



**METRO**

TEL 503-797-1916 FAX 503-797-1930

**MEETING: TRANSPORTATION POLICY ALTERNATIVES COMMITTEE**

**DATE: April 28, 2006**

**TIME: 9:30 A.M.**

**PLACE: Rooms 370A/B, Metro Regional Center**

- |       |   |                                   |
|-------|---|-----------------------------------|
| 9:30  | Call to Order and Declaration of a Quorum   | Andy Cotugno                      |
| 9:30  | Citizen communications to TPAC on non-agenda items  | Andy Cotugno                      |
| 9:35  | * Approval of March 31, 2006 Minutes  | Andy Cotugno                      |
| 9:40  | Future Agenda Items <ul style="list-style-type: none"> <li>• TriMet Annual Service Plan (April/May)</li> <li>• Elderly &amp; Disabled Transportation Plan and Land Use Study (May)</li> <li>• Willamette River Bridges (anytime)</li> <li>• Cost of Congestion Discussion (anytime)</li> <li>• Damascus Concept Plan</li> <li>• Freight Data Collection</li> <li>• New Look Updates</li> <li>• Columbia River Crossing Updates</li> </ul> | Andy Cotugno                      |
| 9:45  | * Resolution 06-3695, For the Purpose of Recommending Approval of the Draft 2006 Portland-Vancouver Ozone Maintenance Plan – <u>RECOMMENDATION TO JPACT REQUESTED</u>   | Marianne Fitzgerald & Mark Turpel |
| 10:00 | * Air Quality Annual Update – <u>INFORMATION</u>  | Mark Turpel                       |
| 10:30 | * Blueprint for Better Biking – <u>INFORMATION</u>  | Scott Bricker                     |
| 10:50 | * Region 1 Draft STIP Recommendation: Draft Schedule, Process and Evaluation Factors – <u>INFORMATION</u>   | Lainie Smith & Ted Leybold        |
| 11:20 | * Air Quality Conformity Consultation: New MTIP Projects from 2005 Federal Authorization Earmarks, Transportation Enhancements Discretionary award, and change in City of Gresham local funding schedule - <u>ACCEPTANCE</u>  | Mark Turpel                       |
| 11:30 | * Resolution No. 06-3684, For the Purpose of Amending the 2006-09 Metropolitan Transportation Improvement Program to Add New Projects Receiving Funding From SAFETEA-LU and From an Award of The State Transportation Enhancements Discretionary Funds – <u>RECOMMENDATION TO JPACT REQUESTED</u>   | Ted Leybold                       |

11:40	*	Transportation Enhancement Funds: Process for MPO letters of endorsement for local application – <u>INFORMATION</u>	Ted Leybold
11:50	#	Connect Oregon Update – <u>INFORMATION</u>	Bridget Wieghart
12:00		ADJOURN	Andy Cotugno

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\* Material available electronically.

Please call 503-797-1916 for a paper copy

\*\* Material to be emailed at a later date.

# Material provided at meeting.

All material will be available at the meeting.



**METRO**

**TRANSPORTATION POLICY ALTERNATES COMMITTEE**

March 31, 2006

Metro Regional Center

**MEMBERS PRESENT**

Frank Angelo	Citizen
Scott Bricker	Citizen
Leland Johnson	Citizen
Nancy Kraushaar	City of Oregon City, representing Cities of Clackamas County
Dave Nordberg	Oregon Department of Environmental Quality (DEQ)
Ron Papsdorf	City of Gresham, representing Cities of Multnomah County
Phil Selinger	TriMet
Karen Schilling	Multnomah County
Jonathan Young	FHWA

**AFFILIATION**

**MEMBERS ABSENT**

James Castaneda	Citizen
Brent Curtis	Washington County
Greg DiLoreto	Citizen
John Hoefs	C-Tran
Susie Lahsene	Port of Portland
Dean Lookingbill	SW Washington RTC
Mike McKillip	City of Tualatin, representing Cities of Washington County
John Rist	Clackamas County
Paul Smith	City of Portland
Mike Williams	Washington State Department of Transportation (WSDOT)

**AFFILIATION**

**ALTERNATES PRESENT**

Clark Berry	Washington County
June Carlson	Citizen
Linda David	SW Washington RTC
Marianne Fitzgerald	Oregon Department of Environmental Quality (DEQ)
Sorin Garber	Citizen
John Gillam	City of Portland
Margaret Middleton	City of Beaverton, representing Cities of Washington County
Ed Pickering	C-Tran
Lainie Smith	Oregon Department of Transportation (ODOT – Region 1)
Ron Weinman	Clackamas County

**AFFILIATION**

**GUESTS PRESENT**

**AFFILIATION**

Alex Campbell	City of Milwaukie
Jody Littlehales	Citizen
Julie Rodwell	ODOT
Cory-Ann Wind	DEQ – Northwest Region

**STAFF**

Andy Cotugno, Kim Ellis, Ted Leybold, Jessica Martin,

**CALL TO ORDER, DECLARATION OF A QUORUM & INTRODUCTIONS**

Mr. Andy Cotugno called the meeting to order and declared a quorum at 9:30 a.m.

**CITIZEN COMMUNICATIONS TO TPAC ON NON-AGENDA ITEMS**

There were none.

**INPUT ON FUTURE AGENDA ITEMS**

Due to time constraints, the committee did not discuss future agenda items.

**MINUTES OF FEBRUARY 24, 2006 MEETING**

ACTION TAKEN: Mr. Phil Selinger moved and Mr. Ron Papsdorf seconded the motion to approve the February 24, 2006 meeting minutes. Hearing no objections, the motion passed.

**RESOLUTION NO. 06-3668, FOR THE PURPOSE OF APPROVING THE FY 2007 UNIFIED PLANNING WORK PROGRAM**

Mr. Andy Cotugno presented Resolution No. 06-3668, which would approve the FY 2007 Unified Planning Work Program (UPWP).

Mr. Cotugno noted that he understood that the UPWP was presented at the February meeting and several changes were requested. He asked the committee if the document before them (included as part of this meeting record) incorporated all requested changes.

ACTION TAKEN: Ms. Karen Schilling moved, seconded by Mr. Selinger to approve Resolution No. 06-3668. The motion passed.

**RESOLUTION NO 06-3667, FOR THE PURPOSE OF CERTIFYING THAT THE PORTLAND METROPOLITAN AREA IS IN COMPLIANCE WITH FEDERAL TRANSPORTATION PLANNING REQUIREMENTS**

ACTION TAKEN: Mr. Ron Papsdorf moved and Mr. Dave Nordberg seconded the motion to approve Resolution No. 06-3667. The motion passed.

In referring to page 6 of Exhibit A to Resolution 06-3667, Mr. Selinger inquired as to why High Capacity Transit (HCT) was a category of its own. Mr. Cotugno responded that he would find out and get back to him.

## STIP COMMENT LETTER

Mr. Ted Leybold appeared before the committee to present potential comments on the Region 1 STIP proposal.

ODOT Region 1 has a draft proposal for the major portions of the 2008-11 State Transportation Implementation Program (STIP). The proposal was created to respond to screening and prioritization criteria of the Oregon Transportation Commission. The Preservation and Bridge portions of the program were generated by their respective management systems and then reviewed by local staff. The proposed program needs to be further narrowed to available funding. Region 1 is requesting comments on the proposal and direction on how to narrow the program to available funding by April 14<sup>th</sup>.

A TPAC workshop was held March 20<sup>th</sup> to consider draft comments on the STIP proposal.

Mr. Leybold directed the committee's attention to a draft letter (included as part of this meeting record) to ODOT Region 1 staff on the draft STIP proposal, which summarizes the comments received at the workshop. He noted that the second paragraph in the comment letter proposes that JPACT have the opportunity to review the comments ODOT receives prior to the comments being submitted by Region 1 to ODOT headquarters for inclusion in the draft STIP.

Mr. Leybold reviewed each comment.

Regarding the first comment, which relates to the proposal of projects that are not already in the financially constrained system, Mr. Frank Angelo requested the letter better clarify the JPACT and Metro Council position.

Ms. Lainie Smith noted that the STIP couldn't be amended at this point because there is not a 20-year time frame left in the RTP.

Regarding the third comment, which asks whether there is adequate budget to perform the planning activities outlined in the 2006-07 UPWP, specifically the Highway 217 EIS and I-205/Powell Boulevard Interchange, Mr. Ron Papsdorf requested confirmation they were in the financially constrained list. Ms. Kim Ellis confirmed that both projects are on the list.

Ms. Karen Schilling requested that a portion of comment #4 (Fund STA Implementation Program) be amended to reflect the following:

*Metro staff and TPAC are willing to work with ODOT staff in the development of a ~~funding program or a specific project proposal~~ for inclusion in the 2008-11 or 2010-13 STIP*

The committee discussed the meaning of regional balance.

Because of the difference in safety issues faced by urban and rural areas, Mr. Scott Bricker requested that the comment relating to safety specify that JPACT and Metro Council are interested in local transportation staff working further with ODOT to identify and evaluate transportation safety issues that are unique to the urban setting.

ACTION TAKEN: Ms. Schilling moved and Mr. Ron Weinman seconded the motion to forward the comment letter as amended to JPACT. The motion passed with Ms. Smith abstaining.

**RESOLUTION NO. 06-XXXX, FOR THE PURPOSE OF AMENDING THE 2006-09 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM TO ADD A PRESERVATION PROJECT ON HIGHWAY 213 BETWEEN I-205 AND CONWAY DRIVE**

Mr. Leybold presented for approval Resolution 06-XXXX (included as part of this meeting record), which would allow the Oregon Department of Transportation (ODOT) to proceed with design and construction of the preservation project on Highway 213 between I-205 and Conway Drive.

ACTION TAKEN: Ms. Nancy Kraushaar moved and Mr. Ron Weinman seconded the motion to approve Resolution No. 06-XXXX. The motion passed.

**2035 REGIONAL TRANSPORTATION PLAN UPDATE**

Ms. Kim Ellis appeared before the committee to present a 2035 Regional Transportation Plan (RTP) Update. Ms. Ellis directed the committee's attention to a memo (included as part of this meeting record) which summarizes recent plans and regulatory changes that have implications for the update to the RTP, which will be used to develop the 2035 RTP update work program and public participation plan, and provide guidance for updating the RTP policies, projects and implementation strategies. She requested that TPAC members review the memo and provide comments/additions by April 28<sup>th</sup>.

Ms. Ellis noted that the consultants from ECONorthwest have begun their discussions with JPACT and the Metro Council. She distributed a handout, which outlined the key issues they identified. A forum, consisting of JPACT, Metro Council, and community and business leaders is planned, which will help draft a work program and public participation plan. In mid-June, the draft work program and public participation plans are expected to be presented to the various Metro advisory committees, then to JPACT and Metro Council for their approval by June.

