metro's Advisory Committees, including Metro's Committee for Citizen Involvement. The 2035 RTP provided several public comment opportunities for the community, affected public agencies, representatives of transportation agency employees,

freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transit, and other interested persons. Public involvement opportunities and key decision points were published in the Oregonian and other community newspapers, posted on Metro's web site, e-mailed via the Planning Department E-News to more than 4,500 individuals, and advertised through Metro's transportation hotline, where citizens could leave comments as well as receive information. All plan documents were simultaneously published (and regularly updated) on the Metro web site, including draft plan amendments, the update schedule, other explanatory materials and summaries of public comments received.

Approval of the 2035 RTP, Resolution No. 07-3831B, followed JPACT and Metro Council consideration of nearly than 300 comments received during the public comment period. The comments were summarized into a comment log and Public Comment Summary Report. Refinements were recommended to respond to the comments received. The comment period for the Air Quality Conformity Determination packet, to be approved by a separate Resolution No. 08-3911, occurred from January 18 – February 19, 2008 and provided an opportunity for public review and comment on the air quality conformity methodology and results.

Section 1.5 in the 2035 RTP and Appendix 4.5 describe the public process in more detail.

134(i)(6) Plan Publication

> *"A transportation plan involving Federal participation shall be:*
>
> *(i) published or otherwise made readily available by the metropolitan planning organization for public review;*
> *(ii) approved by the metropolitan planning organization; and*
> *(iii) submitted for information purposes to the Governor at such times and in such manner as the Secretary shall establish"*

Proposed amendments to the 2035 RTP were organized into a discussion draft 2035 RTP document that was released for public comment from October 15 – November 15, 2007. The subsequent Air Quality Conformity Determination was released for public review and comment from January 18 – February 18, 2008. The proposed amendments and subsequent Air Quality Conformity Determination were posted on Metro's website and available upon request during the public comment periods.

On December 13, 2007, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council approved the 2035 RTP with amendments identified to respond to public comments, pending air quality conformity analysis. JPACT and the Metro Council approved the subsequent Air Quality Conformity Determination for the 2035 RTP and 2008-11 Metropolitan Transportation Improvement Program on February 26 and February 28, respectively. With U.S. DOT approval, the approved 2035 RTP and Air Quality Conformity Determination for the RTP and the 2008-11 Metropolitan Transportation Improvement Program will be submitted to the Governor for approval.

134(i)(7) Selection of Projects

> *"Not-withstanding paragraph (2)(C), a State or metropolitan planning organization shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (2)(C)."*

The implementation provisions of the RTP require the MTIP to select projects for federal funding exclusively from the federally-recognized financially constrained system (2035 RTP Section 7.5.1). The 2035 RTP provides an updated set of financially constrained projects and programs for future MTIP funding allocations.

134(k)(1)(A) Designation of Transportation Management Areas

> *"The Secretary shall identify as a transportation management area each urbanized area (as defined by the Bureau of the Census) with a population of over 200,000 individuals."*

The Portland region exceeds this population threshold, and is designated as a Transportation Management Area. The Metro planning area boundary, Census Urbanized Area boundary, and other relevant boundaries are shown in Figure 1.2 of the 2035 RTP for reference.

134(k)(2) Transportation Plans in Management Areas

> *"In a metropolitan planning area serving a transportation management area, transportation plans and programs shall be based on a continuing and comprehensive transportation planning process carried out by the metropolitan planning organization in cooperation with the State and public transportation operators."*

Metro is the designated metropolitan planning organization for the Portland region, and prepares the regional transportation plan in cooperation with the Oregon departments of Transportation, Environmental Quality and Land Conservation and Development, TriMet, SMART and other transit operators in the region, the Port of Portland, three counties and 25 cities. This cooperation and coordination occurs through TPAC, MTAC, JPACT and MPAC and periodic briefings to the Oregon Transportation Commission, Land Conservation and Development Commission and the TriMet Board.

134(k)(3) Congestion Management Process

> *"Within a metropolitan planning area serving a transportation management area, the transportation planning process under this section shall address congestion management through a process that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under this title and chapter 53 of title 49 through the use of travel demand reduction and operational management strategies. The Secretary shall establish an appropriate phase-in schedule for compliance with the requirements of this section."*

Metro's congestion relief policies and processes for measuring and managing congestion are contained in the RTP, which guides all Metro transportation planning activities. The policy uses a tiered approach for establishing performance expectations for the motor vehicles system, which seeks to improve bottlenecks and maintain off-peak mobility. However, the two-hour peak period policy acknowledges the RTP analysis findings that capacity increases along major corridors will not necessarily improve mobility or relieve congestion during periods of high demand. For these corridors, the RTP policy seeks to improve travel alternatives in commute corridors, and identify freight corridors where peak period mobility should be considered. This policies and actions are found in Chapter 3.

A background research paper was developed during Phase 2 of the update to document current regional street and highways trends, performance issues and congestion mitigation strategies in the region. This research was considered during the formulation of the 2035 RTP goals, objectives, projects and potential actions included in

Chapter 3 and investment priorities in Chapter 6 of the 2035 RTP. Section 2.4.6.1 of the 2035 RTP also summarizes current congestion mitigation activities in the region and current bottlenecks on the region's highways. The RTP includes a number of other measures that provide a more complete picture of how periods of heavy motor vehicle travel affect the region, including vehicle miles traveled per capita, which FHWA statistics show are declining in the Portland region – an opposite trend from what most other major cities are experiencing, and a positive indicator that the multi-modal strategy of the RTP, combined with the region's urban growth policies, are reducing the amount of personal driving for area residents.

The 2035 RTP retains the congestion management program (2035 RTP Sections 7.4.7 and 7.6.3) that was developed in response the federal ISTEA, and certified as part of Title 6 of the Urban Growth Management Functional Plan in 1996. This section of the RTP and Chapter 3 objectives and actions implement the CMP Roadmap submitted to and approved by FHWA in 2006. The approved CMP roadmap is included in Appendix 4.6 for reference.

134(k)(4)(A) Selection of Projects

> *"All federally funded projects carried out within the boundaries of a metropolitan area serving a transportation management area under this title (excluding projects carried out on the National Highway System and projects carried out under the bridge program or the Interstate maintenance program) or under chapter 53 of title 49 shall be selected for implementation from the approved transportation improvement program by the metropolitan planning organization designated for the area in consultation with the State and any affected public transportation operator."*

All federal funds allocated through Metro are granted through the MTIP, the approved transportation improvement program for the Portland area MPO, and recognized as such by the State, TriMet and SMART (2035 RTP Section 7.5). Projects and programs funded with federal revenue through the MTIP process must be identified as part of the financially constrained system in the RTP. The 2035 RTP provides an updated set of financially constrained projects and programs for future MTIP funding allocations.

134(k)(4)(B) National Highway System Projects

> *"Projects carried out within the boundaries of a metropolitan planning area serving a transportation management area on the National Highway System and projects carried out within such boundaries under the bridge program or the Interstate maintenance program under this title shall be selected for implementation from the approved transportation improvement program by the State in cooperation with the metropolitan planning organization designated for the area."*

The MTIP funding decisions are developed in coordination with the Oregon Department of Transportation. Projects funded in the MTIP are incorporated into the State Transportation Improvement Program (STIP), to ensure consistency between regional and state improvement programs.

134(k)(5)(A) Certification Required

> *"The Secretary shall:*
>
> *(i) ensure that the metropolitan planning process in each metropolitan planning area serving a transportation management area is being carried out in accordance with applicable provisions of Federal law; and*

> *(ii) subject to subparagraph (B), certify, not less often than once every 4 years, that the requirements of this paragraph are met with respect to the metropolitan planning process."*

Metro's planning process is certified annually based on the adoption of the Unified Planning Work Program ("UPWP"), through the federal self-certification process. Metro last completed the self-certification process on April 26, 2007 through Resolution No. 07-3798. The FHWA approved the 2007-08 UPWP and self-certification on July 10, 2007. The next scheduled certification review will occur in February 2008.

134(k)(5)(B) Certification Requirements

> *"The Secretary may make the certification under subparagraph (A) if:*
>
> *(i) the transportation planning process complies with the requirements of this section and other applicable requirements of Federal law; and*
>
> *(ii) there is a transportation improvement program for the metropolitan planning area that has been approved by the metropolitan planning organization and the Governor."*

FHWA and FTA approved the 2004 RTP and the associated air quality conformity determination on March 5, 2004. The 2005-06 Unified Planning Work Program self-certification process confirmed that the 2004 RTP complied with the requirements of this section, and other applicable requirements of federal law, and that Metro's MTIP had been approved by JPACT, the Metro Council and the Oregon Transportation Commission (OTC), on behalf of the Governor.

In Spring 2008, the 2035 RTP and the 2008-11 MTIP will be reviewed for compliance with the requirements of this section as part of the next scheduled certification review.

Agenda Item Number 5.1

Resolution No. 08-3901, For the Purpose of Amending the Joint Policy Advisory Committee on Transportation (JPACT) Bylaws**.**

Metro Council Meeting
Thursday, February 28, 2008
Metro Council Chamber

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION BYLAWS	)))	RESOLUTION NO. 08- 3901 Introduced by Councilor Rex Burkholder

WHEREAS, Title 23 of the Code of Federal Regulations, Part 450, and Title 45, Part 613, require establishment of a Metropolitan Planning Organization (MPO) in each urbanized area; and

WHEREAS, these federal regulations require that principal elected officials of general purpose local governments be represented on the MPO to the extent agreed to among the units of local government and the Governor of the state of Oregon ("Governor"); and

WHEREAS, the Governor, on November 6, 1979, designated Metro as the MPO for the Oregon portion of the Portland-Vancouver urbanized area; and

WHEREAS, the Governor of the State of Washington, on January 1, 1979, designated the Southwest Washington Regional Transportation Council as the MPO for the Washington portion of the Portland-Vancouver urbanized area; and

WHEREAS, ORS chapter 268 authorizes Metro to prepare and adopt a functional plan for transportation; and

WHEREAS, the involvement of local elected officials and representatives from transportation operating agencies is essential for the successful execution of these responsibilities; and

WHEREAS, the Federal Highway Commission and the Federal Transit Administration recommended a review and update to the bylaws of the Joint Policy Advisory Committee on Transportation (JPACT) for consistency with changes in population growth and distribution in the region; and

WHEREAS, JPACT prepared revisions and endorsed the revisions to its bylaws proposed by this resolution on February 14, 2008; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the amendments to the JPACT Bylaws as shown in Exhibit A, attached and incorporated into this resolution.

ADOPTED by the Metro Council this 28th day of February 2008.

David Bragdon, Council President

Approved as to Form:

Daniel B. Cooper, Metro Attorney

EXHIBIT A

JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION (JPACT)

BYLAWS

ARTICLE I

This committee shall be known as the JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION (JPACT).

ARTICLE II
MISSION

It is the mission of JPACT to coordinate the development of plans defining required regional transportation improvements, to develop a consensus of governments on the prioritization of required improvements and to promote and facilitate the implementation of identified priorities.

ARTICLE III
PURPOSE

Section 1. The purpose of JPACT is as follows:

a. To provide the forum of general purpose local governments and transportation agencies required for designation of ~~the~~ Metro~~politan Service District~~ as ~~the~~ metropolitan planning organization for the Oregon ~~urbanized~~ portion of the Portland metropolitan area, defined as the Metro jurisdictional boundary or the Metro urban growth boundary whichever is greater, and to provide a mechanism for coordination and consensus on regional transportation priorities and to advocate for their implementation.

b. To provide recommendations to the Metro Council under state land use requirements for the purpose of adopting and enforcing the Regional Transportation Plan.

c. To coordinate on transportation issues of bi-state significance with the Clark County, Washington metropolitan planning organization and elected officials.

~~d. (Pending establishment of an Urban Arterial Fund) To establish the program of projects for disbursement from the Urban Arterial Fund.~~

Section 2. In accordance with these purposes, the principal duties of JPACT are

as follows:

a. To approve and submit to the Metro Council for adoption the Regional Transportation Plan (RTP) and periodic amendments.

b. To approve and submit to the Metro Council for adoption short and long-range growth forecasts and periodic amendments upon which the RTP ~~and other Metro functional plans~~ will be based.

c. To approve and submit to the Metro Council for adoption the Unified Planning Work Program (UPWP) and periodic amendments for the Oregon and Washington portions of the metropolitan area. The Metro Council will adopt the recommended action or refer it back to JPACT with a recommendation for amendment.

d. To approve and submit to the Metro Council for adoption the Transportation Improvement Program (TIP) and periodic amendments. The Metro Council will adopt the recommended action or refer it back to JPACT with a recommendation for amendment.

e. To approve and submit to the Metro Council for adoption the transportation portion of the State Implementation Plan for Air Quality Attainment for submission to the Oregon Department of Environmental Quality. The Metro Council will adopt the recommended action or refer it back to JPACT with a recommendation for amendment.

f. To periodically adopt positions that represent the region's consensus on ~~con-~~ transportation policy matters, including adoption of regional priorities on federal funding, ~~the Surface Transportation Act~~ federal transportation reauthorizations and appropriations, the ~~Six-Year Highway~~ State Transportation Improvement Program priorities and regional priorities for Light Rail Transit (LRT) funding. The Metro Council will adopt the recommended action or refer it back to JPACT with a recommendation for amendment.

g. To review and comment on the RTP and TIP for the Clark County portion of the metropolitan area and include in the RTP and TIP for the Oregon urbanized portion of the metropolitan area a description of issues of bi-state significance and how they are being addressed.

h. To review and comment, as needed, on the regional components of local comprehensive plans, public facility plans and transportation plans and programs of ODOT, Tri-Met and the local jurisdictions.

ARTICLE IV
COMMITTEE MEMBERSHIP

Section 1. Membership

a. The Committee will be made up of representatives of the following voting jurisdictions and agencies:

	Members	Votes
Multnomah County……	1	1
Washington County……	1	1
Clackamas County……	1	1
City of Portland……	1	1
Cities of Multnomah County…….	1	1
Cities of Washington County……..	1	1
Cities of Clackamas County……	1	1
Oregon Department of Transportation…	1	1
TriMet……...	1	1
Port of Portland……..	1	1
Department of Environmental Quality….	1	1
~~Metropolitan Service District (~~Metro~~)~~….	3	3
State of Washington……	3	3
TOTAL	17	17

b. Alternates may be appointed to serve in the absence of the regular members.

c. Members and alternates will be individuals in a position to represent the policy interests of their jurisdiction.

Section 2. Appointment of Members and Alternates

a. Members and alternates from the City of Portland and the Counties of Multnomah, Washington and Clackamas will be elected officials from those jurisdictions and will be appointed by the chief elected official of the jurisdiction. The member and alternate will serve until removed by the appointing jurisdiction. The Clackamas County seat shall represent the regional transit service providers Sandy Area Metro (SAM), South Clackamas Transit District (SCTD) or City of Molalla, and Canby Area Transit (CAT) that provide services within the MPO boundary.

b. Members and alternates from the Cities of Multnomah, Washington and Clackamas Counties will be elected officials from the ~~represented~~ cities represented by these positions of each county (except Portland) and will be appointed through the use

of a mail ballot of all represented cities based upon a consensus field of candidates developed through a forum convened by the largest city being represented. The member and alternate will be from different jurisdictions, one of which will be from the city of largest population if that city's population constitutes the majority of the population of all the cities represented for that county. The member and alternate will serve for two-year terms. In the event the member's position is vacated, the alternate will automatically become member and complete the original term of office. The member and alternate will periodically consult with the appropriate transportation coordinating committees for their area. The Cities of Clackamas County seat represents the City of Wilsonville, which as the governing body represents South Metro Area Rapid Transit (SMART).

c. Members and alternates from the two statewide agencies (Oregon Department of Environmental Quality and Oregon Department of Transportation) will be a principal staff representative of the agency and will be appointed by the director of the agency. The member and alternate will serve until removed by the appointing agency.

d. Members and alternates from the two tri-county agencies (TriMet and the Port of Portland) will be appointed by the chief board member of the agency. The member and alternate will serve until removed by the appointing agency. As the regional transit representative, TriMet will periodically coordinate with the South Metro Area Rapid Transit (SMART).

e. Members and alternates from the Metro~~politan Service District~~ Council will be elected officials and will be appointed ~~nominated~~ by the ~~Presiding Officer of the~~ Metro Council President ~~in consultation with the Metro Executive Officer~~ and confirmed by the Metro Council and will represent a broad cross-section of geographic areas. The members and alternate will serve until removed by the Metro Council President ~~Presiding Officer of the Metro Council~~.

f. Members and alternates from the State of Washington will be either elected officials or principal staff representatives from Clark County, the City of Vancouver, the Washington Department of Transportation, the Southwest Washington Regional Transportation Council and C-TRAN. The members will be nominated by Clark County, the City of Vancouver, the Washington Department of Transportation and C-TRAN and will serve until removed by the nominating agency. The three Washington State members will be selected by the Southwest Washington Regional Transportation Council ~~IRC Transportation Policy Committee~~.

h. Terms for all members and alternates listed above commence on January 1 of each year.

ARTICLE V
MEETINGS, CONDUCT OF MEETINGS, QUORUM

a. Regular meetings of the Committee will be held monthly at a time and place established by the chairperson. Special or emergency meetings may be called by the

chairperson or a majority of the membership. In the absence of a quorum at a regular monthly meeting or a special meeting, the chairperson may call a special or emergency meeting, including membership participation and vote by telephone, for deliberation and action on any matters requiring consideration prior to the next meeting. The minutes shall describe the circumstances justifying membership participation by telephone and the actual emergency for any meeting called on less than 24 hours' notice.

b. A majority of the voting members (or designated alternates) of the full Committee (9 of 17 members) shall constitute a quorum for the conduct of business. The act of a majority of those present at meetings at which a quorum is present shall be the act of the Committee.

c. Subcommittees to develop recommendations for JPACT can be appointed by the Chair. The Chair will consult on subcommittee membership and charge with the full membership at a regularly scheduled meeting. Subcommittee members can include JPACT members, JPACT alternates and/or outside experts.

d. All meetings shall be conducted in accordance with Robert's Rules of Order, Newly Revised.

e. The Committee may establish other rules of procedure as deemed necessary for the conduct of business.

f. Each member shall be entitled to one (1) vote on all issues presented at regular and special meetings of the Committee. In the absence of the member, the alternate shall be entitled to ~~one (1)~~ vote. ~~The chairperson shall vote only in case of a tie.~~

g. Unexcused absence from regularly scheduled meetings for three (3) consecutive months shall require the chairperson to notify the appointing agency with a request for remedial action. In the case of the representative for the "cities" of Multnomah, Washington and Clackamas Counties, the chairperson will contact the largest city being represented to convene a forum of represented cities to take remedial action.

h. The Committee shall make its reports and findings public and available to the Metro Council.

i. Metro shall provide staff, as necessary, to record the actions of the Committee and to handle Committee business, correspondence and public information.

ARTICLE VI
OFFICERS AND DUTIES

a. The chairperson and vice-chairperson of the Committee shall be ~~designated~~ ~~nominated~~ appointed by the Metro ~~Presiding Officer~~Council President and confirmed by the Metro Council.

b. The chairperson shall preside at all meetings he/she attends and shall be responsible for the expeditious conduct of the Committee's business.

c. The chairperson shall vote only in the case of a tie.

~~c~~d. In the absence of the chairperson, the vice-chairperson shall assume the duties of the chairperson.

ARTICLE VII
RECOGNITION OF TPAC

a. The Committee will take into consideration the alternatives and recommendations of the Transportation Policy Alternatives Committee (TPAC) in the conduct of its business.

ARTICLE VIII
AMENDMENTS

a. These bylaws may be amended or repealed only by a two-thirds vote of the full membership of the Committee and a majority vote of the Metro Council.

b. Written notice must be delivered to all members and alternates at least 30 days prior to any proposed action to amend or repeal Bylaws.

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 08-3901, FOR THE PURPOSE OF AMENDING THE JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION (JPACT) BYLAWS

Date: February 14, 2008

Prepared by: Andrew C. Cotugno and Joshua Naramore

BACKGROUND

As part of the 2004 Federal Triennial Certification Review, the Federal Highway Administration and Federal Transit Administration issued the following recommendations to review the bylaws and membership of JPACT to reflect the dramatic changes in the region's area and population since the inception of the committee:

1. Because of the recent inclusion of the City of Wilsonville and the emerging City of Damascus in the MPO boundary, the considerable growth of the MPO population in general and public comments indicating a perception that smaller jurisdictions may not be adequately represented in MPO matters, it is recommended that the MPO members review the existing policy board representation and voting structure and either reaffirm its adequacy or agree on appropriate modifications

2. It is strongly recommended that other MPO members also evaluate the effectiveness of SMARTs input opportunities and consider appropriate alternatives.

Federal law requires that MPO policy boards be comprised of local elected officials, officials of public agencies that administer or operate major modes of transportation in the metropolitan area, and appropriate State officials[1]. In response to this recommendation, Metro agreed to initiate a review of JPACT membership and operating bylaws. Amending bylaws requires a two-thirds vote of the full JPACT and a majority vote of the Metro Council. Over the past few months, a review of JPACT membership and operating bylaws was undertaken. A special Membership Subcommittee was formed to begin exploring options and potential revisions to JPACT bylaws.

Two memos were presented to JPACT. The first explored population growth trends in the incorporated and unincorporated areas as well as the demographic changes in the cities and counties. The region's population has grown dramatically from 1980 – 2005 with more than 80 percent living within cities. The second memo identified regional transit service districts that provide service into or within the MPO boundary. Based on the information presented, the special JPACT Membership Subcommittee, recommended amendments to the JPACT Bylaws.

This Bylaw amendment proposes to clarify the role of TriMet as a regional transit representative and requiring periodic coordination with South Metro Area Rapid Transit (SMART). Additionally, language is proposed that clarifies that the "Cities of Clackamas County" member seat represents the City of Wilsonville, which is the governing body of SMART. Language is also proposed to be added that

[1] "Metropolitan Planning." Title 49 U.S.Code, Sec. 5303. <http://frwebgate4.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=61971321540+0+0+0&WAISaction=retrieve >

clarifies the Clackamas County member seat and describes its representation of Canby Area Transit (CAT), South Clackamas Transit District (SCTD) or the City of Molalla, and Sandy Area Metro (SAM), as regional transit service providers that provide service within the MPO boundary.

In addition to the proposed amendment dealing with representation of transit districts, this amendment includes a number of housekeeping edits and corrections. The Subcommittee is continuing to consider possible amendments involving membership, particularly membership by cities.

ANALYSIS/INFORMATION

1. **Known Opposition** None known.

2. **Legal Antecedents** Metro Resolution No. 90-1189A (FOR THE PURPOSE OF ADOPTING THE JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION (JPACT) BYLAWS), adopted on July 12, 1990.

3. **Anticipated Effects** The purpose of this proposed amendment is to clarify the representation of SMART and other regional transit service providers, as well as to update current language. The revisions will respond to the FHA and FTA request for review and possible changes to the bylaws.

4. **Budget Impacts** Adoption of this resolution has no anticipated impacts to the Metro budget.

RECOMMENDED ACTION

Staff recommends the adoption of Resolution No. 08-3901.

Agenda Item Number 5.2

Resolution No. 08-3909, For the Purpose of Endorsing Formation of a Reserves Steering Committee and a Schedule With Key Milestones to Guide Metro's Participation in the Designation of Urban and Rural Reserves.

Metro Council Meeting
Thursday, February 28, 2008
Metro Council Chamber

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ENDORSING FORMATION OF A RESERVES STEERING COMMITTEE AND A SCHEDULE WITH KEY MILESTONES TO GUIDE METRO'S PARTICIPATION IN THE DESIGNATION OF URBAN AND RURAL RESERVES	))))	RESOLUTION NO. 08-3909 Introduced by Councilor Harrington

WHEREAS, Metro and the cities and counties of the region collaborated on a legislative agenda for the region for introduction to the 2007 Legislature; and

WHEREAS, one of the items on the agenda was legislation to authorize the region to use a new and innovative process for managing long-term growth in the region so as to facilitate the development of "Great Communities" within the urban growth boundary (UGB); provide long-term certainty for the agricultural and forest industries outside the UGB; and protect natural landscape features that limit urban development or help define appropriate natural boundaries of urbanization; and

WHEREAS, the local governments of the region made an extensive and successful effort to gather support for this new process from state agencies and business, environmental, development, citizen and other organizations in the region and statewide; and

WHEREAS, the 2007 Legislature responded by enacting Senate Bill (SB) 1011, now codified at ORS 195.137 et seq., which authorizes Metro and Multnomah, Washington and Clackamas Counties to enter into agreements to designate land outside the UGB as "urban reserves" for possible addition to the UGB over the next 40 to 50 years and as "rural reserves" to be secure from urbanization for the same 40 to 50 years; and

WHEREAS, the 2007 Legislature also extended for two years the deadline for Metro's next analysis of population and employment capacity to accommodate the next 20 years of growth in order to give the region time to designate urban and rural reserves; and

WHEREAS, LCDC adopted rules to implement ORS 195.137 et seq. on January 24, 2008, ahead of the statutory deadline, in part because of the continuing collaboration among local governments, state agencies and business, environmental, development, citizen and other organizations in the region; and

WHEREAS, successful designation of urban and rural reserves will require continued regional collaboration along the path to agreements between Metro and the three counties and ultimate designation by them of reserves; and

WHEREAS, a steering committee composed of representatives of many of the same local governments, state agencies and business, environmental, development and citizen and other organizations that participated in passage of SB 1011 and adoption of the LCDC rules to advise Metro and the counties on the designation of reserves will help maintain the high level of collaboration that has marked this long-range planning effort from the beginning; and

WHEREAS, a schedule of milestones for the process leading to designation of urban and rural reserves will aid the region's effort to complete the designations in time, as determined by HB 2051, for possible expansion of the UGB, now, therefore

BE IT RESOLVED that the Metro Council:

1. Endorses the formation of the Reserves Steering Committee, composed of the representatives of local governments, state agencies and business, environmental, development and other organizations indicated in Exhibit A ("Reserves Steering Committee"), attached and incorporated into this resolution, and approves Metro's participation on the committee.

2. Endorses the use of the schedule and milestones for the process leading to designation of urban and rural reserves indicated in Exhibit B ("Key Milestones for Designating Urban and Rural Reserves"), attached and incorporated into this resolution, and agrees to follow the process.