Ms. Ellis presented a PowerPoint presentation (included as part of the meeting record).

**CONNECT OREGON UPDATE**

Ms. Julie Rodwell, ODOT Freight Mobility Manager, appeared before the committee to present an update on *ConnectOregon*, a new state program to aid freight mobility. Ms. Rodwell gave a PowerPoint presentation that included information on the following:

- Program background
- Grants and Loans
- Managing the Projects
- Project Considerations (criteria)
- Project Review Process
- Project Evaluation
  - Four Groupings
  - Process in SB71
  - Refined Process
- Timeline

In response to Ms. Rodwell's presentation, Mr. Selinger voiced his concerns that applicants might not have been aware that the six criteria were given varying weights. Ms. Rodwell clarified that while the legislation and the Oregon Transportation Commission (OTC) directions did not weight the six considerations, the Freight Advisory Committee requested weights be assigned.

Speaking to the sixth project consideration, Mr. Selinger noted that you couldn't have a project in final design until you have funds identified and a great deal the transit projects are in conceptual design. Ms. Rodwell agreed that because there are so little transportation funds, the transit projects might have been worse off in that category as compared to the other projects that were nearly ready, just needing the last portion of funding. She did note that because project readiness was just one consideration, it shouldn't preclude any good projects.

Mr. Papsdorf noted that while projects in all modes had cost estimates based on concept designs, the transit projects seemed more often to be deemed as incomplete in terms of cost estimates. He urged Ms. Rodwell to double check the consistency of those initial screenings. Ms. Rodwell stated that a great deal of hard work went into making the review consistent. She noted that anyone wishing to make a comment should do so by the end of the day today.

## **AIR QUALITY**

### *Regional Maintenance Plan*

Ms. Marianne Fitzgerald appeared before the committee and gave a PowerPoint presentation on the Regional Maintenance Plan (included as part of this meeting record). Her presentation included information on the following:

- Ozone Air Quality Trend
- Emission Results
- Emission Forecast
- Retain Existing Maintenance Strategies
- Proposed Rule Changes
- Proposed Contingency Plan
- Schedule

### *Air Quality Annual Update*

Due to time constraints, Mr. Cotugno asked Mr. Mark Turpel to present the Air Quality Annual Update at the next regular TPAC meeting.

## **MTIP ALLOCATION UPDATE RE: 1-205/COMMUTER RAIL/N. MACADAM STREETCAR**

Mr. Steve Siegel appeared before the committee to provide an update on the use of the MTIP funds for Commuter Rail, Portland Streetcar and I-205/Mall LRT projects. He directed the committee's attention to a memo (included as part of this record), which outlines the changes and impacts of those changes.

In his recollection of history, Mr. Scott Bricker noted that the City of Portland received \$10 million for N. Macadam (a consolidation of projects) but not for the streetcar specifically. Because of that consolidation process, the bike and pedestrian trail, an essential link to

downtown is currently at zero. Mr. Bricker stated that the City's commitment should not change even though the type of funds has changed.

**ADJOURN**

As there was no further business, Mr. Cotugno adjourned the meeting at 12:15p.m.

Respectfully submitted,

Jessica Martin  
Recording Secretary



BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF RECOMMENDING ) RESOLUTION NO. 06- 3695  
APPROVAL OF THE DRAFT 2006 PORTLAND- )  
VANCOUVER OZONE MAINTENANCE PLAN ) Introduced by Michael Jordan, COO,  
) in concurrence with President David Bragdon

WHEREAS, in accordance with the Clean Air Act Amendments (CAAA) of 1990, the U.S Environmental Protection Agency (EPA) designated the Portland region a marginal nonattainment area for the 1-hour ozone standard; and

WHEREAS, because of the region's air quality designation, the CAAA required that an ozone maintenance plan be prepared for the region; and,

WHEREAS, the Metro Council, after consultation and coordination with the Joint Policy Advisory Committee, approved Resolution No. 96-2260, For the Purpose of Recommending to the Environmental Quality Commission the Transportation Control Measures (TCM's), Contingencies, and Emissions Budgets to Be Included in the Portland Region's Ozone and Carbon Monoxide (CO) Maintenance Plans; and,

WHEREAS, the Oregon Environmental Quality Commission adopted the 1996 Ozone Maintenance Plan on July 12, 1996 and, in turn, the EPA approved said plan on May 19, 1997; and,

WHEREAS, although the region has not violated the 1 hour ozone standard since 1998 and has not violated the new 8 hour ozone standard, the CAAA and EPA rules require that the region update the 1997 Ozone Maintenance Plan to demonstrate continued maintenance of ozone standards through the year 2015; and,

WHEREAS, the Oregon Department of Environmental Quality (DEQ) has prepared a draft 2006 Ozone Maintenance Plan; and,

WHEREAS, the draft 2006 Ozone Maintenance Plan includes continuation of Employee Commute Options program, Industrial Emission Management program and air quality contingency plans which help ensure coordination between the state and region with regard to integrating transportation, land use and air quality; and,

WHEREAS, DEQ has, in accordance with state and federal requirements, asked for public comment on the draft 2006 Ozone Maintenance Plan; and,

WHEREAS, the Transportation Policy Advisory Committee, the Joint Policy Advisory Committee on Transportation and the Metro Council have reviewed and considered the April 18 draft Ozone Maintenance Plan; now therefore

BE IT RESOLVED that the Metro Council

1. Recommends that the Oregon Environmental Quality Commission approve the Portland area portion of the draft Portland-Vancouver AQMA (Oregon Portion) and Salem Keizer Area Ozone Maintenance Plan.

ADOPTED by the Metro Council this \_\_\_\_\_ day of May, 2006

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David Bragdon, Council President

Approved as to Form:

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Daniel B. Cooper, Metro Attorney

## STAFF REPORT

### IN CONSIDERATION OF RESOLUTION NO. 06-3695, FOR THE PURPOSE OF RECOMMENDING APPROVAL OF THE DRAFT 2006 PORTLAND-VANCOUVER OZONE MAINTENANCE PLAN

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Date: April 20, 2006

Prepared by: Mark Turpel

#### BACKGROUND

In the 1980's and 1990's, the Metro region had a problem with meeting federal ozone (smog) standards. There have been no ozone violations in the region since 1998. Today, the region is in attainment with both the 1 hour and 8 hour ozone standards. In addition, air quality conformity determinations (comparisons of future emissions from transportation with maximum transportation "budgets") for ozone are no longer required. However, an ozone maintenance plan update is still required by the federal Clean Air Act and U.S. Environmental Protection Agency rules.

Accordingly, the Oregon Department of Environmental Quality has prepared a draft 2006 Ozone Maintenance Plan for the Metro region of the Portland -Vancouver air quality maintenance area.

Plan features of note to the region include continuing the Employee Commute Option (ECO) and Industrial Emissions Management Program. The ECO program is proposed to be refocused to address employers with more than 100 employees instead of employers with more than 50 employees and reporting every two years instead of annually. These changes to the Employee Commute Option have been reviewed by the Regional Travel Options (RTO) committee. The 2006 Ozone Maintenance Plan also continues the Industrial Emissions Management Program, where a "cushion" is provided for expansion of existing businesses or new businesses. New growth allowances totals have been proposed and appear to be sufficient to provide for substantial growth.

As there is no longer any requirement for the region to model future ozone emissions from transportation sources, Metro and DEQ staff have discussed the worth of continuing this effort as a means of identifying potential problems early on. Such analysis is required for carbon monoxide and running the air quality emission model for ozone is easily done at the same time and with little extra effort. Metro and DEQ staff recommend that such ozone monitoring be done on a voluntary basis.

#### ANALYSIS/INFORMATION

##### 1. Known Opposition

None

##### 2. Legal Antecedents

###### Federal

Clean Air Act

SAFETEA-LU and predecessor transportation legislation

State

OAR 340, Division 200, State of Oregon Clean Air Act Implementation Plan  
OAR 340, Division 202 Ambient Air Quality Standards and PSD Increments  
OAR 340, Division 204 Designation of Air Quality Areas  
OAR 340, Division 224 Major New Source Review  
OAR 340, Division 225 Air Quality Analysis Requirements  
OAR 340, Division 232 Emission Standards for VOC Point Sources  
OAR 340, Division 242 Rules Applicable to the Portland Area - Employee Commute Options Program

Metro

Resolution No. 82-305, For the Purpose of Adopting the Ozone and Carbon Monoxide State Implementation Plans For the Oregon Portion of the Portland-Vancouver Air Quality Maintenance Area.

Resolution No. 85-610, For the Purpose of Endorsing the Revised Ozone Control Strategy For the Portland-Vancouver Interstate Air Quality Maintenance Area (AQMA).

Resolution No. 96-2260, For the Purpose of Recommending to the Environmental Quality Commission the Transportation Control Measures (TCM's), Contingencies, and Emissions Budgets to Be Included in the Portland Region's Ozone and Carbon Monoxide (CO) Maintenance Plans.

**3. Anticipated Effects**

Approval of the 2006 Ozone Maintenance Plan will ensure that federal regulations are met and air quality standards maintained.

**4. Budget Impacts**

The approval of the 2006 Ozone Maintenance Plan will result in fewer requirements for Metro.

**RECOMMENDED ACTION**

Approve Resolution No. 06-3695, FOR THE PURPOSE OF RECOMMENDING APPROVAL OF THE DRAFT 2006 PORTLAND-VANCOUVER OZONE MAINTENANCE PLAN

State of Oregon  
Department of Environmental Quality

Memorandum

**Date:** April 11, 2006

**To:** Interested Persons

**From:** Marianne Fitzgerald, (503) 229-5946

**Subject:** Portland-Vancouver and Salem Ozone Maintenance Plan  
and Proposed Rule Revisions

**Background**

The Portland area has exceeded federal clean air standards for ground level ozone (commonly known as summertime smog) in the past. The Oregon Department of Environmental Quality (DEQ) and the Southwest Clean Air Agency (SWCAA) developed Ozone Maintenance Plans for the Portland-Vancouver Air Quality Maintenance Area (AQMA) in 1996 that included several strategies to reduce emissions of air pollutants. DEQ and SWCAA are now updating the plans to demonstrate how the AQMA will maintain air quality within the 8-hour ozone standard through 2015. DEQ is also updating the ozone maintenance plan for the Salem area.