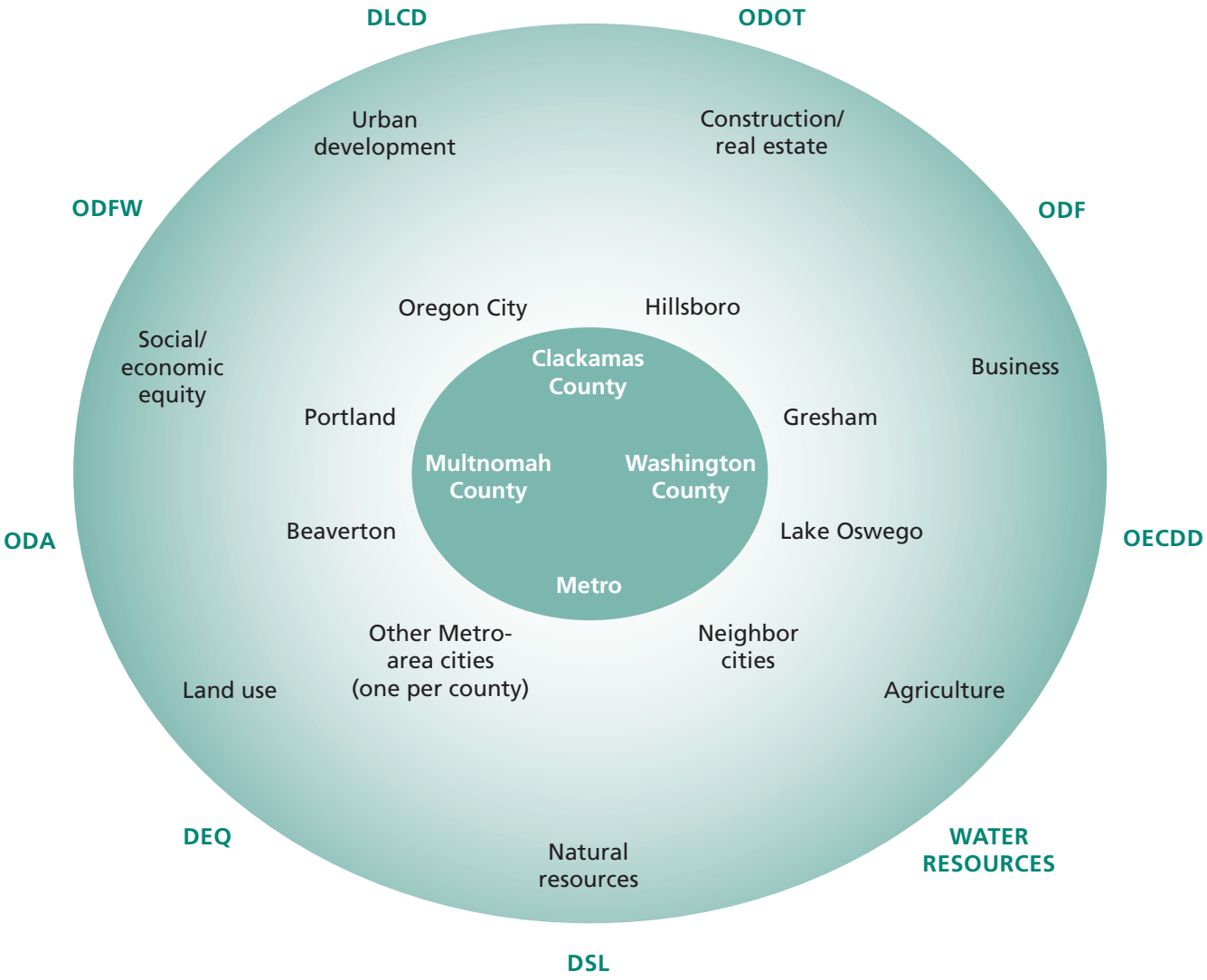
ADOPTED by the Metro Council this __ day of _____, 2008

_____
David Bragdon, Council President

Approved as to form:

_____
Daniel B. Cooper, Metro Attorney

Reserves Steering Committee



- Four votes (Metro and counties); all decisions unanimous
- All other steering committee members serve in non-voting advisory positions
- Each steering committee member serves as the representative of an entity or community named on this diagram and is expected to coordinate with members of that entity or community
- Decisions that require governing body approval are tentative (e.g., IGAs)
- Charge is limited to creating IGA on urban and rural reserves
- Independent chair or facilitator

January 2008
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Resolution No. 08-3909
Exhibit B

DRAFT

work in progress

Key Milestones for Designating Urban and Rural Reserves

2008

Identifying and analyzing options for urban and rural reserves study areas

2009

Final analysis and decisions on urban and rural reserves

2010

Future decisons

WINTER | SPRING | SUMMER | FALL | WINTER | SPRING | SUMMER | FALL

Reserves Steering Committee established

Agreement on analytical approach and public involvement process

Public input

LCDC adopts Reserves Administrative Rule

Technical analysis of "broad" reserve study areas

Reserve study areas recommended

LCDC Briefing

Public input

Reserve study areas endorsed

Input from Investment track
- Regional infrastructure analysis
- Economic, employment and housing needs and trends
- Local aspirations for centers and corridors
- Public investment action plan

Analyze reserve study areas incorporating:
- Agricultural lands assessment
- Natural features
- Great Communities characteristics (e.g. governance, complete communities, finance)
- Input from Investment track
- Input from Transportation track

Public input

LCDC Briefing

Input from Regional Transportation track
- RTP update

Input to Investment track

Preliminary reserve areas recommended

Public input

Input to Transportation track

Reserve areas recommended via inter-governmental agreements

Metro and counties hold public hearings

Metro Council designates urban reserves

Counties designate rural reserves

Metro Council makes growth management decisions

Submit reserves to LCDC for acknowledgement

Conceptual planning

Legend

- Milestone/Decision
- Preliminary recommendation
- Analysis work
- Public input

CLACKAMAS COUNTY | MULTNOMAH COUNTY | WASHINGTON COUNTY OREGON | METRO

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 08-3909, FOR THE PURPOSE OF ENDORSING FORMATION OF A RESERVES STEERING COMMITTEE AND SCHEDULE WITH KEY MILESTONES TO GUIDE METRO'S PARTICIPATION IN THE DESIGNATION OF URBAN AND RURAL RESERVES

Date: February 7, 2008

Prepared by: Tim O'Brien
Principal Regional Planner

INTRODUCTION

Metro and regional leaders identified the need for a different approach to selecting areas for urban expansion and for bringing these areas into the urban growth boundary (UGB). Recent experience suggests that one of the unexpected outcomes of the UGB process is less than desirable, and often impractical, urban form. Historically, a consideration of the type of community we are trying to create when we expand the UGB was not taken into account. Agricultural land, which receives high value in both the culture and the economy of the region, lacks long-term certainty that urbanization won't eventually limit its productivity. Finally, the value of natural areas in their own right has not been considered within the greater region. Though a process for the designation of urban reserves exists, it does not allow for a transparent analysis of broad urbanization criteria nor does it include a role for rural reserves.

BACKGROUND

Realizing that a change was needed, Metro and the cities and counties of the region successfully collaborated on a 2007 legislative agenda for the region. One of the key components of the agenda was legislation to authorize the region to use a new an innovative process for managing long-term growth in the region while providing long-term certainty for the agricultural and forest industries and the protection of natural landscape features. The local governments of the region made an extensive and successful effort to gather support for this process from state agencies as well as from business, environmental, development and citizen groups. As a result the 2007 Legislature enacted Senate Bill (SB) 1011, which authorizes Metro and Multnomah, Washington and Clackamas Counties to enter into agreements to designate land outside the UGB as "urban reserves" for possible addition to the UGB over the next 40 to 50 years. In addition, SB 1011 authorizes the designation of land outside the UGB as "rural reserves" to be secure from urbanization for the same 40 to 50 years. The 2007 Legislature also enacted House Bill (HB) 2051, which extended for two years the deadline for Metro's next analysis of population and employment capacity to accommodate the next 20 years of growth in order to give the region time to designate urban and rural reserves.

SB 1011 required the Land Conservation and Development Commission (LCDC) to adopt rules to guide the designation of urban and rural reserves under the new process by January 31, 2008. LCDC adopted rules to implement SB 1011 on January 24, 2008, ahead of the statutory deadline, in part because of the continuing collaboration among local governments, state agencies and business, environmental, development, citizen and other organizations in the region. LCDC's rules call for continued regional collaboration along the path to agreements between Metro and the three counties and ultimate designation by them of urban and rural reserves.

Finally, it is apparent that a steering committee composed of representatives of many of the same local governments, state agencies and business, environmental, development, citizen and other organizations that have participated in passage of SB 1011 and adoption of the LCDC rules will help maintain the high level of collaboration that has marked this long-range planning effort from the beginning. The formation of the Reserves Steering Committee, composed of representatives from these same organizations and agencies will ensure this continued level of regional collaboration occurs throughout the urban and rural reserve designation process.

ANALYSIS/INFORMATION

Known Opposition: Staff is not aware of any opposition to Resolution 08-3909.

Legal Antecedents: Oregon Revised Statute (ORS) 195.137 to 195.145 and 197.651 (from SB 1011) and Oregon Administrative Rule (ORA) 660 Division 27 Urban and Rural Reserves in the Portland Metropolitan Area authorize the designation of urban and rural reserves by Metro and a county through intergovernmental agreements.

Anticipated Effects: The adoption of Resolution 08-3909 endorses the continued regional collaboration called for in LCDC's adopted rules to lead to agreements between Metro and Clackamas, Multnomah and Washington counties and ultimately designations by them of urban and rural reserves.

Budget Impacts: The adoption of Resolution No. 08-3909 will not have a budget impact.

Agenda Item Number 6.0

PORTLAND'S WORKING RIVERS

Metro Council Meeting
Thursday, February 28, 2008
Metro Council Chamber

PORTLAND'S WORKING RIVERS:
The Heritage and Future of Portland's Industrial Heartland

Prepared by Carl Abbott

January 2008

Prepared for the
Working Waterfront Coalition
c/o Schnitzer Steel Industries
P.O. Box 10047
Portland, OR 97296

Table of Contents

Executive Summary

Portland is one of a handful of U.S. cities whose riverside location is nearly as important to prosperity and growth today as it was a century ago. The water, rail and energy complex that converges around the lower Willamette River has long supported several industrial sectors, especially primary metals, machinery and equipment manufacturing, distribution and logistics.

Unfortunately, however, the vast majority of the general public isn't familiar with Portland's industrial heart – its history, its function, its importance. If there is a public image of Portland's working waterfront and heavy industry, it tends to be about problems, such as the Superfund designation or the environmental costs of maintaining the navigation channel.

This report traces the stages of development of Portland's industrial heartland and industrial mix, identifies current issues and places Portland in a comparative context. The report touches on:

- Portland's strategic location at the intersection of the Columbia River Valley and the Puget-Willamette Trough.
- The growth of various sectors in Portland: lumber and wood products, agricultural processing, metals and machinery, and electronics.
- Recognition of how the natural river can live in concert with the commercial and industrial uses on the river.
- How Portland's economy is supported by river-dependent and transportation-oriented businesses.
- Trends in the region's industrial land preservation and the working waterfront.
- Considerations as Portland plans for the future of its harbor and industrial areas.

The report concludes by offering specific recommendations for planners, governments, employers, investors and the general Portland populations, including some of the following:

- The public sector should continue to recognize the importance of Portland's industrial heart with supportive land use regulations and protections.
- Portland needs to take extreme care and caution before determining that industrial land is no longer viable for industrial uses.
- It is vital to protect and enhance this transportation infrastructure as an economic asset that would require billions of dollars to replace or reproduce, and to promote public awareness of its value.
- Public agencies and private organizations that promote sustainable development have an opportunity to increase their effectiveness by taking advantage of a supportive industrial base.

- As private activity increases in the first decade of the 21st century, it is important to keep the industrial economy on the public agenda.
- Deliberate efforts to maintain this diversification by supporting the continued development of the waterfront transportation/industry complex should be a central element of all regional planning and development efforts.

Historically, Portland has been committed to investing in its working waterfront and industrial complex. Moving forward, the community should remain committed to preserving the resources the city has built over the last hundred years.

Protecting Portland's Industrial Heartland

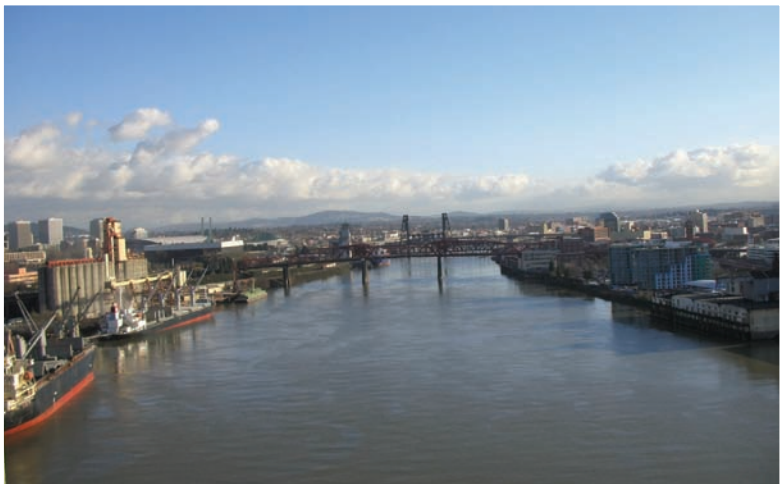
There's a common sentiment with regard to real estate: "They're not making any more land." It is even truer that "They're not making any more rivers."

It's a thought that everyone in Portland should keep in mind. Most cities grew originally because of access to water transportation, whether ocean harbors or navigable rivers. Portland is one of a handful where the riverside location is nearly as important to prosperity and growth as it was a century ago. Rivers are many things: ecological systems, recreational opportunities and real estate amenities. The Willamette and Columbia rivers are all of these, but they are also essential parts of the working economy of the Portland-Vancouver metropolitan area.

Closely tied to the rivers are the city's workhorse railroads, which sought vital connections to river commerce from their beginnings in the 1870s. Because the Columbia River cuts a relatively easy route eastward, Portland has been a natural rail center that pulls freight for eastern markets from Puget Sound as well as the Willamette Valley. The president of Portland and Western Railroad, which serves much of the Portland harbor, has commented that "industrial land with rail access is also a finite resource." With a few exceptions (like the enormously expensive Alameda Corridor in Los Angeles), the railroad-building era in the United States ended two generations ago, so it's also true to say that they're not really making any more rail-industrial land.

The water/rail/energy complex that converges around the lower Willamette has long supported several industrial sectors, especially primary metals, machinery and equipment manufacturing, and distribution and logistics. These industries have one foot planted solidly on the waterfront, but have also thrived in other industrial areas such as northern Clackamas County and the Columbia Corridor, where companies have also depended to varying degrees on river and rail transportation. To talk about an industrial heartland is to look simultaneously at place and an intertwined set of industries.

This report takes Portland's working waterfront, with its tens of thousands of jobs and its thick infrastructure of transportation facilities, as a starting point. It traces stages in the development of Portland's industrial heartland and industrial mix, identifies current issues and places Portland in comparative context with similar cities.