**Maintenance Plan Proposal**

Air quality data and projections show that the region will maintain clean air with the current programs in place. DEQ proposes to make certain rule changes to update certain parts of the maintenance plans affecting Portland and Salem. Highlights of the proposals include the following:

- Retain existing rules and strategies in the current ozone maintenance plans;
- Revise rules for Employee Commute Options to reduce administrative burdens while maintaining alternative commute programs at larger employers;
- Update rules for Industrial Emission Management in the Portland area, to manage growth of major new and expanding industrial sources;
- Redesignate Salem from a nonattainment area to a maintenance area under state rules; and
- Update rules for New Source Review in the Salem area, to manage growth of major new and expanding industrial sources.
- Amend DEQ rules to reflect the new federal ozone air quality standard, from the old 1-hour standard (which EPA has revoked) to the current federal 8-hour standard of 0.08 ppm, three year average.

The purpose of this memo is to let interested people know about the proposed plan and rule changes. Here is the schedule:

**Informational Meeting**

Friday, April 21, 2006, 8:30 am  
DEQ Headquarters, Room 3A  
811 SW Sixth Avenue  
Portland

**Rules Advisory Committee Meeting**

Thursday, May 4, 2006, 8:30 am  
DEQ Headquarters, Room 3A  
811 SW Sixth Avenue  
Portland

**Other key dates:**

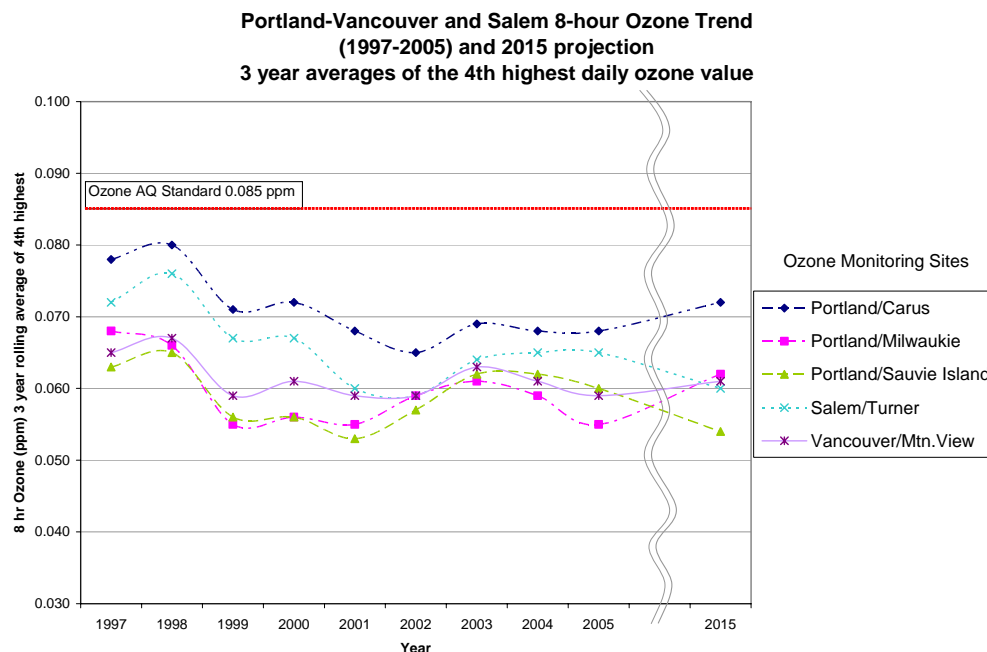
- Public Comment Period: June 1 to July 14, 2006
- Public Hearing: July 11, 2006 (Salem and Portland)
- EQC Adoption: December 14 or 15, 2006

### **Ozone Air Quality**

Ozone air pollution is often called summertime smog. Pollutants known as volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>) combine with oxygen to form ground level ozone on hot, stagnant summer days. Ozone producing emissions come from a wide variety of sources. Exposure to high levels of ground-level ozone can damage lung tissue and can be especially harmful to older people, children and people with respiratory ailments such as asthma.

The U.S. Environmental Protection Agency (EPA) revised the ozone standard from a 1-hour average of 0.12 ppm to an 8-hour average of 0.08 ppm in July 1997. After a lengthy court battle, the courts upheld the 8-hour ozone standard in 2002. EPA adopted rules to implement the 8-hour ozone standard on April 30, 2004, and revoked the 1-hour standard effective June 15, 2005.

**Figure 1**



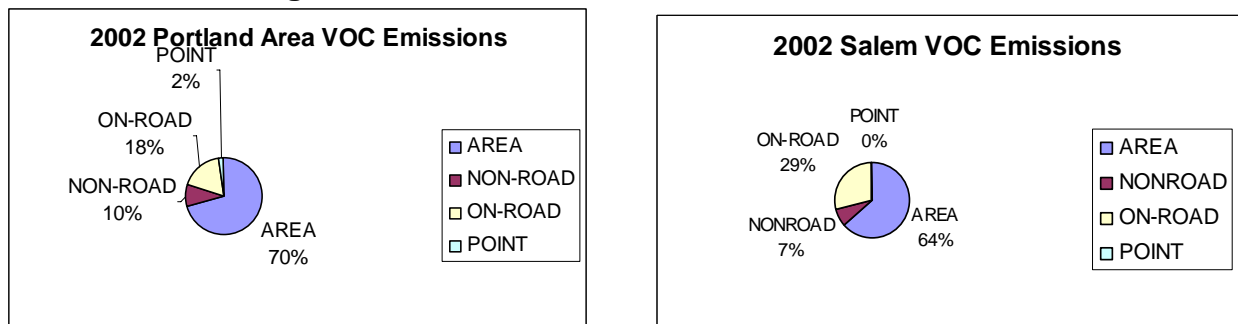
No violations of the 8-hour ozone standard have been recorded in Portland or Salem (see Figure 1). A violation is based on averaging the fourth highest daily 8-hour ozone values over a rolling three year period. There were exceedances of the 1-hour and 8-hour standards in 1996 and 1998 (based on the highest daily maximum 8-hour ozone value).

EPA designated the State of Oregon in “attainment” with the 8-hour ozone standard, effective June 15, 2004, based on air quality data from monitoring sites in the Portland-Vancouver, Salem, Eugene, and Medford areas. The federal Clean Air Act and EPA rules require DEQ to update the maintenance plan for Portland and Salem because they have violated the one-hour ozone standard in the past.

### **Where does the pollution come from?**

The latest emissions estimates indicate that the largest contributors of VOC emissions are “area sources” which are primarily from households, small businesses and other small diffuse sources (see Figures 2 and 3). Area sources include household consumer products, paints and other surface coating, dry cleaners, printing operations, open burning and wildfires. Mobile sources, which include both on-road motor vehicles and non-road engines, also are a major source of VOC emissions as well as air toxics and greenhouse gases. On-road motor vehicle emissions are projected to decrease as federal engine and fuel standards phase in over the next ten years. Emissions from small engines, including lawnmowers, construction equipment and recreational watercraft, are projected to increase due to population increases in the region. Industrial (point) sources are a relatively small portion of the 2002 emission inventory.

**Figure 2: VOC Emissions in Portland and Salem**



### **Future Year Forecast**

DEQ calculated 2015 air quality values using air quality dispersion modeling techniques. Modeling projections for 2015 ozone values are based on simulating meteorological conditions during a July 1998 episode that produced the highest ozone values in recent years. The model applies future year emission estimates to the meteorology and calculates ozone values. The 2015 maintenance projection predicts that the Portland-Vancouver AQMA and Salem-Keizer Area Transportation Study (SKATS) will remain in compliance with the 8-hour ozone standard (see Figure 1).

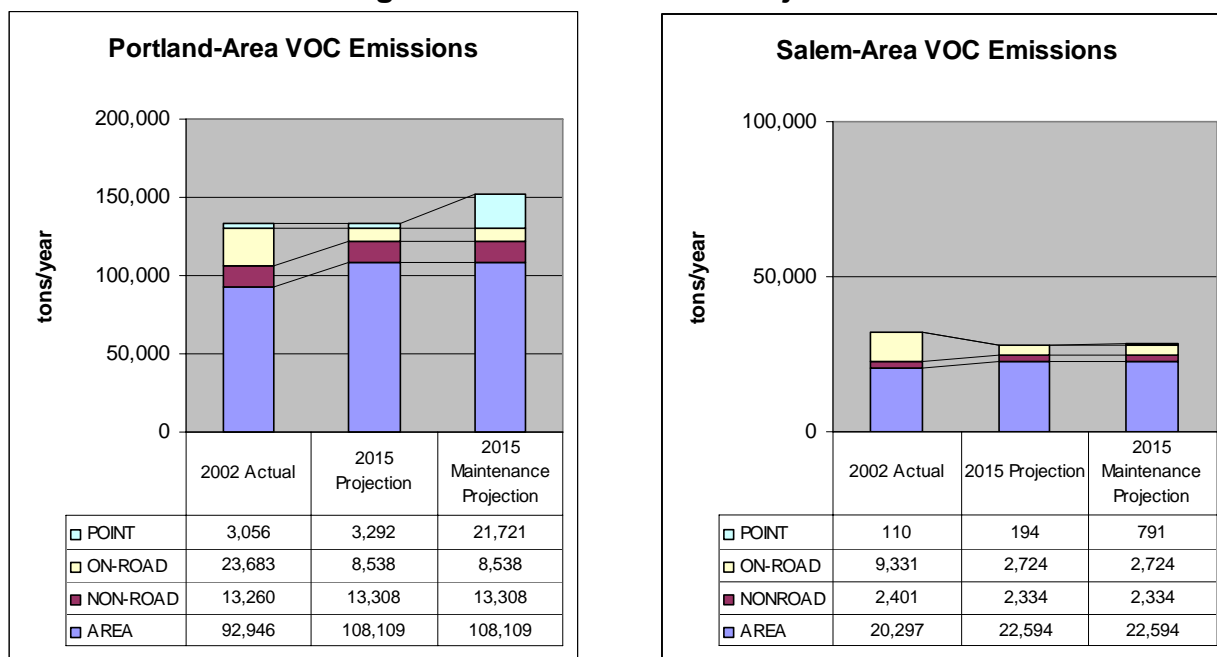
Figure 3 illustrates emission projections for 2015 in both Portland and Salem. These emission values are in tons per year and represent the annual emissions estimates. The Portland area includes Clackamas, Multnomah and Washington Counties. The Salem area includes Marion and Polk Counties.

- The “2002 actual” column represents the baseline year in the maintenance plan.
- The “2015 Projection” column represents the future year emissions using the actual emissions data that industrial sources reported to DEQ in 2002, forecast using employment projections through 2015. Growth factors and modeling techniques were also applied to other sources to calculate the 2015 emissions estimate. The “actual” emissions represent the most likely estimate of future year emissions.
- The “2015 Maintenance Projection” column represents future year emissions using the “allowable” plant site emission limits in industrial source air quality permits. The “allowable” emissions represent the most conservative estimate of industrial emissions

allowed under existing permits. The point source emissions estimate also includes the industrial emissions growth allowance described below.

The “2015 Maintenance Projection” is the emissions inventory used in the air quality dispersion model to determine whether the Portland-Vancouver AQMA and Salem SKATS would maintain compliance with the 8-hour ozone standard. The model predicts that both areas will remain within the 8-hour ozone standard in 2015 (see Figure 1).

**Figure 3: VOC Emission Projections**



**Air Quality Maintenance Plans for Portland-Vancouver and Salem**

DEQ is updating the Oregon portion of the Portland-Vancouver Ozone Maintenance Plan, and developing a Salem Ozone Maintenance Plan, to address federal Clean Air Act requirements and EPA rules. As discussed above, DEQ’s air quality modeling analysis demonstrates that even though some sources are projected to increase emissions and other are projected to decrease emissions over the next ten years, the strategies in the plan ensure that ozone air quality will remain within the federal 8-hour ozone standard (see Figures 1 and 3).

**Portland-Vancouver Ozone Maintenance Plan**

The maintenance plan that was adopted for the Portland-Vancouver AQMA in 1996 contained several rules and programs that reduced VOC and NO<sub>x</sub> emissions. These strategies would remain in place and work together to protect air quality as the population increases over the next ten years. These strategies also reduce emissions of air toxics and greenhouse gases that are emerging issues of concern.



The following strategies would remain in the Portland Ozone Maintenance Plan as they currently apply to sources in the Portland area:

- Motor Vehicle Inspection Program;
- Emission Standards for Industrial Sources of VOC;
- New Source Review Program for new and expanding major industrial facilities;
- Voluntary Parking Ratio Rules;
- Barge Loading Rules that control VOCs from gasoline delivery operations;
- Aerosol Paint Rules that lower VOC content from spray paints sold in the Portland area;
- Motor Vehicle Refinishing Rules that require low-emitting painting methods at autobody repair shops; and
- Public education and outreach that encourages people to voluntarily reduce emissions, such as not mowing lawns on Clean Air Action Days, and driving less during Air Pollution Advisories.

The following strategies would also remain in the Portland Ozone Maintenance Plan, but would be modified (see detail below):

- Employee Commute Options (ECO) Program; and
- Industrial Emission Management Program.

Stage II gasoline vapor recovery system requirements for gas stations in the Portland area would remain in effect until enough newer cars and trucks with on-board vapor recovery canister systems become widespread within the motor vehicle fleet.

### Salem Ozone Maintenance Plan

The Portland-Vancouver and Salem SKATS Ozone Maintenance Plans are being updated together because Salem's ozone concentrations are impacted by emissions of VOC and NO<sub>x</sub> in the Portland area. Salem is technically defined as a "rural" ozone nonattainment area, and a plan was developed in September, 1980 under EPA's rural ozone policy and approved by EPA in 1982. The Salem Ozone Maintenance Plan relies on three strategies:

- Controls on major existing industrial VOC sources under Reasonably Available Control Technology (RACT) rules;
- Controls on major new or expanding industrial VOC sources under Lowest Achievable Emission Rate (LAER) rules; and
- An approved control strategy for the major upwind urban area influencing ozone concentrations in Salem (Portland).

DEQ requested redesignation of Salem to a maintenance area in 1987, but the plan was returned by EPA without formal action. Salem's ozone monitor was temporarily discontinued from 1987 through 1994 due to low ozone air quality levels and agency budget cuts. Following the 1990 Clean Air Act Amendments, Salem was designated a "nonattainment" area with incomplete data. No violations of the 1-hour ozone standard have been recorded at the Salem/Turner monitoring site since 1996, and no violations of the 8-hour ozone standard have ever been recorded.

DEQ proposes to retain the strategies in the Salem Ozone Maintenance Plan, including the industrial source RACT rules, although two rules affecting the Salem area would be modified (see detail below):

- Redesignate Salem from a “nonattainment” area to a “maintenance” area under state rules; and
- Modify requirements for major new industrial sources from “Lowest Achievable Emission Rate” (LAER) to “Best Available Control Technology (BACT); all other new source review requirements would remain the same.

### **Proposed Revisions to Strategies and Rules**

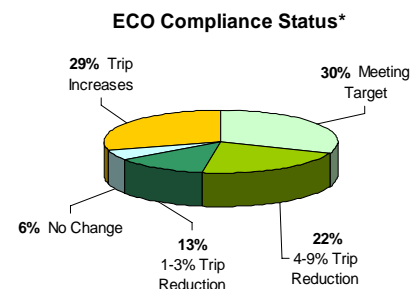
DEQ proposes to amend certain rules as part of the Portland-Vancouver and Salem Ozone Maintenance Plan. The proposed revisions are described below.

### **Employee Commute Options Program Rules**

The Employee Commute Option rules affect employers in the Portland area with more than 50 employees reporting to a single work site. Affected employers must provide incentives for employee use of alternative commute options. The incentives must have the potential to reduce commute trips to the work site by 10% within three years of completing an initial employee survey. Annual surveys measure progress toward this goal.

Key program statistics:

- Number of employer work sites: 1212
- Estimated number of employees affected: 250,000
- Annual Vehicle Miles Traveled reduced: 35.4 million



\*based on survey data as of August 2005. Not all employers are required to survey.

Annual survey data indicates that larger employers are more likely to comply with ECO and provide meaningful transportation options to their employees. Larger employers represent most of the employees in the region. Smaller companies make up the majority of employers who are behind with ECO compliance.

- Employers with more than 100 employees generate 92% of the total trip reduction.
- Employers with more than 100 employees make up 86% of the total ECO affected *employees*.
- Employers with more than 100 employees make up 53% of the total ECO affected *employers*.

DEQ is proposing changes that would more effectively focus limited DEQ staff resources on the larger employers, and update some provisions in the rules. The following are proposed changes to the ECO rules:

- Change the threshold for rule applicability from “more than 50” to “more than 100” employees.
- Change the survey requirement from annual to every two years.

- Require all employers to submit an approved plan, or demonstrate that they participate in an equivalent commute trip reduction program, such as EPA's Best Workplaces for Commuters program or TriMet's Passport program.
- Modify the survey requirements to allow an employer to submit follow-up survey results with less than 75% response rate. DEQ would assign single occupancy vehicle trips to the percentage of employees who did not respond up to the 75% rate.
- Eliminate the 2006 sunset date since the ozone maintenance plan does not sunset.
- Require employers that qualify for exemptions (e.g. through restricted parking ratios) to certify every two years that they continue to qualify for the exemption.

The Employee Commute Option Program has been effective in reducing the amount of vehicle miles traveled by single-occupancy-vehicles in the Portland area, thereby reducing air pollution and traffic congestion in the region. The ECO program has resulted in an estimated annual reduction of over 100 tons of VOCs and over 85 tons of NO<sub>x</sub>. In addition to the benefits to ozone air quality, DEQ estimates that the ECO program is also effective in reducing over 44 million pounds per year of carbon dioxide (a greenhouse gas), as well as associated air toxics emissions (most notably benzene). DEQ's proposed rule changes would streamline the program and make it more effective in encouraging alternative commute trips among larger employers while providing relief to smaller employers.

#### Update to the Industrial Emission Management Rules

DEQ proposes to update the Portland-area Industrial Emissions Management Program to support economic development for major new or expanding sources that locate in the Portland area while assuring compliance with the ozone standard. Currently, major new or expanding sources that propose to increase emissions of more than 40 tons/year of VOC or NO<sub>x</sub> must "offset" those emission increases. The 1996 Portland Ozone Maintenance Plan established a growth allowance that could be used to offset those emission increases while maintaining clean air. DEQ's modeling analysis shows that the growth allowance could be continued and still maintain air quality within the air quality standard (see Figure 1 and Figure 3).

DEQ proposes to modify the rules to:

- Re-establish the size of the growth allowance at 5000 tons of VOC and 5000 tons of NO<sub>x</sub>; and
- Provide an opportunity to replenish the growth allowance, if needed, based on periodic emission inventory updates and an evaluation of ozone air quality monitoring data and trends.

#### Salem Redesignation and New Source Review

Salem is currently designated a "nonattainment" area under state rules, and major new and modified industrial sources that emit more than 40 tons/year of VOC or NO<sub>x</sub> are subject to the most stringent emission control technologies known as "Lowest Achievable Emission Rate" (LAER). Once redesignated as a "maintenance" area, state rules would continue to require sources emitting more than 40 tons/year of VOC or NO<sub>x</sub> to install emission control technology, but would lessen the level of control required from LAER to "Best Achievable Control Technology (BACT)". If Salem were not redesignated as a "maintenance" area, but were redesignated a federal attainment area only, then BACT emission control technology would not be required until a new or expanding major industrial source became a Federal Major Source and emitted 100 tons/year or more of VOC or NO<sub>x</sub> for 28 source categories, or 250 tons/year or more of VOC or NO<sub>x</sub> for other sources. DEQ believes maintaining a lower maintenance area threshold of 40 tons/year for triggering BACT requirements will better protect future compliance with the ozone standard in the Salem area.

The main difference between LAER and BACT is the consideration of cost. LAER reflects the most stringent level of emission control achievable at the time of permitting, and it must be installed

regardless of cost. BACT can also provide a very high level of control, but cost is allowed as a consideration when evaluating the feasibility and cost effectiveness of control options.

**Contingency Plans:**

DEQ proposes to modify the existing Portland-Vancouver contingency plan, and adopt a contingency plan for Salem. The contingency plan establishes early warning thresholds that are designed to prevent violations of the 8-hour ozone standard.

The contingency plan consists of several tiers:

- If air quality is forecast to exceed the standard for one or more days, DEQ will issue a health warning to sensitive individuals and groups and seek voluntary emission reductions;
- If air quality is at risk of violating the 8-hour ozone standard, DEQ will investigate the cause of the event, review key maintenance plan assumptions, and take corrective action with new strategies as needed.
- If air quality violates the standard, DEQ will also investigate the cause of the event, review key maintenance plan assumptions, and take corrective action as needed to reduce emissions and prevent future violations.

**For more information**

If you have questions or would like a copy of the discussion draft of the Portland-Vancouver AQMA and Salem-Keizer Area Ozone Maintenance Plan and associated rules, please contact Marianne Fitzgerald at DEQ's Air Quality Division in Portland at (503) 229-5946, or [fitzgerald.marianne@deq.state.or.us](mailto:fitzgerald.marianne@deq.state.or.us).

# *Discussion Draft*

## Portland-Vancouver AQMA (Oregon Portion) and Salem Keizer Area Ozone Maintenance Plan

Oregon Department of Environmental Quality  
Air Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

April 18<sup>th</sup>  
2006

### **For more information**

If you have questions or would like a copy of the proposed rule revisions, please contact Marianne Fitzgerald at DEQ's Air Quality Division in Portland at (503) 229-5946, or [fitzgerald.marianne@deq.state.or.us](mailto:fitzgerald.marianne@deq.state.or.us).