Portland, like most cities, grew due to access to water transportation.

I. Invisible Industry

The twenty-first century has brought renewed public attention to the Willamette River as a defining feature of Portland. Popular interest in the last decade, however, has focused on the river's environmental and recreational aspects. Waterfront locations have been developed with new upscale housing. City officials have improved general public access with the East Bank Esplanade and other trails. Public and private actors have worked to preserve parts of the natural riverscape, such as Oaks Bottom and Ross Island, within the urban fabric. To different groups of Portlanders today, the Willamette River encapsulates fishing, dragon boat races, scenic cruises, the Rose Festival fleet and an annual armada of decorated Christmas ships. The Columbia means more fishing, pleasure boating, sailing races and summertime camping on Government Island.

At a "Central City Summit" in 1998, 200 civic leaders placed "a healthy river that centers our community" as one of the two highest priorities for the city, along with strong schools. Movers, shakers and idea people agreed that the Willamette "should be more fully embraced as the center and essence of downtown" and that it should function as "a transportation way, a playground, a theater, and a scenic resource." Economic uses were noted, but the emphasis was clearly on the river as a personal amenity.

When delivered in September 2007, the final report of a multi-year visioning process organized and overseen by Mayor Tom Potter summarized the ideas of 12,000 Portlanders in forty-five statements about the desired city of 2030. The report lays out six points about the economic future, but none that talk about preserving the working waterfront. It envisions brownfields regenerated into greenspaces and wildlife habitat, not employment sites. Its eleven points about the physical environment include "healthy rivers, streams, wetlands, and ponds" and a Willamette that is "clean enough to swim in and provides abundant wildlife habitat and safe fishing," but mentions nothing about industrial uses, marine terminals, ship repair yards or ocean-going commerce.

Survey interviews done for the Port of Portland indicate that the general public has little knowledge or information about the Port and its marine terminal operations.

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If there is a public image of Portland's working waterfront and heavy industry, it tends to be compounded by a set of problems including the possibility of breaching Snake River dams, the environmental costs of dredging a 43-foot channel and the Superfund designation for the lower Willamette. The issue was brought home in the recent debate over rezoning the site of an inactive plywood mill in the Linnton neighborhood for housing. Although the site lies in the heart of the industrial waterfront, sandwiched between tank farms that have been functioning since the early twentieth century, it took a concerted effort by the newly organized Working Waterfront Coalition to convince three Portland City Council members to go against public opinion and block the permanent loss of waterfront industrial land.

II. Portland: The River City for More Than 160 Years

The Willamette and Columbia rivers have always been central to Portland's economy. They have been arteries for trade among Native American peoples, avenues of European exploration, pathways for Anglo-American settlement, and channels of commerce that made – and still make – Portland the commercial gateway to the American Northwest. To put the history another way, since Asa Lovejoy and Francis Pettygrove first claimed a wide clearing on the west bank of the Willamette River in 1844 and ambitiously staked out streets and lots a year later, Portland has grown alongside and because of its working rivers.

Geographers make a distinction between a city's site and its situation, terms that roughly translate as land and location. The first deals with the microlevel influence of the particular landscape, the second with the macroscale interactions of the city with the nation and world beyond. For Portland, both aspects are deeply – and inextricably connected to its rivers.

1. Portland's selection as preferred port

Portland grew originally because it was the head of navigation for the ocean-going ships of the mid-nineteenth century. The river shallowed above Ross Island, effectively blocking the hopes of Milwaukie and Oregon City. Captain John Couch, who moved his operations from Oregon City to Portland in 1846, announced that the river at Ross Island was surrounded by water only four feet deep and claimed to have ridden across the river on horseback. The fact that Oregon's first steamship was based on the Willamette in Milwaukie was not enough to overcome that town's limitations for ocean-going commerce.

Photo courtesy of Oregon Historical Society

Grain & lumber ships crowded Portland's harbor in the first decades of the century.

The battle between Portland and St. Helens was tougher. Thirty miles closer to the ocean and on the main stem of the Columbia River, St. Helens built a road over Cornelius Pass to the rich Tualatin Valley wheat farms. Portland countered with a road of wooden planks through a lower and more direct pass, the route of Canyon Road. It was the first "paved" road in the Sunset Corridor. Another sandbar, this time at Swan Island, nearly swung the balance to St. Helens, but Portland had better access to the Tualatin Plains and Willamette Valley and therefore more reliable cargoes. When the Pacific Mail Steamship Company decided to terminate its San Francisco-to-Oregon runs at Portland, the contest was over.

One additional point about the Portland waterfront being a prime commerce destination is worth noting: Portland was incontestably on U.S. territory. From 1818 to 1848, the United States and Great Britain controlled the vast Oregon Country as diplomats tried to find an acceptable dividing line. It was clear by the time the Oregon Trail migration started that land on the south side of the Columbia River would end up American. The fate of what is now western Washington was less certain, meaning that Fort Vancouver and its very buildable surroundings were not attractive to settlers from the United States until Portland already had a head start.

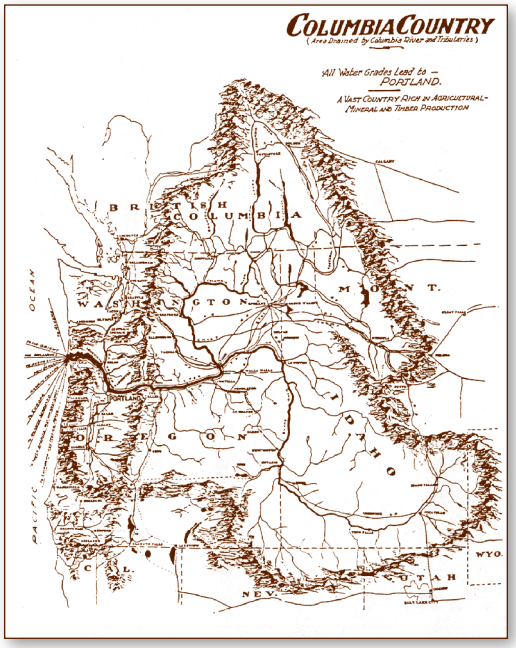
2. Portland's strategic location

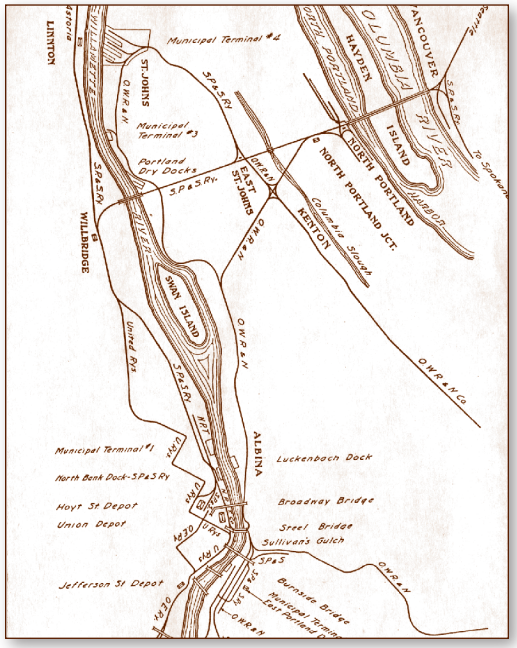
The Portland metropolitan region lies at a natural intersection. Running east to west is the valley of the Columbia River. Extending north to south is the Puget-Willamette Trough, where fault lines have dropped great blocks of land below the parallel coastal mountains and Cascades. To the north, the trough dips below sea level to form Puget Sound and the Strait of Georgia. Further south, it has captured rivers that drain the west side of the Cascade Range, diverting the Cowlitz River southward in Washington and the Willamette River northward in Oregon. Even the powerful Columbia bends north between its confluence with the Willamette, where it enters the trough, and the Cowlitz, where it turns again toward the sea. This natural lowland was the obvious route for the first telegraph line in the 1860s, for railroads in the 1870s and 1880s, and for 20th century highways.

The Columbia, of course, is the Great River of the West that connects the Pacific Ocean to the interior of the Northwest. The river's discharge at its mouth is three quarters of the flow of the Great Lakes/St. Lawrence system and two-fifths of the flow of the Mississippi River. The closest analogy for the Columbia is the Danube, which draws the same volume of water from a comparably sized region (imagine Spokane as Vienna, the Tri Cities as Budapest and The Dalles as Belgrade). The natural geography of the Columbia, which was interrupted by rapids 40 miles upstream from the Willamette, also made Portland the easiest and most logical place for ocean-going shipping exchange cargoes with upstream shipping and then railroads and trucks.

The result of this dual geography is a "city that gravity built." Portland is one of the last generations of American cities that was founded and developed as an ocean-to-river port first and rail center second (the others are Houston and Sacramento).

Since the 1840s, transportation policy has centered on maintaining the functionality of these transportation corridors.





Upstream on the Willamette, commercial navigation was feasible for only a few decades. In 1870, six of the seven largest towns in Oregon were on the Willamette, and steamers regularly served Albany and Corvallis, picking up produce that farmers laboriously hauled to the riverbank. Riverboats even reached up the Yamhill River to Lafayette and McMinnville. With intensive farming and logging, however, the upper Willamette silted up and filled with snags by the end of the century. Railroads had already taken up the slack, with lines on both sides of the valley that connected strings of towns collecting farm and forest products. The 20th century brought highways – 99E, 99W and Interstate 5.

The Columbia River gained an integrated transportation system in the 1860s when Portland entrepreneurs created the Oregon Steam Navigation Company by consolidating transportation interests into an integrated system of steamers, wagon and stage lines, and short railroads. It was a "millionaire making machine" for its investors and the transportation key that helped unlock the mineral and agricultural wealth of eastern Oregon, eastern Washington and Idaho. Navigation improvements included a canal and locks around the Cascades and another canal and lock system around The Dalles and Celilo Falls in 1915. In the middle decades of the 20th century, a series of dams across the Columbia and Snake rivers opened barge navigation to Idaho.

Downstream, the Columbia required maintenance and repeated deepening of the channel from Portland-Vancouver to the sea. The Oregon legislature in 1891 created the Port of Portland to construct and permanently maintain a 25-foot ship channel in the Willamette and Columbia rivers "at the cities of Portland, East Portland, Albina, St. Johns and Linnton, and from these cities to the sea." Subsequent federal legislation specified and mandated cooperation between the Port of Portland and the U.S. Army Corps of Engineers in maintaining and deepening the Columbia and Willamette channels.

Photo courtesy of Oregon Historical Society

At the turn of the 20th century, factories and warehouses lined the Willamette waterfront. River steamers ran goods and people up and down the Columbia and multi-masted steamers hauled Oregon lumber to California.

Dredging and fill repeatedly created new industrial land and reshaped the harbor. Couch Lake northwest of the Portland city center turned into Northern Pacific rail yards. Guild's Lake was filled for what is now Portland's Northwest Industrial District. On the east bank, fill made possible the warehouse district between Southeast Grand Avenue and the river. And in the 1920s, the Port of Portland shifted the channel of the Willamette from the east side to the west side of Swan Island, attaching the "island" to the east bank. Rivergate is the most recent example, filled with dredge spoils in the 1960s after it passed from private ownership (as a duck shooting area) to Willamette University and then to the Port of Portland.

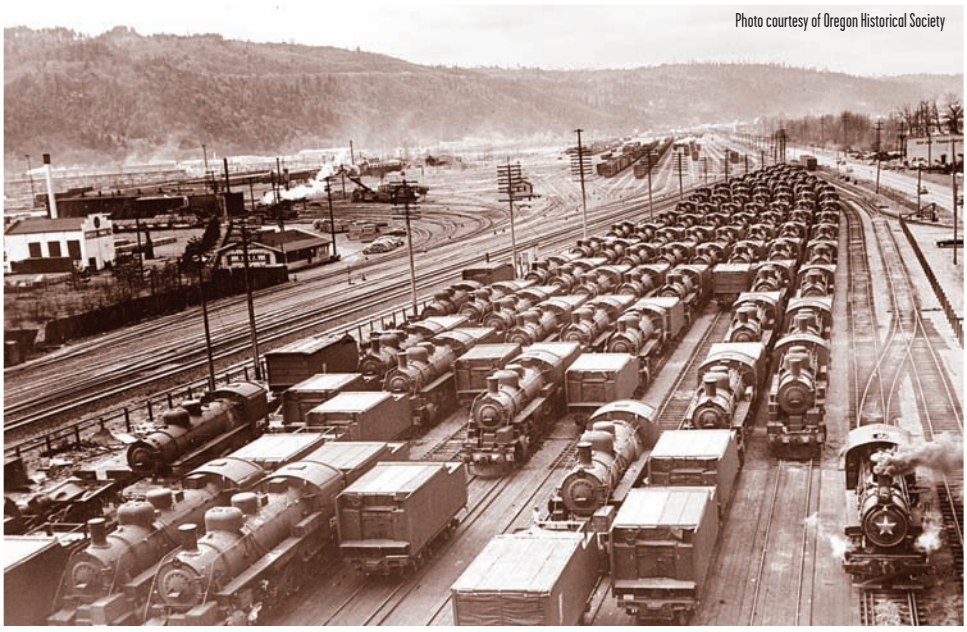
In 1910, Portland voters established a Commission of Public Docks over the objections of the mayor. The purpose was to build public docks and marine terminals as alternatives to those owned by railroads or individual businesses. The new Commission opened Terminal 1 on the west side of the Willamette at Northwest Front and Upshur, just north of today's Fremont

Bridge in 1913, following with an east side terminal at the foot of Oak Street across from downtown and then by a terminal at St. Johns.

Railroads, of course, were a second part of the transportation story. In the 1870s, west side businessmen hurried to build a rail line south toward California while upstart Ben Holladay, a California transplant with money from freighting and stage coach lines, pushed a rival line southward along the east bank of the Willamette. The city got its first transcontinental rail connection in 1883 with a connection to the Northern Pacific. Board of Trade President Donald MacLeay summed up the excitement in one sentence: "We are now connected to the rest of the world." When a Union Pacific branch linked up with the Northern Pacific in eastern Oregon the next year, MacLeay was doubly right. A towering – and still standing – symbol of the maturing economy was the Union Pacific smokestack in the rail yards below the Albina bluff, built in 1887 on "a foundation that would last for all time."

Nearly a century later, Portland is the meeting point of a 110-mile, deep-draft channel to the ocean that carries 30 million tons of foreign cargo each year and a 355-mile barge route to Idaho that carries 8.5 million tons of cargo per year. The Port of Portland owns four marine terminals, Portland International Airport, a general aviation airport and several industrial parks. Private docks handle construction materials, fuels, grain and other bulk commodities. Two Class 1 railroads handle heavy freight while trucks rumble in and out of the city on two interstate highways.

Photo courtesy of Oregon Historical Society



These locomotives were built for the Soviet Union under the Lend-Lease program during World War II. They awaited shipment to Russia at Guild's Lake (ca. 1945).

III. Baseline Industries

The baseline for Portland's development has remained its ability to link the Northwest and the North American interior with national and world markets. Comprehensive comparisons of the economic roles and functions of American cities have consistently described it as a "commercial hub" or a "regional metropolis." Like Minneapolis-St. Paul, Kansas City or Denver, Portland has had a disproportionate number of workers in transportation, warehousing, wholesaling and finance compared to national averages, making it "a commercial center for the Pacific Northwest."

Principal employers in the early 21st century are still wholesaling, transportation, finance, professional and health care. The interrelated complex of finance, insurance, transportation and wholesaling accounted for 14 percent of Portland-area jobs in 1994, a proportion that is one-third greater than for the United States as a whole. A closely related growth sector is high-end competitive business and professional services. Portland continues to thrive as the regional transportation hub and trading post for Oregon and much of Idaho and Washington. Major exports that move through its marine terminals include wood products, farm products, minerals and electrical machinery. Leading imports are Korean and Japanese automobiles, petroleum and miscellaneous manufactures. On the whole, its bulk export cargos such as minerals and agricultural products account for high tonnage but relatively low value compared to other West Coast ports. In contrast to the high tonnage of exports, Portland has struggled in recent years to attract container lines that bring in high-value, containerized manufactured goods.

Portland's manufacturing sector has been characterized by the emergence in sequence of four industrial clusters: first lumber and wood products, then agricultural processing, then metals and machinery, and most recently, electronics. The first two passed their peak as industrial clusters more than two generations ago, although individual companies still thrive. The second two are still large, viable and capable of further innovation and growth.

1. Wood products

The dominant industrial cluster from the mid-nineteenth century into the 1930s was lumber and wood products. This dominance coincided with the rise and maturity of the Pacific Northwest as the nation's most productive timber region from the early 1900s into the 1960s. Portland sawmills and shingle mills first processed logs from the Willamette Valley foothills, then from the Coast Range and lower Columbia. Logs arrived by water and then by rail for huge mills on both sides of the Willamette, including the Weidler mill in northwest Portland and the Inman-Poulson mill on 37.5 acres in southeast Portland. Using the products and byproducts were factories that turned out crates and boxes, window sashes, doors, architectural features and furniture (memories of some of these companies survive in the names of Doernbecher Hospital, Nicolai Street and John's Landing). Lumber schooners bound for California loaded in the Portland harbor. Portland was the No. 1 lumber shipping and manufacturing center in the world, according to Harper's Weekly of May 24, 1913, and it remained the premier shipper of lumber and wood products into the mid-1920s.

Photo courtesy of Oregon Historical Society

Steel barges hauled logs from the foothills of the Willamette Valley to sawmills along both sides of the Willamette River. (ca. 1973).

Activity spanned both sides of the river, combining with railroads and rail yards to create an industrial waterfront that stretched from Fulton (now the Terwilliger neighborhood) to Slabtown and Linnton on the west side and from Brooklyn to St. Johns on the east side. Mills, factories and transportation facilities were interspersed with working class housing, immigrant neighborhoods and skid row institutions for single male workers.

2. Agricultural processing

Agricultural processing is a relatively loose cluster that emerged in the later 19th century, developed over the next 50 years and faded in the later 20th century. Its growth was tied to the spread of railroads and agriculture east of the Cascades. The Upper Columbia region grew by 79 percent in the 1900-1910 decade alone as the Northern Pacific and Union Pacific rail systems extended lines and competed for business. Grain and livestock poured into Portland. The Portland waterfront already boasted the Pacific Coast elevator, which could unload grain from eight rail cars and load two ships at the same time and whose million-bushel capacity was unrivaled west of the Twin Cities. Now the city emerged as the nation's No. 1 wheat port in 1910s as Palouse and Pendleton farms came into production. Meanwhile, the expanding livestock industry east of the Cascades in the early 20th century supported two additional industries.

One of the industries was woolen textiles and woolen goods, with Jantzen and Pendleton the most prominent names. Eastern Oregon produced great quantities of wool in the early

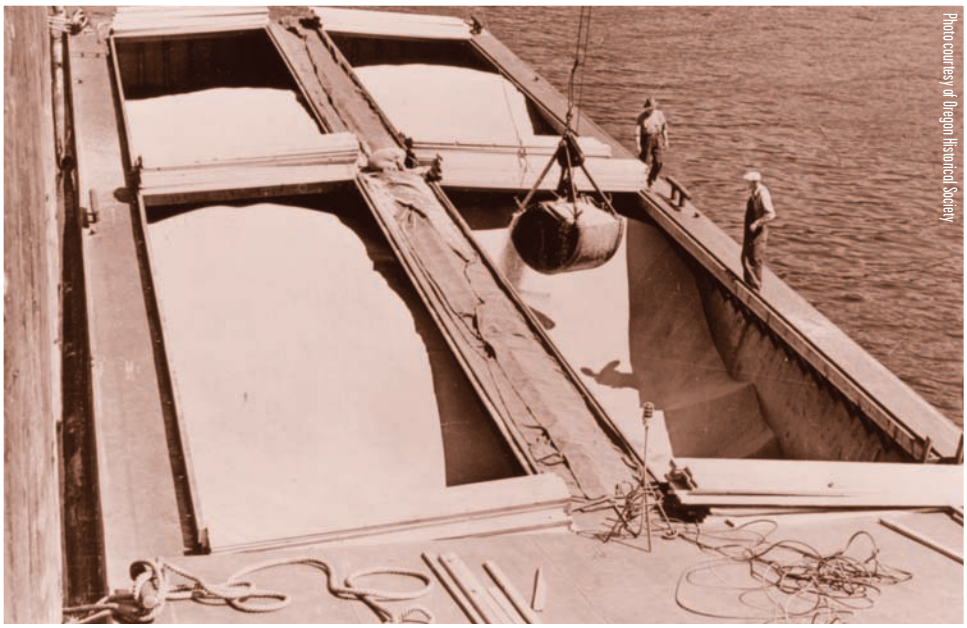


Photo courtesy of Oregon Historical Society

An all-steel barge constructed especially for hauling bulk wheat from the Inland Empire lays at Terminal 4 on the Willamette, waiting to discharge its 18,000-bushel load (ca. 1939).

decades of the 20th century, and small woolen mills sprung up around the state. Jantzen began as Portland Knitting Mills in 1910 and enjoyed explosive success in the 1920s when it developed and marketed lightweight woolen swimwear. Pendleton grew from small mills in Salem and Pendleton but expanded from a Portland headquarters that coordinated production sites from Washougal, Washington, to northern California. Other firms also were part of the industry, such as Portland Woolen Mills in St. Johns, with 500 workers at its peak.

The other agriculture-based industry was meat packing. When the North Bank railroad (now part of the BNSF system) completed its Columbia River line and railroad bridge to Portland in 1907, Swift and Company opened a huge meat packing plant near the Columbia where 1,500 workers processed cattle from eastern Oregon and Washington. Another dozen plants soon followed, and the industry peaked in the years before World War II.

3. Metals, machinery and transportation equipment

Metals, machinery and transportation equipment is a long-lived cluster that grew up with the 20th century. The industrial complex originated with small manufacturers of building materials (such as a iron for office building construction), farm machinery, logging tools and supplies, and ship repair. In effect, it was a smaller regional version of the manufacturing powerhouse that the San Francisco Bay Area developed to serve California mining and farming.

World War I brought a dramatic change. The German U-boat campaign destroyed cargo ships faster than European nations and East Coast shipyards could replace them. In 1916, the Northwest Steel Company at the foot of Sheridan Street in south Portland began to fill orders from European shipping lines. The Albina Engine and Machine works soon followed on the strength of orders from Norway. When the U.S. entered the war in April 1917, the U.S. Emergency Fleet Corporation commandeered the ships under construction and declared itself the sole customer for all the merchant shipping Portlanders could build. From 1917 through 1919, Portland shipyards launched 96 steel ships. Total employment in steel shipbuilding peaked at 12,000, with thousands of support jobs in foundries and machine shops.

In the same years, up to 16,000 other Portlanders built 80 wood-hulled cargo ships, particularly at the Grant-Smith-Porter yard at the foot of Baltimore Street in St. Johns. They bought their material from booming Portland sawmills, drew their workers from the large pool of men with woodworking skills and fitted the ships with hardware from many of the same plants that supplied the steel-hull shipyards.

Shipbuilding returned like an economic tornado during World War II. The first federal contract went to the Commercial Iron Company in 1940. New orders for minesweepers and patrol craft came to the Albina Shipyard and the Willamette Iron and Steel Company in 1941. In the same year, Henry Kaiser, fresh from helping to build Boulder and Grand Coulee dams, partnered with Todd Shipbuilding to create Oregon Shipbuilding with 11 construction

Photo courtesy of Oregon Historical Society

Kaiser shipyard workers.

Portland shipyards built more than 1,000 ocean-going ships during World War II.

ways in St. Johns. It produced the first of 330 Liberty ships and 120 Victory ships in September 1941. Kaiser bought out Todd early in 1942 and opened Kaiser Company-Portland on Swan Island to build T-2 tankers and Kaiser Company-Vancouver to build LSTs, cargo ships and escort carriers. At the peak in 1943-1944, metropolitan Portland counted 140,000 defense workers – 92,000 with Kaiser, 23,000 at other shipyards and 25,000 in other defense industries. Portland and Vancouver together produced more than 1,000 ocean-going combat and cargo ships.

Portland emerged as one of the nation's largest shipbuilding centers for multiple reasons. It had no large military bases to compete for workers, but its climate allowed year-round work, its inland location protected it from direct attack and the rivers had good depth for medium-draft vessels. It also had a pool of metal workers and a set of small shipyards that provided a foundation for the Kaiser effort.

Partially concealed by the meteoric rise and fall of shipbuilding was a steadily evolving set of specialized producers of construction materials, transportation equipment, machinery and tools, many of them oriented originally to serving the needs of western resource industries.

The following is a small sampling of these firms.

- Schnitzer Steel originated as a scrap recycling company and has grown into one of the nation's leading metal recyclers and is an important manufacturer of steel products.

- The Electric Steel Company (ESCO) poured its first steel casting in 1914 and has prospered by making steel castings for a wide range of customers, first logging and mining operations and now spanning a gamut of industries from logging and mining to aerospace and petrochemicals.
- The Iron Fireman Company, which developed from the Portland Iron and Wire Works, prospered in the 1920s and 1930s by building automated stokers for coal furnaces. It benefited from the pool of skilled workers and from the fact that Portland's transportation connections made it easy to collect and reuse scrap iron from the hinterland – broken log chain, worn-out farm machinery and the like – and ship its output to eastern markets via the Panama Canal.
- Beall Corporation, which located in Portland in the 1930s as Beall Pipe and Tank, now produces specialized trailers and truck beds in north Portland and in other locations inside and outside of the Portland area.
- Hyster grew out of the Willamette Iron and Steel Company in the 1930s, with forklifts replacing steam engines in the product line.
- Precision Castparts is a 1953 offshoot of Oregon Chain Saw (later Omark and then Oregon Cutting Systems), itself founded in 1947 to manufacture an innovative product for the forest industry.

4. Electronics

The fourth and most recent addition to Portland's baseline industries has been the "high-tech" complex of measuring and sensing devices, electronics and related software. The industry is the combined result of entrepreneurial accident and location. Tektronix is the most significant homegrown electronics company. Howard Vollum and Jack Murdock started their firm in an old factory building on Southeast Hawthorne Street in 1946 and moved to Washington County in 1951. Demand for Tektronix's oscilloscopes and scientific instruments boomed as the United States invested more and more resources in Cold War science and medical research. Reaching its peak employment in the 1970s, Tektronix was a fertile source of innovation and a seed bed for new start-ups. Floating Point Systems, Planar Systems, TriQuint, Mentor Graphics, InFocus and Merix all came spinning out of the Tektronix orbit.

A new surge in electronics created Oregon's Silicon Forest, developed courtesy of California. In 1976, Intel chose Portland for a major branch plant. One attraction was the pool of workers trained by Tektronix, the other was a location only two hours by air from San Jose. Hewlett-Packard came to Oregon in 1979. Foreign companies followed: Wacker Siltronics in 1980, and then Japanese firms such as SEH, Fujitsu, Epson, Sharp and NEC, attracted in part by the city's closeness to Tokyo by the great circle air route. Intel, too, has been an important source of spin-off companies that have kept the Silicon Forest alive despite the recent technology shakeout.

Statewide, high-tech employment passed timber-related employment in the mid-1990s, explaining why the Portland-Salem Consolidated Metropolitan Statistical Area in 1996 ranked 10th in the nation in the value of its exports at $9.2 billion. High-tech and software companies, broadly defined, employed roughly 70,000 people in the Portland area in 1997, double the number a decade earlier. In 2006, in the aftermath of the industry's readjustment, statewide employment in electronics manufacturing and software was 42,500.