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## Oregon State Implementation Plan Section 4.50

### Portland-Vancouver AQMA (Oregon portion) And Salem-Keizer Area 8-hour Ozone Maintenance Plan

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## Executive Summary

The Portland area has exceeded federal clean air standards for ground level ozone (commonly known as summertime smog) as recently as 1998. In 1996, the Oregon Department of Environmental Quality (DEQ) and the Southwest Clean Air Agency (SWCAA) developed Ozone Maintenance Plans for the Portland-Vancouver Air Quality Maintenance Area (AQMA) that included several strategies to reduce air pollutants and ensure compliance with ozone standards. These strategies were successful in reducing smog forming emissions and no violations of the ozone standard have occurred in the Portland-Vancouver area since 1998.

In 1997, the U. S. Environmental Protection Agency (EPA) revised the ozone standard from a 1-hour average of 0.12 parts per million (ppm) to an 8-hour average of 0.08 ppm. This 2006 ozone maintenance plan is a revision to the 1996 maintenance plan for the Portland-Vancouver area, and ensures continued compliance with the new 8-hour ozone standard through at least 2015. The plan also includes an ozone maintenance plan for the Salem-Keizer Area Transportation Study (SKATS) area. Both the Portland-Vancouver and Salem areas are covered in the Departments ozone maintenance (modeling) analysis. An ozone maintenance plan update for the Vancouver portion of the Portland-Vancouver AQMA is being prepared by the Southwest Clean Air Agency in Vancouver, Washington.

This 2006 maintenance plan continues the same strategies adopted for the Portland-Vancouver AQMA in 1996 to reduce and manage Volatile Organic Compounds (VOC) and Nitrogen Oxide (NO<sub>x</sub>) emissions. Air quality data and projections show that ozone levels can still occasionally approach or exceed the 8-hour ozone standard in the Portland-Vancouver area, but that with the existing strategies in place, the region will maintain compliance with the 8-hour ozone standard. The suite of strategies described below work together to protect air quality as growth and population pressures increase over the next ten years. This suite of strategies will also reduce emissions of air toxics and greenhouse gases that are important emerging issues of concern.

The following strategies will remain in the Portland-Vancouver Ozone Maintenance Plan as they currently apply to sources in the Portland area:

- Motor Vehicle Inspection Program;
- Emission Standards for Industrial Sources of VOC;
- New Source Review Program for new and expanding major industrial facilities;
- Voluntary Parking Ratio Rules;
- Barge Loading Rules that control VOCs from gasoline delivery operations;
- Aerosol Paint Rules that lower VOC content from spray paints sold in the Portland area;
- Motor Vehicle Refinishing Rules that require low-emitting painting methods at autobody repair shops; and
- Public education and outreach that encourages people to voluntarily reduce emissions, such as not mowing lawns and driving less on Clean Air Action Days (now called Air Pollution Advisories).

Strategies that have reduced VOC emissions in the Salem SKATS area will also remain in place, including emission standards for existing industrial source of VOC.



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The 2006 maintenance plan includes updates to several programs:

- Revised rules for Employee Commute Options in the Portland Area to reduce administrative burdens while maintaining alternative commute programs at larger employers;
- Updated rules for Industrial Emission Management in the Portland area, to manage growth of new and expanding major industrial sources;
- Designate the Salem-Keizer Air Quality Area as an ozone maintenance area under state rules;
- Revised rules for New Source Review in the Salem area, to change emission control technology requirements for new and expanding major industrial sources; and
- Amended DEQ rules to reflect the new federal ozone air quality standard, from the old 1-hour standard (which EPA has revoked) to the current federal 8-hour standard of 0.08 ppm, three year rolling average.

## **4.50.1 Background**

Ground level ozone, also known as smog, is an air pollutant formed in the atmosphere by a chemical reaction of volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>). This reaction is most intense on hot summer days with poor ventilation. Ozone is a strong respiratory system irritant that aggravates respiratory illnesses, impairs athletic performance, and can cause permanent respiratory system damage. Ozone can be especially harmful to older people and children, and can damage crops and other materials. In the past, motor vehicles and industrial operations have been the major sources of ozone precursors. We now recognize that other sources such as household products, paints, construction equipment, watercraft and lawnmowers are major contributors to ozone formation.

Historically, the Portland-Vancouver and Salem-Keizer areas violated the national ambient air quality standard (NAAQS) for ground level ozone<sup>1</sup>. The Portland-Vancouver Air Quality Maintenance Area (AQMA) and the Salem-Keizer Area Transportation Study (SKATS) areas were designated nonattainment for ozone on March 3, 1978 under the 1977 Clean Air Act Amendments. Plans were subsequently developed to reduce ozone precursor emissions of VOC and NO<sub>x</sub>, and bring the areas into compliance (attainment) with standards. Under the 1990 Clean Air Act Amendments, the Portland-Vancouver AQMA was designated a “marginal” ozone nonattainment area, and Salem-Keizer Transportation Area Study was designated “nonattainment/insufficient data”.

### **4.50.1.1 Portland-Vancouver AQMA**

Over several decades, efforts to reduce smog forming emissions in the Portland area have included a combination of federal, state, and local emission control strategies, including a vehicle inspection and maintenance program for Portland-area motor vehicles (1975), industrial VOC controls (1978), and area source controls on gasoline station vapors (1991). The most recent ozone maintenance plan for Portland-Vancouver was adopted by the Oregon Environmental Quality Commission (EQC) on July 12, 1996 and approved by EPA on May 19, 1997 (62FR 27204). A violation of the 1-hour ozone standard did occur in 1998, before all

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<sup>1</sup> Ozone monitoring sites were established in Oregon beginning in the early 1970s (see Appendix 1).

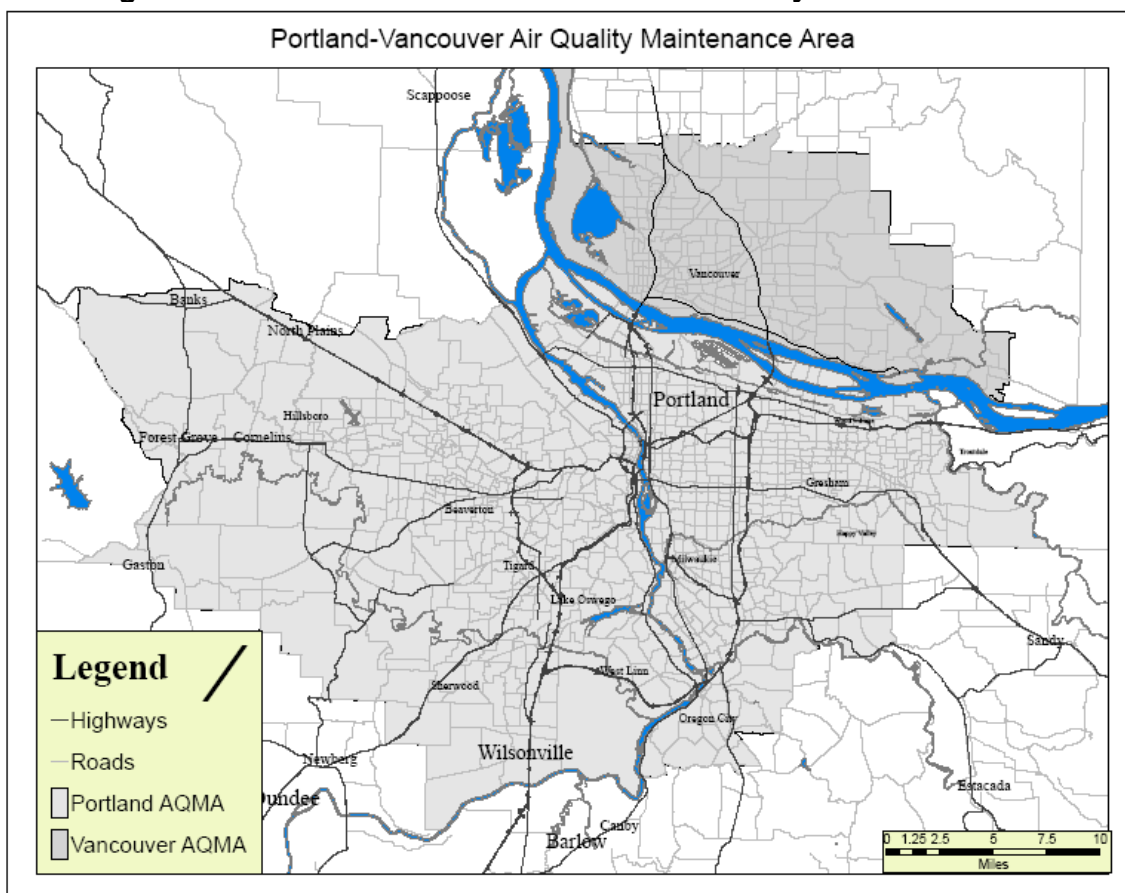
# DISCUSSION DRAFT

emission reduction measures had been fully implemented. However, since 1998, there have been no violations of the ozone standard.

In 1997, the U. S. Environmental Protection Agency (EPA) revised the ozone standard from a 1-hour average of 0.12 parts per million (ppm) to an 8-hour average of 0.08 ppm. After a lengthy court battle, the courts upheld the 8-hour ozone standard in 2002. EPA adopted rules to implement the 8-hour ozone standard on April 30, 2004, and revoked the 1-hour standard effective June 15, 2005. EPA designated the State of Oregon in "attainment" with the 8-hour ozone standard, effective June 15, 2004 (62FR 23858, April 30, 2004).

EPA's transition rules from the 1-hour to 8-hour ozone standards require DEQ to prepare this 2006 maintenance plan update for the Portland-Vancouver area to ensure continued compliance with the 8-hour ozone standard. Also, in accordance with EPA rules to implement the 8-hour ozone standard (62 FR 23951, April 30, 2004), Oregon hereby requests that EPA remove the obligation to do a second one-hour ozone maintenance plan.