The more sophisticated technology firms are concentrated in Washington County. This first industrial cluster that is independent of water and rail transport (but not air service) was dubbed the "Silicon Forest" in the 1980s. Silicon wafer and semiconductor plants were more widely scattered in Portland and Gresham in Oregon and Clark County, Washington. In contrast, software and multimedia firms clustered in central Portland in proximity to advertising, publishing, art galleries and financial services. Telecommunications scholar Mitchell Moss (1998) used the registered location of commercial Internet domains (.com addresses) at the end of the 1990s to assess the relative standing of 85 cities as Internet information centers. Portland's location quotient of 3.11 placed it a satisfying 16th, several steps up from earlier in the decade. Another comparison by the Progressive Policy Institute in 2001 placed Portland 13th among 50 large metropolitan areas in its engagement with the "digital economy."

IV. Planning for Portland's Rivers

1. The first plans: nature or commerce

Self-conscious city planning as a practice and profession emerged around the beginning of the 20th century out of the intersection of landscape design, architecture, civil engineering and social reform. Portland followed the national model by engaging two of the most renowned planning consultants of the time to advise the city and its citizens on its future growth and land use. The resulting documents emphasized two different ways to understand and use the Willamette and Columbia rivers as central features.

The Olmsted Park Plan and the natural river

Most American cities began to develop public parks in the 1860s and 1870s, following the great example of Central Park in New York City. By the last decades of the century, cities were increasingly interested in comprehensive planning for park and parkway systems. Examples included Chicago, Kansas City, Minneapolis and Boston.

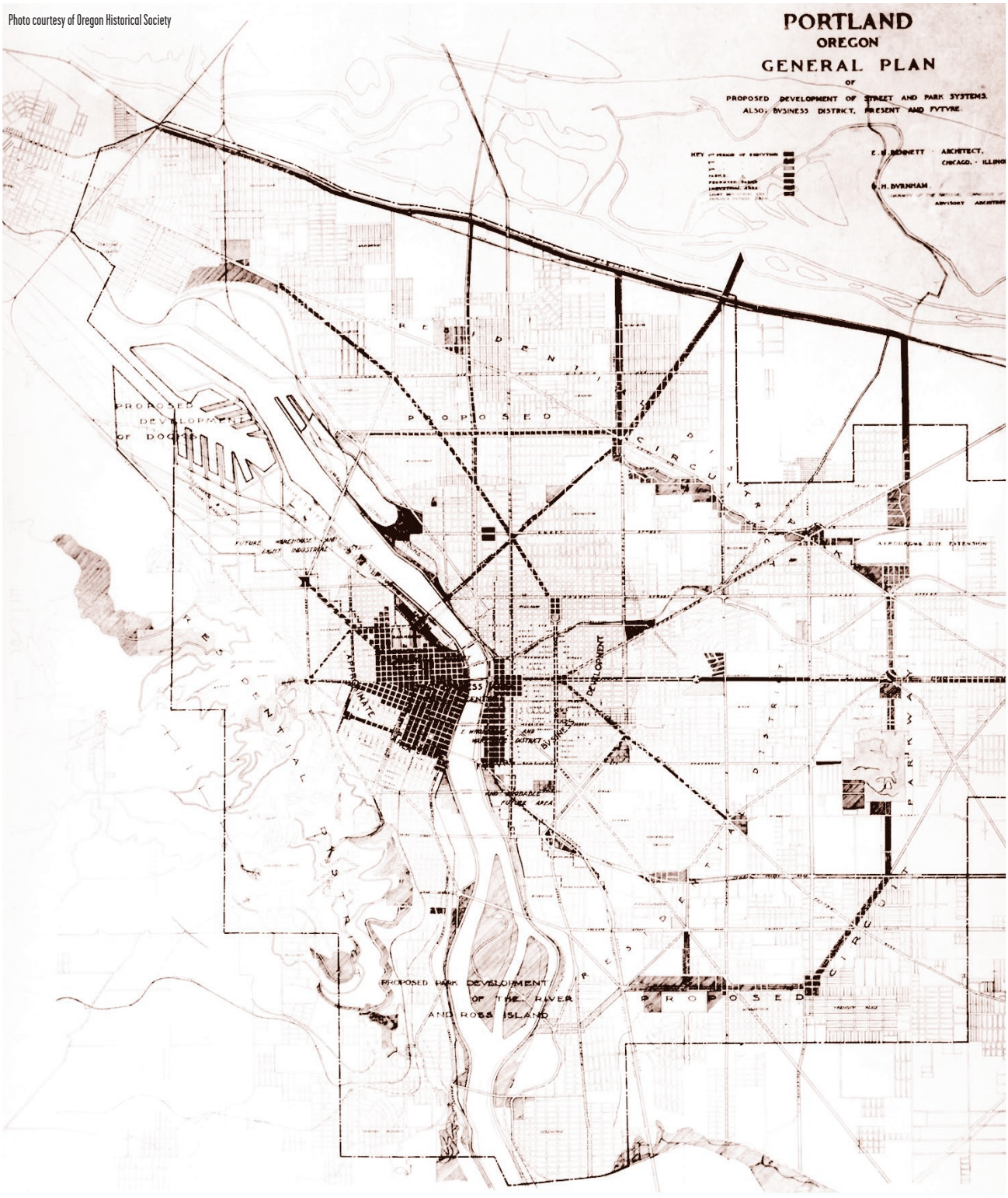
With the opening of a new century, Portland joined the trend by creating a Parks Commission. The Commission invited John C. Olmsted, son of the pioneering landscape architect Frederick Law Olmsted, to prepare a parks plan for Portland. The resulting plan, presented in 1903, proposed a series of parkways and boulevards to connect steep slopes (the crest of west hills, volcanic cones like Rocky Butte and Mount Tabor) and low-lying lands (the northwest waterfront, the south shore of the Columbia River, Ross Island, Swan Island), which would be reserved for large parks. Olmsted thus emphasized preserving open and natural space along what was a busy commercial river.

Edward Bennett, the Greater Portland Plan and the commercial river

The early 20th century also brought a set of comprehensive city-regional plans that focused on creating strong – even magnificent – city centers and linking those centers to the surrounding region with rationalized transportation systems. The key figure was Chicago architect Daniel Burnham, who was involved in the replanning of Washington, D.C., and identified with grand, comprehensive plans for Chicago and San Francisco.

As Portland boomed in the early 1900s, a group of business leaders formed the Civic Improvement League, raised $20,000 in donations and invited the Burnham to do a Portland plan. Burnham was too busy, and they instead got his right-hand man Edward Bennett, British-born, Paris-educated and experienced in comprehensive planning. The "Greater Portland Plan" that he submitted in 1911 was described as "architectural engineering in its application to city building." Working outward from the heart of Portland, Bennett proposed three civic centers – a government complex, a cultural complex of museums below Washington Park and a transportation center around Union Station. There were diagonal boulevards in the style of Paris to serve a future population of two million. There was to be an improved downtown riverfront in the style of Paris or Budapest. And there were to be vastly

Photo courtesy of Oregon Historical Society



The plan for Greater Portland proposed a series of diagonal boulevards and highways, eastside business development and the movement of waterfront industry down the Willamette to the Guild's Lake area.

expanded marine terminals from the Steel Bridge downstream. In short, this was a plan that devoted a small segment of the riverfront to aesthetics but largely retained and enhanced the working harbor.

In the ensuing decades, one of the key decisions concerned the Guild's Lake area, the site of the Lewis and Clark Centennial Exposition in 1905. The Exposition, whose grounds were designed by John C. Olmsted, called attention to the possibility of a large riverfront park. A variety of reasons, including the unwillingness of city and citizens to invest heavily in park land acquisition, led to the dismantling of the Exposition buildings (they were not built to last), filling of the site with dredged material and adapting it first for war-worker housing in World War II and then for industry after 1945. It is now Portland's Northwest Industrial District.

2. 21st century plans: environment and industry

The competing approaches to the river and riverfront land that marked the first generation of Portland planning remained evident a century later. Compared to other cities, however, Portland has been more aware of the tensions and tradeoffs and more willing to explicitly recognize the commercial and industrial functions of its rivers.

Industrial land supply

OREGON

The Oregon land-use planning system includes "Goal 9: Economic Development." Local jurisdictions are required to plan land uses "to provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare and prosperity of Oregon's citizens." The goal further states that comprehensive plans for urban areas shall "limit uses on or near sites zoned for specific industrial and commercial uses to those which are compatible with the proposed uses." Implementing rules require that local governments identify sites needed for industrial and commercial development in both the short term and the long term. Local governments are specifically required to make sure that conversions of more than two acres do not create supply deficits.

In 2003, the Department of Land Conservation and Development undertook a broad study of the state's industrial land supply at the mandate of House Bill 2001 (2003) and Governor's Executive Order 03-02 on industrial lands. DLCD convened an Industrial Conversion Study Committee and presented a report titled "Promoting Prosperity: Protecting Prime Industrial Land for Job Growth" in November 2004. The report found that conversion of industrial land to non-industrial uses occurs because of zoning changes, because the pattern of uses in multiple-use zones changes, and because adjacent lands develop in such a way as to make industrial use incompatible or unsustainable (e.g., because of increased highway congestion). The report found that "the state has an interest in discouraging conversions of prime industrial lands" and "in reinvesting in viable industrial districts including those with brownfield sites."

In response, LCDC adopted amendments (effective January 2007) to the Oregon Administrative Rule relating to Goal 9. In particular, changes added the concept of Prime Industrial Land, meaning lands that are well suited for traded-sector industries and are difficult or impossible to replicate in the planning area or region. These lands have "necessary access to transportation and freight infrastructure, including, but not limited to, rail, marine ports and airports, multimodal freight or transshipment facilities, and major transportation routes." The changes also encourage attention to short-term supply and to consideration of market factors such as availability and ownership patterns in identifying an adequate industrial land inventory.

Metro

Metro has a mandate to identify and conserve regionally significant industrial land. Title 4 of the Metro Code requires cities and counties to adopt zoning that limits commercial uses in industrial areas. Its Title 4 map matches the industrial sanctuary and general employment areas of the City of Portland. In 2002, Metro expanded the Urban Growth Boundary for the Portland region but also determined that land inside could/should be used more efficiently. It amended Title 4 to make a distinction between regionally significant industrial areas and other industrial areas, to limit retail in industrial areas and to limit non-industrial office development in regionally significant areas. Most of the industrial zones of the Portland harbor are regionally significant industrial areas.

Portland

In most cities, industrial zoning is intended to protect residential and commercial areas, so it allows other uses in industrial zones (creating a hierarchy in which industrial uses are at the bottom). The City of Portland has the reverse, using affirmative zoning to protect industry, with an industrial sanctuary policy stated explicitly in its Comprehensive Plan. The language is straightforward: "Provide industrial sanctuaries. Encourage the growth of industrial activities in the city by preserving industrial land primarily for manufacturing purposes."

The policy is implemented through zoning that allows six categories of use outright in industrial sanctuaries: industrial service, manufacturing and production, railroad yards, warehouse and freight movement, waste-related and wholesale sales. It also allows retail, community service and office uses when they "are supportive of the industrial area or not detrimental to the character of the industrial area." In practice, this means uses that will not adversely impact industrial transportation needs and directly serve industrial workers. The most prominent test of the policy was the city's decision to reject a proposal for a Costco big box retail outlet in the Northwest Industrial District.

Waterfront-oriented initiatives

Portland's River Renaissance Strategy

The River Renaissance Strategy (Dec. 2004) recognizes "a prosperous working harbor" as the second of five comprehensive goals for Portland rivers, and states that "Portland's working harbor and Columbia Corridor are among the most important contributors to the region's economy." The strategy goes on to identify important issues of freight transportation, including highway bottlenecks, railroad capacity and river channel maintenance. Its seven policies are:

- Stimulate Portland's competitiveness and growth as a major West Coast marine port and distribution and industrial center. Affirm and advance the critical role that the harbor and its industries and businesses play in the economy and quality of life of Portland and the Columbia and Willamette basins.
- Invest in maritime, rail, air and truck infrastructure, and develop seamless connections among these modes.
- Protect and enhance the industrial land supply, economic health and distribution-hub functions of the working harbor and Columbia Corridor industrial districts and ensure river access to river-related and river-dependent industry.
- Maintain and enhance the buffers (riverine bluffs, major roadways and mixed employment areas) that frame these districts and separate them from other land uses, in order to prevent the loss of industrial land.
- Facilitate industrial redevelopment, particularly in brownfield sites.
- Improve the transparency, predictability and timeliness of regulatory systems, while encouraging innovation.
- Promote environmentally beneficial industrial operations and facility planning through a combination of incentives, technical assistance and regulations.

River Concept and River Plan

The Planning Bureau is currently (September 2007) engaged in a River Plan, which will be integrated into a substantial revision of the city's Comprehensive Plan. The planning process is guided by a River Concept adopted in 2006 and is first dealing with the North Reach (the Willamette River and adjacent lands from the Columbia River south to the Fremont Bridge on the west side and to the Broadway Bridge on the east side). The basic policy statement reads as follows:

The North Reach: Portland's Working Waterfront – The North Reach will continue to provide Oregon with access to global markets and support the region's economy as a West Coast distribution hub and a heavy industrial area.

Working Harbor Reinvestment Strategy

The Working Harbor Reinvestment Strategy is the economic development element of this River Plan. It brings together the Planning Bureau, Portland Development Commission and Port of Portland to develop a 10-year plan for capital investment to enhance the working waterfront and promote private investment and development in harbor industrial districts. Drawing from stakeholder interviews and focus groups, the Investment Strategy emphasizes work to improve rail and highway bottlenecks and to increase the supply of useable industrial land through assistance with brownfield cleanup.

Portland Development Commission

The Willamette Industrial Urban Renewal Area, created in 2005, gives the Portland Development Commission a tool for assisting with the investment needs that may be identified in the Working Harbor Reinvestment Strategy. The 751-acre district includes Swan Island/Mocks Landing and sections of the west shore on both sides of the BNSF railroad bridge. Because state law allows downward assessment of environmentally damaged lands, the tax increment available for appropriate projects will be small in the short run, although it is expected to increase in a 5- to 20-year time frame.