**Figure 1: Portland-Vancouver Interstate Air Quality Maintenance Area**



An analysis of meteorological and growth factors indicates that the number of days with elevated ozone levels should have risen over the past several years, but in fact has remained relatively stable (see Appendix 2). This stable ozone trend indicates that the ozone strategies

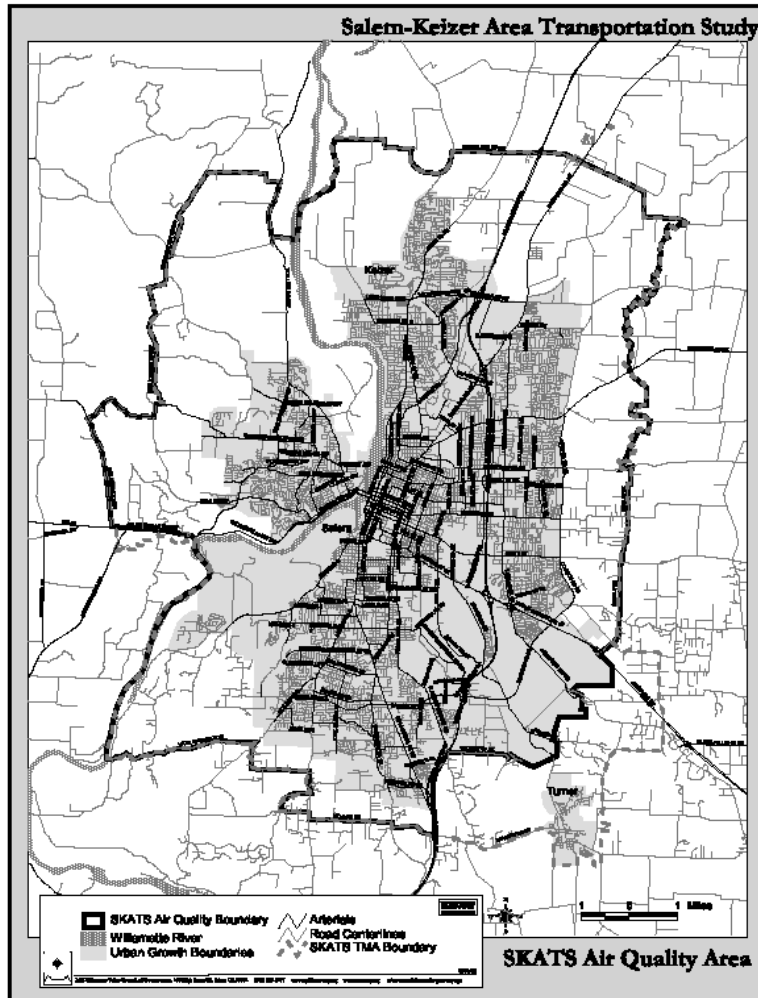
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continue to work despite significant population growth in the metropolitan area and the occurrence of high temperature/air stagnation events that drive ozone formation. The suite of emission reduction strategies contained in Portland ozone plan will continue to be very successful in reducing smog forming emissions, and will continue to ensure compliance with ozone standards in to the future.

## 4.50.1.2: Salem-Keizer Area

The Salem area marginally violated the federal air quality standard for ozone in the 1970s and was designated an ozone nonattainment area on March 3, 1978 under the 1977 Clean Air Act Amendments. The Mid-Willamette Valley Council of Governments recommended the nonattainment area as the area within the Salem-Keizer Area Transportation Study boundary (SKATS). This includes portions of Marion and Polk County, including the cities of Salem and Keizer.

Figure 2: Salem-Keizer Area Transportation Study Air Quality Area



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Salem's ozone concentrations appear to be influenced by emissions of ozone precursors in the Portland area. In 1979 the Salem area was defined under EPA guidelines as a "rural" ozone nonattainment area, and an Attainment Plan was adopted by the EQC in September, 1980 and approved by EPA on April 12, 1982. Salem's attainment plan under the rural ozone policy consists of three elements: 1) controls on major existing sources of volatile organic compounds under Reasonably Available Control Technology (RACT) rules, 2) controls on major new VOC sources under Lowest Achievable Emission Rate (LAER) rules, and 3) an approved maintenance plan for the Portland-Vancouver AQMA, which is the major urban area upwind of Salem.

DEQ had developed a maintenance plan and requested redesignation to attainment in 1987, but EPA returned the plan because EPA did not believe it contained sufficient emission inventory data and forecasts. Due to low ambient ozone levels and agency budget cuts, DEQ discontinued the Salem ozone monitor from 1987 through 1994 and was not able to complete the necessary planning work for redesignation. Under the 1990 Clean Air Act Amendments, SKATS was designated a nonattainment area with incomplete data. In 1995, DEQ reinstated the ozone monitor to support development of a maintenance plan for Salem, but was unable to secure staffing resources to complete the plan.

No violations of the federal 1-hour standard have been recorded at the Salem/Turner ozone monitoring site since 1996, and no violations of the 8-hour ozone standard have ever been recorded (see Figure 3 and Tables 1 and 2). Salem SKATS was designated in attainment with the 8-hour ozone NAAQS effective June 15, 2004 (62 FR 23858, April 30, 2004).

## **4.50.2 Ozone Trends and Compliance with Standards**

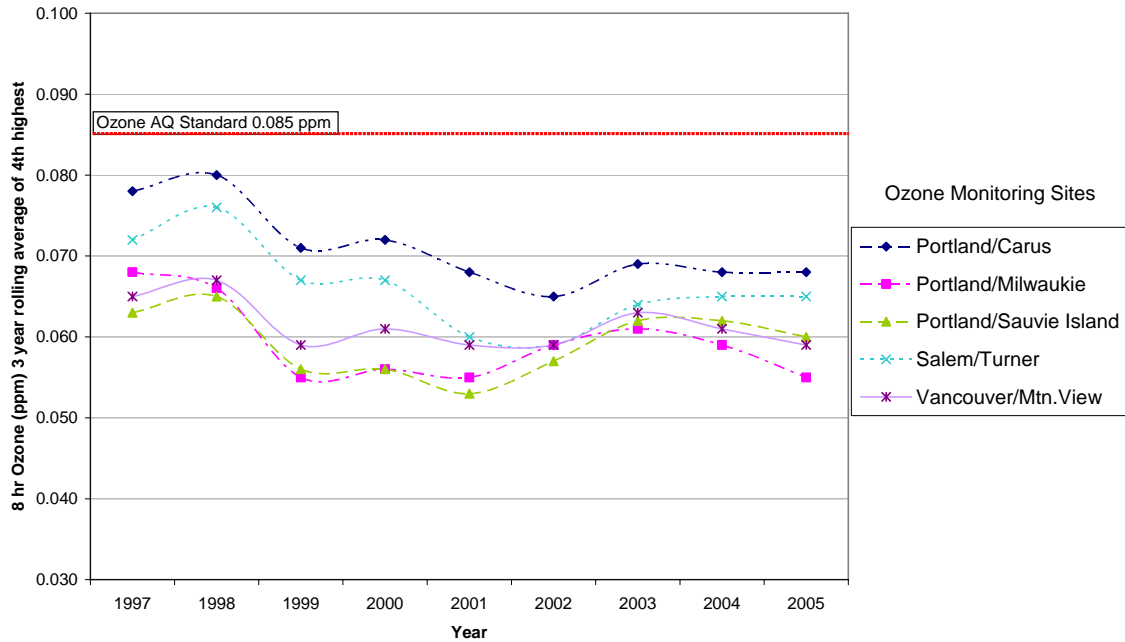
Figure 3 shows the ozone trends measured at monitoring sites for the Portland, Vancouver, and Salem areas for the period 1997 through 2005. Table 1 shows the highest maximum 8-hour average ozone concentrations measured for 1998, 2003, 2004, and 2005. While these peak values are important in assessing public health risk, they are not used to determine official compliance with the federal ozone standard. Compliance with the standard is based on a statistical method that looks at the three year average of the 4<sup>th</sup> highest (maximum 8-hr avg.) ozone value each year. If the three-year average of the 4<sup>th</sup> highest values exceeds the standard, the area is in violation. Table 2 shows the rolling three-year average of 4<sup>th</sup> high values for 1998, 2003, 2004, and 2005. It is these ("design values") that are compared to the 0.08 ppm ozone standard to determine compliance. Under EPA's calculation convention, a value of 0.084 ppm would round down to 0.08 ppm (i.e. in compliance), while a value of 0.085 ppm or higher would be a violation.

Key ozone monitoring sites include the "Carus" site in Portland, "Mountain View" site in Vancouver, and the "Turner" site in Salem (see Appendix 1).

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**Figure 3: Portland-Vancouver and Salem 8-Hour Ozone Values**

8-hour Ozone Air Quality (1997-2005)  
3 year averages of the 4th highest daily ozone value



**Table 1: 8-Hour Ozone Maximum Values**

8-hour ozone standard = 0.08 ppm  
Exceedance = 0.085 ppm maximum

Monitoring Site	1998 8-hour Maximum	2003 8-hour Maximum	2004 8-hour Maximum	2005 8-hour Maximum
Portland/Carus	0.116	0.084	0.084	0.079
Portland/Milwaukie	0.100	0.068	0.077	0.063
Portland/Sauvie Island	0.077	0.073	0.061	0.065
Vancouver/Mtn. View	0.078	0.076	0.065	0.076
Salem/Turner	0.098	0.080	0.068	0.080

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**Table 2: 8-Hour Ozone 4<sup>th</sup> High, Design Values**

Design Value = 4<sup>th</sup> highest 8-hour average, averaged over three years

8-hour ozone standard = 0.08 ppm

Violation = 0.085 ppm design value

Monitoring Site	1998 Design Value	2003 Design Value <sup>2</sup>	2004 Design Value	2005 Design Value
Portland/Carus	0.080	0.070	0.068	0.068
Portland/Milwaukie	0.066	0.060	0.059	0.055
Portland/Sauvie Island	0.065	0.060	0.062	0.060
Vancouver/Mtn View	0.067	0.060	0.061	0.060
Salem/Turner	0.076	0.060	0.065	0.065

### **4.50.3 Attainment Inventory**

DEQ developed an attainment emission inventory for the year 2002. The emission inventory reflects detailed estimates of emissions from all sources on an annual, countywide basis.

Emissions are grouped in four major categories:

- Industrial (Point) Sources (sources with a DEQ air quality permit),
- On-Road Mobile Sources (e.g. motor vehicles and trucks),
- Non-Road Mobile Sources (e.g. lawnmowers, construction equipment and other small engines), and
- Area Sources (e.g. household products, print shops, degreasing and surface coating operations, pesticide application, open burning and wildfires).

The 2002 Consolidated Emissions Reporting Rule (CERR) emissions data submitted by DEQ and SWCAA to EPA's National Emission Inventory (NEI) was used as the basis for the 2002 attainment year inventory. This 2002 county-by-county annual inventory was developed following the currently accepted methodologies for the National Emission Inventory. Appendix 3 and Appendix 4 describe the emissions inventory calculations in more detail.

Table 3 contains the countywide estimates for the Portland-Vancouver AQMA, Oregon portion (Clackamas, Multnomah and Washington Counties) and Salem SKATS (Marion and Polk Counties) in tons/year. Countywide estimates, in tons/year, will be used to track future emission trends. The final Portland-Vancouver and Salem Ozone Maintenance Plan will include a typical summer-seasonal day emission inventory, adjusted for AQMA and SKATS boundaries, in accordance with EPA guidance.

Area source emissions were calculated following EPA guidance for the 2002 NEI. Area sources are the largest category of emission sources. Some of these sources of VOC emissions include

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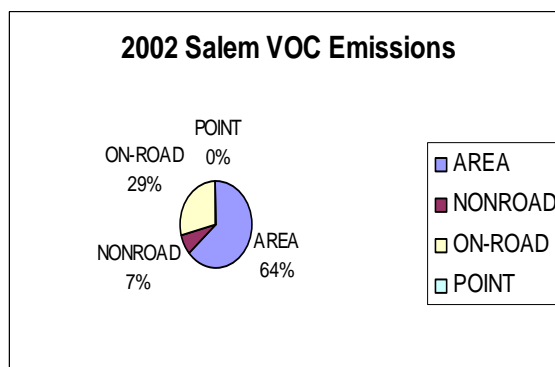
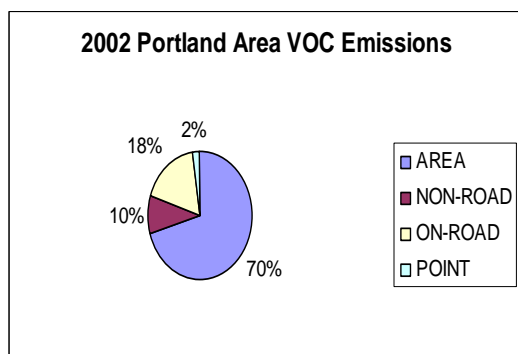
<sup>2</sup> 2003 Design Value was used to determine the attainment designation for Portland-Vancouver AQMA (January 22, 2004 letter from DEQ to EPA). Design value is calculated using the 4<sup>th</sup> highest ozone value at each monitoring site, averaged over 3 years.

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painting, surface coating and degreasing operations; print shops; dry cleaners; and household consumer products. The annual area source emissions inventory in both Portland and Salem includes residential wood stoves, a significant emitter of VOC but not likely to be in use during ozone episode conditions with temperatures above 90 degrees. The summer-seasonal emissions inventory and ozone maintenance modeling demonstration reflect daily summertime conditions.

**Table 3: Portland and Salem 2002 Annual Emissions (tons/year)**

Portland-Area 2002 Emissions (Clackamas, Multnomah, Washington Counties)			Salem-Area 2002 Emissions (Marion, Polk Counties)		
Source Type	2002 VOC	2002 NO <sub>x</sub>	Source Type	2002 VOC	2002 NO <sub>x</sub>
AREA	92,946	5,808	AREA	20,297	1,646
NON-ROAD	13,260	17,347	NONROAD	2,401	3,159
ON-ROAD	23,683	36,786	ON-ROAD	9,331	11,276
POINT	3,056	2,522	POINT	110	290
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Total	132,944	62,464	Total	32,138	16,371



Non-road mobile source emissions were calculated using EPA's draft NONROAD2002 model and other methods following EPA guidance for the NEI. Non-road engines are also significant contributors to both VOC and NO<sub>x</sub> during the summer ozone season, and sources include aircraft, locomotives and marine engines as well as lawn and garden equipment, construction equipment, boats and personal watercraft.

On-road mobile source emissions for the 2002 CERR were calculated using traffic data and growth forecasts from the Oregon Department of Transportation. Because of growing vehicle travel throughout the region, motor vehicles will continue to be significant emitters of VOCs and NO<sub>x</sub>, although motor vehicle emission standards will reduce individual vehicle emissions over the next ten years.

Point source emissions for the 2002 Attainment Inventory are based on data submitted by permitted facilities and reflect actual 2002 emissions reported in annual permit reports to DEQ.

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Within the Portland-Vancouver AQMA, industrial point sources that emit more than 10 tons/year of VOC, 40 tons/year of NO<sub>x</sub>, or 100 tons/year of CO were inventoried. Outside of the Portland-Vancouver AQMA (including Salem), point sources that emit more than 40 tons/year of NO<sub>x</sub> or 100 tons/year of VOC or CO were inventoried. Stack parameters, activity, and exact location were collected to provide the most comprehensive accounting possible.

*Reserved for seasonally adjusted summer-season emissions inventory*

**Table 4: Portland and Salem 2002 VOC and NO<sub>x</sub> Summer-Season Daily Emissions**

Reserved

## **4.50.4 Portland and Salem Control Strategies**

### **4.50.4.1 Portland-Vancouver AQMA Ozone Maintenance Plan**

The Portland-Vancouver AQMA Ozone Maintenance Plan (Oregon portion) includes federal, state and local emission control programs. All four major source categories of ozone precursor emissions (VOC and NO<sub>x</sub>) are affected by rules that reduce emissions from these sources. Several of the strategies provide benefits beyond VOC and NO<sub>x</sub> emission reductions, such as air toxics and greenhouse gas emission reductions, traffic congestion reduction, energy savings, and overall cost-savings for the transportation systems.

The existing Portland-Vancouver AQMA Ozone Maintenance Plan strategies will remain in place and work together to protect air quality as the population increases over the next ten years. These strategies have successfully reduced VOC and NO<sub>x</sub> emissions and also reduce emissions of air toxics and greenhouse gases that are emerging issues of concern.

The following strategies will remain in the Portland Ozone Maintenance Plan as they currently apply to sources in the Portland area:

- Motor Vehicle Inspection Program;
- Emission Standards for VOC Point Sources (Reasonably Available Control Technology) for existing major industrial facilities;
- New Source Review Program for new and expanding major industrial facilities;
- Voluntary Parking Ratio Rules;
- Barge Loading Rules that control VOCs from gasoline delivery operations;
- Aerosol Paint Rules that lower VOC content from spray paints sold in the Portland area;
- Motor Vehicle Refinishing Rules that require low-emitting painting methods at autobody shops; and
- Public education and outreach that encourages people to voluntarily reduce emissions, such as not mowing lawns and driving less on Clean Air Action Days (now called Air Pollution Advisories).

The following strategies Portland-Vancouver Ozone Maintenance Plan strategies (Oregon portion), have been modified:



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- Employee Commute Options Program: Program requirements now focus on larger employers (100 or more employees) and reduce the survey requirements from annual to every two years (see detail below),
- Industrial Emission Management Program: Updated industrial growth allowance for new and modified major industrial sources and create a public process to replenish the growth allowance (see detail below).

In June, 2005, the Environmental Quality Commission amended the Vehicle Inspection Program rules to replace the “enhanced” vehicle inspection test with the “basic” vehicle inspection test for vehicle model years 1981-1995. This change is reflected in the modeling projections and maintenance demonstration of this plan.

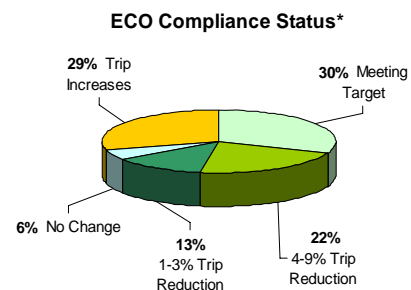
Stage II vapor recovery system requirements for gas stations will remain in effect until the motor vehicle fleet reflects widespread use of on-board canister systems. The Stage II rules will be revised at that time (prior to 2015). The eventual shift from Stage II vapor recovery to on-board canisters is reflected in the 2015 modeling projections and maintenance demonstration of this plan.

#### 4.50.3.1.1 Changes to the Employee Commute Options Rule

The Employee Commute Options Program rules adopted in 1996 (OAR 340-242-0010 through 0290) require Portland-area employers with more than 50 employees to implement programs that would reduce single-occupancy commute travel by 10%. Affected employers must provide incentives for employee use of alternative commute options. The incentives must have the potential to reduce commute trips to the work site by 10% within three years of completing an initial employee survey. Annual surveys measure progress toward this goal.

#### Key program statistics:

- Number of employer work sites: 1212
- Estimated number of employees affected: 250,000
- Annual Vehicle Miles Traveled reduced: 35.4 million



\*based on survey data as of August 2005. Not all employers are required to survey.

# DISCUSSION DRAFT

Annual survey data indicates that larger employers are more likely to comply with ECO and provide meaningful transportation options to their employees. Larger employers represent most of the employees in the region. Smaller companies make up the majority of employers who are behind with ECO compliance.

- Employers with more than 100 employees generate 92% of the total trip reduction.
- Employers with more than 100 employees make up 86% of the total ECO affected *employees*.
- Employers with more than 100 employees make up 53% of the total ECO affected *employers*.

DEQ has modified the ECO program to more effectively focus limited DEQ staff resources on larger employers that produce the most significant amount of emission reduction benefit, and to streamline reporting requirements. Program changes include:

- Changing the threshold for rule applicability from “more than 50” employees to “more than 100” employees;
- Changing survey requirements from annual to every two years;
- Requiring all employers to submit an approved plan, or demonstrate that they participate in an equivalent commute trip reduction program, such as EPA’s Best Workplaces for Commuters program or TriMet’s Passport program;
- Modifying survey requirements to allow an employer to submit follow-up survey results with less than 75% response rate. DEQ will assign single occupancy vehicle trips to the percentage of employees who did not respond up to the 75% rate;
- Eliminating the 2006 sunset date since the ozone maintenance plan does not sunset; and
- Requiring employers that qualify for exemptions (e.g. through restricted parking ratios) to certify every two years that they continue to qualify for the exemption.

The Employee Commute Option Program has been effective in reducing the amount of vehicle miles traveled by single-occupancy-vehicles in the Portland area, thereby reducing air pollution and traffic congestion in the region. The ECO program has resulted in an estimated annual reduction of over 100 tons of VOCs and over 85 tons of NO<sub>x</sub>. In addition to the benefits to ozone air quality, DEQ estimates that the ECO program is also effective in reducing over 44 million pounds per year of carbon dioxide (a greenhouse gas), as well as associated air toxics emissions (most notably benzene). DEQ’s proposed rule changes would streamline the program and make it more effective in encouraging alternative commute trips among larger employers while providing relief to smaller employers. The program is one of many efforts in the Portland area to reduce single-occupancy vehicle trips and DEQ will continue to partner with regional alternative transportation programs in these efforts.

DEQ will continue to focus on larger employers (those with over 100 employees) who account for over 90% of the trip and emission reduction achieved by the EQO program.

# DISCUSSION DRAFT

Therefore, DEQ believes there will be no significant loss in emission reduction benefit from ECO by focusing the program on larger employers.

## 4.50.4.1.2 Industrial Emission Management Rules

The 1996 Portland-Vancouver Ozone Maintenance Plan included an industrial emissions growth allowance that could be used by new and expanding major industry in lieu of obtaining emission offsets. This 2006 maintenance plan update continues this approach to managing industrial emissions growth. The growth allowance program is described below.