V. Maritime and Industrial Portland in 2007

The economy of the Portland region in 2007 is supported by a thick ecology of river-dependent and transportation-oriented businesses and industries. The rivers and waterfronts are not only the historic focus for Portland's economy but remain central to a complex of activities. From 2004 through mid-2007, capital investment of $440 million was completed or funded for 36 harbor sites.

1. Transportation nexus

Portland's rivers are the focal point for a multifaceted transportation system of marine terminals, ocean shipping lines, barge lines, bulk handling facilities, Class 1 railroads, short-line railroads, Interstate highways, commercial and general aviation airports and pipelines. The federal government recognized the importance of this nexus by funding replacement of the BNSF railroad bridge across the Willamette to reduce an impediment to navigation. Roughly 90 percent of harbor sites also have rail access.

- Portland and Western Railroad has seen business originating along its Astoria-Willbridge line triple in the past 10 years, from 7,000 carloads in 1997 to more than 20,000 carloads per year at present. The railroad is a link in a multimodal system. It interfaces with tank farms (which receive materials by water and pipeline) and exchanges freight with trucks, barges and other transportation modes.

- Fuel and construction materials firms have expanded and upgraded terminals and storage facilities in recent years.

- The Port of Portland in 2006 ordered a new crane for Terminal 6 to serve post-Panamax vessels.

- Portland is the largest wheat export port in United States, just as it was a century ago, drawing from as far as Minnesota and Kansas. Including Vancouver and Kalama, lower Columbia ports account for 40 percent of wheat shipments. The Columbia system also draws cargo from east of the Mississippi, making the lower Columbia the nation's second largest corn export center. Portland is also the most important bulk mineral port on the West Coast.

- Port of Portland cargo forecasts anticipate that the volume of trade through Portland will double by 2035.

2. Wholesaling and distribution

The North Reach of the Willamette River and the Columbia Corridor taken as a single crescent of industrial land have an intense concentration of wholesaling and distribution businesses that serve both the metropolitan area and the larger multi-state hinterland.

- With a good climate for aviation, a relatively uncrowded airport and relatively non-congested regional highways, Portland has potential as a secondary air freight center. The announced expansion of FedEx at Troutdale is one indicator of the possibilities.

- Automobile import volumes have climbed in recent years. In 2006, a record number of 464,000 Hondas, Hyundais and Toyotas were handled by Portland auto import terminals. In addition, the Port of Vancouver has been receiving Subarus since the early 1990s. Toyota, which is being squeezed out of Los Angeles, it expanding its Terminal 4 import facility for a second time. Hyundai has also expanded its auto terminal.

3. Metals, machinery, transportation equipment

The Willamette River is the focal point for the metals, machinery, and transportation equipment complex of interdependent firms. Portland has countered the trend in decline of metal industries jobs.

Riverfront Expansion

- Advanced American Construction relocated from Oregon City to the North Reach in 2006, after searching the entire metro area for a suitable site.

- Evraz Oregon Steel Mills relocated to Rivergate in 1969 and has expanded several times on site, including adding a new pipe mill. It depends heavily on bringing in steel slab by water from Russia and Mexico and shipping product to western U.S. markets by water and rail. Its expansion has led to an expansion of subcontractors.

- Gunderson has utilized its flexible location between rail and water to overcome short-term business downturns, and has upgraded facilities in 2005-2006.

- Schnitzer Steel, which consolidated its Portland operations in 1973, has recently invested $30 million in a new shredder and other capital improvements.

- Cascade General ship repair is at capacity and planning another drydock.

- U.S. Barge has recently relocated from New Orleans to Swan Island, not only because of problems with the previous location but also due to the rise of Pacific trade demand for barges.

Schnitzer Steel's many investments at its Portland yard include a new mega-shredder. These improvements significantly enhance the operation's processing capabilities and global competitiveness.

Metro-wide industry

The industrial complex extends to locations beyond the working waterfront. Related companies include Precision Castparts, Oregon Cutting Systems, Oregon Iron Works, Warn Industries, Gerber Blades, Leatherman Tools and Boeing. Most of these firms are located either in the Columbia Corridor-Gresham area or the Milwaukie-Clackamas industrial corridor. Both of these areas need to be considered as parts of Portland's industrial heart.

Flexibility and innovation

Many manufactured items follow a product cycle. As a product moves from an initial stage of innovation and small-scale production to large-scale, routine production, manufacturing tends to move from the original site to other, lower-cost sites. Headquarters and research and development may remain in the original location, but branch plants and subcontractors in other locations can be used for more efficient production. The challenge in any specific community is to nurture the next innovations and next products to fill the gap left by closed factories. The same challenge occurs when the market for a particular product is saturated or when that product becomes outmoded.

The metals and machinery complex has shown substantial flexibility over the last century. New firms and products have appeared as replacements for companies with outdated products, and Portland has suffered less from the product cycle than rustbelt cities like Youngstown or Dayton, Ohio for several reasons. First, Portland's metals and equipment industry has been a set of small and middle-sized firms rather than consisting of one or two vulnerable giants. Second, many of these firms have produced a wide range of products for multiple markets rather than depending on a single customer or single market. They have the flexibility to shift production from one item to another. Third, many of them produce intermediate items for construction or manufacturing, again providing the buffer of multiple markets. Fourth, the pool of skilled workers adds to the ability to shift directions or to develop new firms and products.

Over time, these factors have meant that this industrial sector has remained strong even as individual companies have disappeared (no one buys home coal stoking machines any more) or shifted production to other locations (Hyster, Freightliner). This is the same sort of process that has kept Oregon's computer and electronics sector viable despite the decline of Tektronix from its peak around 1980.

For example, Oregon Iron Works was founded in 1944 and has specialized in complex, large-scale metal fabrication (bridges, hydroelectric systems, patrol craft). This mid-sized company with 300 plus employees at Clackamas and Vancouver facilities recently received federal funding to build the first U.S.-made streetcar in many decades in partnership with a Czech company.

Portland is also developing bicycle manufacturing for niche markets, a spin-off both from its "green industry" sector and its metal-working sector. It may seem a stretch from Gunderson barges or Evraz Oregon Steel Mills to the bicycle industry, but manufacturing of high-end bicycles and components is an important and growing business. The business currently ranges from two-person artisan shops that build a handful of bikes at a time to firms like Kinesis in north Portland, a U.S. branch of a Taiwanese bicycle manufacturer with 40 workers, Huntco Supply, which makes bike racks and lockers, and Chris King Precision Components, a manufacturer of high-end bicycle parts that relocated from California to northwest Portland.

Bicycle headsets manufactured by King Cycle Group, a leading producer of bicycle components, which relocated to Portland in 2005.

4. Oregon export industries

Oregon stands well above the national average for value of exports relative to population. Its export history reaches back to 19th century agriculture and timber. This category remains important, but it has been eclipsed by other manufactured goods. Federal government data for 2001-2006 shows that the value of all Oregon exports increased by 72 percent in the first half decade of the 21st century. In comparison, export growth in fabricated metal products, primary metals and transportation equipment all matched or surpassed the growth of computer and electronics exports.

INCREASE IN VALUE OF OREGON EXPORTS: 2001-2006

Agricultural and livestock products	31%
Fabricated metal manufactures	**69%**
Computer and electronic products	71%
All Oregon exports	72%
Primary metals manufacturing	**177%**
Transportation equipment	**205%**

Computers and electronic products made up 43 percent of the total value of Oregon exports in 2006. Metals, machinery and transportation made up 28 percent, while agricultural and lumber products accounted for only 17 percent.

5. Industrial employment concentration

The Portland harbor area, as defined by planning agencies and the Working Waterfront Coalition, counts 35,000 industrial jobs and 4,000 to 5,000 other jobs.

State employment data for 2004, aggregated by Metro staff for all of the major industrial districts, show the importance of the several districts that utilize and/or abut the Willamette and Columbia rivers. The following table shows industrial employment in these districts.

Employment in River-Related Industrial Districts, 2004

	Manufacturing	Transportation, Warehousing Utilities	Wholesale Trade	All Workers
Northwest Industrial District	8,800	2,800	2,900	22,000
Swan Island & Central Eastside	3,700	3,700	5,500	37,000
Rivergate	10,400	1,400	. . .	20,000
Columbia Corridor	7,200	8,800	4,800	40,000
Totals for river-related districts	**30,100**	**16,700**	**13,200**	**119,000**

Employment in these districts can also be compared to that in the metropolitan area's three other industrial districts: the Sunset Corridor and 217 Corridor where the electronics and computer industry is concentrated, and the Milwaukie/Clackamas Corridor, with its mix of manufacturing and distribution.

Employment in All Major Industrial Districts, 2004

	Manufacturing	Transportation, Warehousing Utilities	Wholesale Trade	All Workers
River-related Districts	30,100	18,200	13,200	119,000
Milwaukie & Clackamas	6,200	2,500	4,500	28,000
Sunset corridor	10,500	6,600	800	42,000
217 corridor	5,000	1,400	5,000	46,000

In total, the Multnomah County and Clackamas County districts have 36,200 manufacturing jobs compared to 15,500 in the Washington County districts, and 38,400 jobs in transportation and distribution compared to 13,800.

VI. Challenges in Comparative Perspective

1. Waterfront and industrial lands under pressure

The most powerful trend relating to older industrial districts in the last quarter century has been conversion from traditional manufacturing and transportation functions to other, more intensive uses. This pattern has been doubly true of waterfront lands with their potential aesthetic appeal.

Industrial obsolescence is certainly involved in the process. Some industries have finite life cycles because their product becomes obsolete, inputs become unavailable or their national/international competitive position changes. Few people are going to complain when offices and condos are constructed within the granite shells of old water-powered mills, whether in Edinburgh (Scotland) or Georgetown (Washington, D.C.). In the Portland region, for example, the aluminum industry had roughly a 50-year life span from the early 1940s to the 1990s. Created by an abundance of cheap electricity and a war defense market, the aluminum industry was later squeezed by a combination of growing competition for electricity within the Northwest and competition from cheaper overseas producers.

There is also a tendency for industrial waterfront uses and port facilities to move downstream toward deeper channels and wider expanses of land for manufacturing and transportation. In the long view, this trend can be traced to London and Philadelphia, Bremen/Bremerhaven and Antwerp. At the same time, river ports remain key players in the patterns of global commerce. The three highest volume ports in Europe – Rotterdam, Antwerp, and Hamburg – are all located on rivers. Shanghai is a river port. Houston, New Orleans-Baton Rouge and Savannah are among the strong river ports in the United States.

At the same time, real estate developers and public officials have seen central city waterfronts as sites to be reclaimed for new, intense development. An entire nonprofit, the Waterfront Center in Washington, D.C., was founded in 1981 "in the belief that waterfronts . . . are unique, finite resources. Like the cities they help define, urban waterfronts are dynamic places, undergoing profound change. Waterfronts often represent the best opportunity for community enhancement and enrichment." Older central industrial districts, with loft buildings and warehouses, are often viewed in the same terms. Where more traditional uses remain, there are strong pressures to push them downstream or further away from the center of the city. As a result, old industrial waterfronts have often become bright, post-industrial redevelopment zones.

Upscale housing: Multi-story granite wharves have been converted to residences in Boston and brick buildings have been converted in Baltimore. Printers Row in Chicago now has hotels, trendy restaurants and new upmarket housing but no printing businesses. The northern branch of the Chicago River looks far different than it did even 10 years ago. San Francisco's industrially zoned land saw the construction of 5,000 residential units between 2001 and 2005. At the same time, a combination of rising rents and complaints about industrial activities by new residents drove out many production, distribution and repair businesses. In Los Angeles, high housing prices and demand have pushed residential uses into industrial districts south of downtown.

Recreational attractors: The examples are numerous. They include aquariums for Boston and Baltimore, festival markets in Baltimore, New York, Norfolk and Vancouver, ballparks for San Francisco, Seattle, Cleveland and Denver, and parks for Seattle and Portland. Philadelphia residents and officials have been engaged in bitter debate for the past two years on whether or not to build casinos on the waterfront that Benjamin Franklin once knew.

Mixed-use developments: Waterfronts are especially attractive sites for mixed-use projects that combine retail, office, hotel and residential space – for example, the Georgetown waterfront and now the Anacostia waterfront in Washington, D.C.

A similar story has been playing out in Portland since the early 1980s: Waterfront Park was the first public investment. Private investors followed in the 1980s with McCormick Pier apartments and Riverplace on the south waterfront. Then came the emergence of the Pearl District on the bones of a railroad warehouse district and a River District on abandoned rail yards. Terminal 1, Albers Mill and a PGE power plant were redeveloped for housing, offices, and a museum, respectively. South Waterfront condo towers are currently filling in what was once a waterfront industrial district. The Burnside Bridgehead project, if it comes to fruition, will mark the encroachment of mixed-use development into the Central Eastside.

At the same time, however, many Portland firms have deliberately relocated from these older industrial areas to the remaining parts of the working waterfront. The tension between the two uses remains.

Mixed-use development in Portland's South Waterfront district.

2. Public Policies to Facilitate Change

In the common framework of city politics, the default position is to accommodate the transition of industrial land by piecemeal rezoning in response to development proposals. Rezoning, of course, generates new pressure for additional change. It has been an issue of concern at the state level in Oregon (hence the land conversion study discussed earlier). This sort of question surfaced recently in Portland over the possible future of the Linnton Plywood site.

Cities can facilitate transition by proactive rezoning and adopting plans than anticipate change. Oakland has rezoned waterfront industrial land for housing in the hope of attracting overspill for the hot San Francisco market. San Francisco envisions its southern waterfront, from China Basin southward, as the home of bioscience companies, an idea with a familiar ring in Portland. Seattle came close to adopting the Seattle Commons idea that would have totally transformed the area between downtown and Lake Union – change that is now happening piecemeal. Seattle's first light rail line runs through the large warehousing and light industrial area south of downtown. Because the city allows housing and commercial uses of up to 70,000 square feet in the area, pressures for land conversion are intense for projects ranging for housing to the expansion of Starbucks headquarters.

Cities can promote land conversion by actively priming redevelopment with public assistance through urban renewal and tax increment financing tools, property tax abatements and similar tools to subsidize the costs of private development. All of these are options that Portland has utilized for the middle reach of the Willamette.

3. Public policies to resist change

Relatively few cities have implemented systematic policies to retard or resist the conversion of industrial lands. A review of other cities clearly indicates that Portland has been a leader.

Boston

Boston has identified the retention of "back streets" jobs as a city priority. It defines "back streets" as manufacturing, wholesale, construction, commercial services, logistics and food processing businesses (in contrast to "main streets" retailing). It sees "back streets" businesses as important places for entrepreneurship and sources of family-wage jobs. The city inventoried eight industrial districts in 2001, with a total of 47,000 jobs, and found that the trend in all but one was toward increased residential and commercial uses.

The city has adopted a policy goal of no net loss of industrial space, to be implemented with infrastructure improvements for industrial districts, low-interest loans to qualifying businesses, assistance in finding tenants for industrial space and strengthened zoning review guidelines "regarding development proposals that convert industrial land and buildings to office, commercial, residential or institutional uses." Evaluations of the impacts of these policies are not available.

Vancouver, British Columbia

In the last two decades, much of Vancouver's historically industrial land on both sides of False Creek has been converted to upscale housing (this includes the site of the 1986 World's Fair). In 1995, the City Council adopted Industrial Lands Policies for seven remaining industrial districts. These included two districts along the Fraser River, four districts located east of the city center with historic rail and water transportation services (Burrard Waterfront, Powell Street/Clark Drive, False Creek Flats, Mount Pleasant), and one with rail and truck transportation (Grandview/Boundary).

The overall policy was to "retain most of the city's existing industrial land base for industry and service businesses . . . to meet the needs of port/river related industry and city-serving and city-oriented industries." The city updated definitions of industry to better accommodate service businesses and revised provisions for conditional uses permitted in industrial areas. For each district, the city also determined how much land should be retained for industrial uses and established criteria for approving or disapproving applications to rezone industrial land. As a former Vancouver City Council member phrased it: "The main initiative we took was actually to let industrial lands go for housing. We inventoried what we had, what was in demand and what parcels made sense to 'let go.'"

Vancouver followed in 2005 with a Metropolitan Core Jobs and Economy Land Use Plan. It found that manufacturing jobs in the core sub-area of the city declined by 40 percent since 1981 and consisted largely of clothing and food manufacturing. At the same time, it reiterated the importance of manufacturing by noting that demand for industrial space is likely to increase in the False Creek Flats, Powell, Burrard Waterfront and Mount Pleasant areas (see earlier paragraph). At the same time, the city's department of community services anticipated increases in offices, services and commercial businesses in these spaces.

Taken together, Vancouver policies offer a mixed message about the future of industrial and water-dependent land uses. They identify retention of industrial land as important, but deal with the issue on a district-by-district basis. I2 and I3 zones have protected large parcels from being subdivided and prevented residential conversion, but they also allow a wider range of uses and clearly suggest that traditional heavy industry and logistics businesses will gradually give way to commercial services, big box retailing, offices, service activities, and – they hope – high-tech industries. The city currently faces a challenge in supporting hoped-for expansion of the port because supporting rail facilities are located precisely in an area (False Creek Flats) that has seen changing land uses.

Chicago

Chicago has 20,000 acres of industrial land, but it is scattered in more than two dozen small districts that cluster around the Chicago River and the city's thick network of railroads. In the late 1980s, the real estate market in Chicago was placing very heavy pressure on industrial land adjacent to the Loop and North Loop, which were increasingly attractive for residential and mixed-use projects. In response, the neighborhood-oriented administration of Mayor Harold Washington created the category of Planned Manufacturing District, which it applied to three areas near the North Chicago River in 1988-1990. Two additional PMDs were created in the 1990s and eight more in 2004-2005.

In PMDs, the city foregoes higher taxes revenues possible from rezoning to residential or retail use in favor of preserving and creating industrial jobs. As defined in the Chicago Zoning Ordinance, PMDs have several purposes: (1) foster the city's industrial base; (2) maintain a diversified economy; (3) strengthen suitable manufacturing areas; and (4) encourage industrial reinvestment, modernization and expansion by providing stable and predictable industrial environments. PMDs can be initiated by the mayor, the relevant alderman, or the owners of all land within proposed boundaries. Proposed areas are reviewed for suitability and established by vote of the City Council. PMD regulations are zoning overlays. Each PMD has an industrial council and an urban renewal district to generate funds for brownfield and transportation work, and a staff person to advocate for infrastructure improvements.

An evaluation of the older Planned Manufacturing Districts by the Center for Economic Development at the University of Wisconsin-Milwaukee found that two of the three districts from the 1980s had succeeded in increasing the number of businesses and jobs. However, there was a continuing shift from manufacturing to warehouse and distribution employment, marking the program partly but not completely successful in meeting its goals.

Chicago's Planned Manufacturing Districts are a relatively close match to Portland's industrial sanctuaries, although they are much newer and applied to individually smaller districts. It has been popular with local industrial businesses and with different city administrations.

VII. Current Trends and Issues

The Port of Portland likes to say that Portland is engaged in "industrial smart growth." This is a slogan designed to appeal to Portland's "green" constituency, but it also a good description of the facts on the ground and on the waterfront. Clustering freight-oriented industrial and distribution uses along the harbor and railroad freight corridors limits the total miles of transportation that are needed. Maintaining intensive use of industrial waterfronts and other close-in industrial land reduces sprawl and makes efficient use of a century and a half of cumulative investment.

1. Land needs and availability

There has been steady demand for waterfront industrial land and land within Portland's transportation core. Land uptake was 21 acres per year in 1990s, slowed with economic downtown, but now is closer to 30 acres per year.

One response to the need for more close-in industrial land has been for firms to make more intensive use of their existing acreage. For example, the Columbia Sportswear warehouse at Rivergate is built high enough to stack materials in multiple layers. Tank farms are expanding to handle ultralowsulfur and renewable fuel, and Chevron is replacing low storage tanks with taller, higher-capacity tanks. Toyota is trying to move cars more rapidly through its import facility in order to maximize use of its land.

2. Environmental concerns

The Superfund listing of the Portland harbor raises serious problems for maintaining and reusing industrial land. Environmental remediation will be necessary before a number of parcels can be reused, especially highly desirable 50- to100-acre sites. However, it is worth noting that Superfund listing has also been applied to much of the comparable land in Tacoma and Seattle (Harbor Island, Lower Duwamish).

3. Energy and construction materials

Continued growth in Oregon and southwest Washington supports the viability and expansion of energy and construction materials businesses on efficient sites on or near the waterfront.

4. Metals, machinery, transportation equipment

Since 1980, Portland has defied the national trend of declining industrial employment, even without counting high-tech employment. Several factors support the viability of the large cluster of metals, machinery and transportation equipment manufacturers. The presence of many small and moderate sized firms, rather than one giant company, provides flexibility and resilience. So does the orientation to markets in the rapid growth region of western North America markets. In addition, many firms make a variety of products for multiple markets.

5. Green industries

There are opportunities for synergy between traditional industrial firms and "green industries."

The Portland Development Commission's target clusters include metals and transportation equipment but also cycling and energy technologies, both of which have "hard" product dimensions as well as expertise dimensions.

6. Distribution and logistics

Several factors support continuing growth in the distribution and logistics field. As overall United States manufacturing declines and production shifts overseas, more products will be arriving through U.S. ports (especially on West Coast) and moving long distances into and across the continent. Portland has substantial advantages in a port with room to expand and with good highways and rail connections that are less congested than in California.

At the same time, the region has transportation bottlenecks and continued investment needs. Half of region's rail users are in harbor area. The huge and growing commitment of Class 1 railroads to coal hauling puts limits on the future of Portland as a transshipment point for containers headed to central and eastern United States.

7. Labor supply and production synergies

Portland is known as an attractive location for small and medium-sized businesses in the metals and machinery industries because it has skilled workers and a network of subcontractors. For example, Schnitzer Steel has 150 accounts in the Portland region. For a comparison and model, we might think about the Los Angeles area, where the aircraft industry developed and thrived with more than 1,000 subcontractors and suppliers.

8. Industrial sanctuaries

Industrial land that is affordable and protected from competing uses remains vitally important for supporting new businesses, for new manufacturing entrepreneurs need affordable, accessible, and hassle-free space in which to grow their businesses. This was true in the 1910s when Portland Knitting Mills got its start in a 50 by 50 foot building on Southeast Stark Street. It was true in the 1940s when Tektronix started in an old loft building at Southeast Seventh and Division and the 1950s when ESI used the same building on Stark. It was true recently when Rejuvenation Houseparts grew from a storefront operation in the mid-1980s to manufacturing operation with 300 plus employees located in the Northwest Industrial District, or when Chris King Precision Components moved from California to the Northwest Industrial District.

9. Competition from non-industrial uses

Industrial districts and the working waterfront will continue to face pressures for conversion to residential areas and/or mixed-use developments. For example, not far from home, Salem is proposing to rezone industrial land with good rail service, effectively removing it from the industrial land inventory. Another example is that of Advanced American Construction. The company has a marine and industrial repair business in Vancouver, whose future has been made uncertain by the nearby construction of a new middle school and rezoning for mixed use.

Similarly to Seattle and Vancouver, B.C., the coming years may well see consolidation of railroad yards and maintenance facilities on Portland's east side, opening previously industrial lands for debate about future land uses.

Along the river, there will be resistance to the continued operation of Terminal 2 because of its proximity to new housing. There continues to be pressure against industrial uses of industrial land in Linnton. The Port of Portland will have a balancing act with environmental concerns when it needs to expand to West Hayden Island.

VIII. Conclusion

Portland's complex of metals, machinery and transportation equipment manufacturing is an innovative industrial sector with a strong future and growing connections to Portland's position as a leader in sustainable economic development. The public sector should continue to recognize its importance with supportive land-use regulations and protections.

Portland is known for a strong and systematic commitment to maintaining industrial land, a commitment that is more deeply rooted and more comprehensive than in any other U.S. city. It has a strong record of favoring industrial land retention over proposals for the intrusion of big box retailing and housing into industrial districts. As the metro-area economy adds more and more jobs in high-tech industries and "idea industries," it is important to keep people educated about this policy and its benefits. Policy makers and the public need to remember that the traditional industrial economy employs tens of thousands of workers at family-wage jobs and still pays more bills than fashionable software or multimedia firms.

Like many cities throughout the United States, Portland is experiencing strong and increasing demand for new housing in the center city and core neighborhoods. Some of this demand is being satisfied on land that previously housed industrial or transportation uses. Although such land conversion is sometimes appropriate, the city needs to take extreme care and caution before determining that industrial land is no longer viable for industrial uses.

Portland has a superior freight movement infrastructure that represents 150 years of investment. This infrastructure includes railroad lines developed more than a century ago, as well as much more recent investments like an enlarged lock at Bonneville Dam, a new BNSF bridge across the Willamette, brownfield remediation, and ongoing rail and highway improvements for Rivergate. It is vital to protect and enhance this transportation infrastructure as an economic asset that would require billions of dollars to replace or reproduce and to promote public awareness of its value.

Freight transportation in the 21st century is the quiet partner in Portland's transportation system. Freight movement is less glamorous than new passenger rail systems and receives less public attention than highway congestion. However, the water-rail-pipeline network that concentrates in Portland is the anchor for a trade-based economy. Regional transportation planning and investment will be most effective when addressing truck mobility and highway connections to major industrial areas, marine transportation facilities and railroad bottlenecks as coordinated elements of a single freight movement system.

There are important points of compatibility and synergy between Portland's industrial heartland and the growing desire to make the city a leader in sustainable urban growth. These include the capacity of metals and machinery businesses to engineer and build specialized, environmentally friendly products (from bicycles to streetcars to fish ladders); the important role of recycling in the metals industry; and the substantial energy advantage of moving

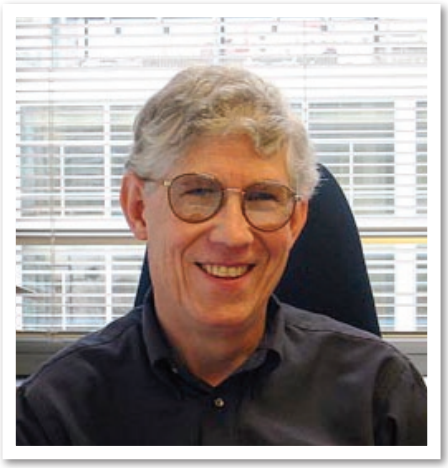
freight by water. Public agencies and private organizations that promote sustainable development have an opportunity to increase their effectiveness by taking advantage of a supportive industrial base.

Conserving Portland's industrial districts and its working waterfront is directly compatible with Oregon land-use planning goals. The Oregon system was established to protect the economic foundations of the state from being eroded by urbanization and sprawl. Most attention, then and now, has focused on Urban Growth Boundaries and the preservation of farm and forestland, but the protection of one-of-a-kind industrial land and transportation infrastructure is fully in synch with the system's goals. Retaining a compact industrial waterfront limits conflicts between industrial and residential uses and reduces the need for "industrial sprawl."

Portland has a history of intentional action to promote and protect its waterfront economy and industrial base. The private sector has invested and reinvested in transportation and industrial facilities, and the public sector has actively supported this investment through land-use policy, energy development and transportation improvements. As private activity increases in the first decade of the 21st century, it is important to keep the industrial economy on the public agenda.

Over the decades, Portland has benefited from a diversified economy with multiple industries and areas of activity, rather than depending on a single industry or employer. This diversification has helped smooth the peaks and valleys of the business cycle and prevented the kind of economic problems of cities like Detroit or Youngstown. Deliberate efforts to maintain this diversification by supporting the continued development of the waterfront transportation/industry complex should be a central element of all regional planning and development efforts.

About the Author



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