Under the existing Industrial Emission Management Rules adopted in 1996 (OAR 340-242-0400 through 0440), new or expanding major industrial sources located in or near the Portland AQMA must “offset” emission increases of more than 40 tons/year of VOC and NO<sub>x</sub> by obtaining an equivalent decrease from another facility. However, the offset requirement can be satisfied by obtaining an allocation from an emissions growth allowance set aside for this purpose. This 2006 maintenance plan update reestablishes the growth allowance for new and expanding major VOC and NO<sub>x</sub> industrial sources, and retains the emission offset requirement as a safeguard. The growth allowance has been included in the modeled 2015 ozone maintenance demonstration.

### Growth Allowance Program Elements

This plan reestablishes the industrial growth allowance at 5,000 tons for VOC and 5,000 tons for NO<sub>x</sub>. The owner or operator of a proposed major source or major modification may apply to DEQ for an allocation of the growth allowance in lieu of providing an emission offset. As required in the existing rules, the growth allowance will be allocated on a first come first served basis, with one exception. Sources that previously reduced their allowable emissions through the voluntary Plant Site Emission Limit (PSEL) donation program will receive priority access to the growth allowance.

Consumption of the growth allowance will be monitored and tracked by the Department. If the growth allowance decreases to 1,000 tons per year or less, DEQ may increase the growth allowance by utilizing new federally enforceable emission reductions and shutdown credits that were not relied on in the maintenance demonstration. Any such increase to the growth allowance will be subject to public comment and review by EPA. Federally enforceable emission reductions include requirements adopted by EPA, requirements adopted by the EQC and approved by EPA as a revision to the Oregon State Implementation Plan, and requirements established by a federally enforceable permit condition. If the growth allowance is consumed, and cannot be reestablished, emission offsets for VOC and NO<sub>x</sub> will be required for new and expanding major industry.

The Department may consider temporarily reducing the growth allowance if monitored ozone concentrations exceed the thresholds described in the contingency plan (Section 4.50.7.2.1). The Department must provide reasonable advance notice to affected industries if there is a possibility that the growth allowance could be reduced.

# DISCUSSION DRAFT

## Growth Management System

The emissions growth allowance approach described above works together with several other elements in the maintenance plan, including the tracking of emission growth, ambient ozone monitoring, the emission offset backstop requirement, and the early warning and action elements in the contingency plan, to meet air quality management goals and protect compliance with standards. The Industrial Emissions Management Rules provide both flexibility for future economic opportunity and protection of the ozone NAAQS.

### 4.50.4.1.3 Transportation Conformity and Transportation Control Measures

Under EPA's 2004 ozone implementation rules (40 CFR 51.905), neither general conformity nor transportation conformity is required. This means that new transportation project plans will no longer need to demonstrate that they conform to clean air plans. However, DEQ and Metro (the Portland-area metropolitan planning organization) have agreed to informally track VOC, NO<sub>x</sub>, air toxics and greenhouse gas emissions when Metro assesses conformity for the purposes of the Portland Carbon Monoxide Maintenance Plan as a voluntary program to assess impacts of transportation emissions on air quality over time. In addition, when Metro assesses VMT/Capita for purposes of the Portland Carbon Monoxide Maintenance Plan Contingency Plan, the information will also be used for the Portland-Vancouver AQMA Ozone Contingency Plan (see Section 4.50.7.2.2).

### 4.50.4.2 Salem SKATS Ozone Maintenance Plan

DEQ also proposes to retain existing strategies in the Salem-Keizer Area Transportation Study (SKATS) area Attainment Plan that was adopted in 1980, including Emission Standards for VOC Point Sources (RACT rules), with some updates:

- Designate Salem/SKATS a maintenance area under state rules;
- Modify control technology requirements for new and expanding major industrial sources from "Lowest Achievable Emission Rate" (LAER) to "Best Available Control Technology" (BACT); all other new source review requirements would remain the same.
- Adopt a contingency plan that includes a commitment to adopt measures to reduce emissions if the Salem area is at risk of violating or violates the ozone standard in the future.

Salem is currently an ozone "nonattainment" area under state rules, and major new and modified industrial sources that emit more than 40 tons/year of VOC or NO<sub>x</sub> are required to install the most stringent level of emission control technology known as "Lowest Achievable Emission Rate" (LAER). Once designated a "maintenance" area under state rules, sources emitting more than 40 tons/year of VOC or NO<sub>x</sub> will be required to install "Best Achievable Control Technology" (BACT).

# DISCUSSION DRAFT

The main difference between LAER and BACT is the consideration of cost. LAER reflects the most stringent level of emission control achievable at the time of permitting, and it must be installed regardless of cost. BACT can also provide an equivalent or very high level of control, but cost is allowed as a consideration when evaluating the feasibility and cost effectiveness of control options.

Under the Clean Air Act, Salem could be designated as a federal ozone attainment area. Under this designation, emission control technology (BACT) would only be required for Federal Major Sources (those sources in 28 categories emitting 100 tons/year or more of VOC or NO<sub>x</sub>, or other sources emitting 250 tons/year or more). However, as an Oregon ozone maintenance area, BACT controls will be continue to be required for sources emitting 40 tons/year of VOC or NO<sub>x</sub>. DEQ believes maintaining a lower maintenance area threshold of 40 tons/year for triggering BACT requirements will better protect future compliance with the ozone standard in the Salem area. All other requirements for new source review in Salem would remain the same, including the current exemption from the need to provide emission offsets or use a growth allowance.

Because Portland has the highest ozone levels in the region, new or expanding major industrial sources within 100 km of the Portland-Vancouver AQMA (which includes part of the Salem area) would continue to evaluate their impact on Portland's ozone air quality.

## **4.50.5 Maintenance Demonstration (Portland-Vancouver and Salem)**

### **4.50.5.1 Ozone Modeling Study**

DEQ and SWCAA teamed with Washington State University (WSU), the Washington Department of Ecology and EPA to study ozone formation using a computer dispersion model (see Appendix 4, "Historical and Future Ozone Simulations using the MM5/SMOKE/CMAQ System in the Portland/Vancouver Area", WSU, 12/31/05 final report). The purpose of the study was to develop a predictive tool to forecast future ozone concentrations based on emission projections and summer meteorology in which ozone formation occurs.

The modeling study simulated two historical high ozone episodes that occurred during the summer of 1997 and 1998. The study compared actual ozone levels measured (monitored) during the 1997 and 1998 events to model predicted ozone levels for the same period in order to test and validate model performance. The model performed within EPA guidelines for both episodes. The model performance testing verifies that the CMAQ model can predict future ozone concentrations for the region.

The modeling team selected the July 26-28, 1998 episode as the basis for future year projections because ozone levels were much higher in 1998 than in 1997, and meteorology reflected worst case conditions that contribute to ozone formation in the Portland area (high temperatures and low wind speeds, with predominant winds from the north). Methodology for developing the modeling emissions data is detailed in the WSU modeling report (Appendix 4).

# DISCUSSION DRAFT

## 4.50.5.2 Growth Projections

The 2015 emissions forecast used in the modeling study reflects 2002 emissions, increased by expected growth in various sectors. The 2002 emission inventory reflects the 2002 Consolidated Emissions Reporting Rule (CERR) emissions data submitted by DEQ and SWCAA to the National Emission Inventory (NEI) and documented in Appendix 3 and 4. Growth factors for various source sectors were derived from the 2002 “Economic Report to the Metro Council, 2000-2030 Regional Forecast for the Portland-Vancouver, Metropolitan Area” (see Appendix 5).

For the 2015 Maintenance Projection, the following growth assumptions were included in the forecast:

Area sources: Area source emissions were calculated following EPA guidance for the 2002 NEI. The 2015 emissions inventory assumes a linear, non-compounding population growth rate of 1.8% per year, and household growth rate of 2.0% per year (see Appendix 5). Table 5 summarizes population trends in Portland and Salem. The area source emission inventory was adjusted to reflect summertime conditions when used in the modeling analysis and maintenance demonstration.

**Table 5: Portland and Salem Area Population Projections**

	2000 Estimate	2003 Estimate	2005 Forecast	2010 Forecast	2015 Forecast
Oregon	3,436,750	3,541,500	3,618,200	3,843,900	4,095,708
Portland Area (Clackamas, Multnomah and Washington Counties)	1,451,650	1,503,900	1,540,055	1,646,124	1,759,470
Salem Area (Marion and Polk Counties)	349,000	359,900	368,347	395,973	427,781

Prepared by the Oregon Office of Economic Analysis, April 2004

Non-road mobile sources: EPA’s draft NONROAD2004 model was used to estimate area source emissions for 2015. This model incorporates the latest assumptions and rules, including EPA’s Tier 4 non-road diesel engine standards and non-road diesel fuel sulfur standards associated with the Tier 4 rule. Railroads, marine vessels and airports were estimated independently of the NONROAD model (see Appendix 4). Aircraft emissions for the four airports with the Portland AQMA were calculated using Port of Portland data (Aviation Demand Forecast Update for Portland International Airport, Port of Portland, November 4, 1999, and associated spreadsheets), which was also used in the 2002 NEI submittal.

On road mobile sources: 2015 emissions estimates used in the modeling analysis are based on two sources: travel demand forecast models run by Metro and the Southwest Regional Transportation Council for the Portland-Vancouver AQMA, and Department of Transportation data and projections for the modeling domain. For emissions tracking purposes, ODOT projections are included in the 2015 Maintenance Projection because they will be used in future CERR submittals.

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Point sources: The 2015 Maintenance Projection for major industry (point sources) used in the modeling analysis reflects the legally allowable emission level currently permitted for existing sources plus an emissions growth allowance for new and expanding facilities (Tables 6 and 7 and Figures 4 and 5).

Point source emissions in the 2015 Projection and Figures 4 and 5 were calculated based on actual emissions data and forecast using employment projections in the “Economic Report to Metro Council, 2000-2030 Regional Forecast,” Appendix A-5 (Appendix 5). For the 2015 projection, “actual” emissions were used because they most closely represent the emissions that will be emitted by the sources in the region in 2015.

The point source emission projections include a few sources that were permitted but not yet operational when the point source inventory was completed in 2004. The most significant change since that time is the withdrawal of a permit application for a large energy facility that was proposed for construction in Marion County (this facility is included in the projections for the Salem area).

Biogenics: The modeling analysis included biogenic emissions which are produced by life substances (e.g. terpenes from pine trees). The data will be included in the seasonally adjusted daily emissions inventory.

## 4.50.5.3 Forecast and Maintenance Inventory (2015)

The 2015 Maintenance Inventory reflects 2002 emission levels, increased by the various growth factors described in section 4.50.5.2. Again, for the major industry sector, the future forecast reflects a very conservative scenario of maximum allowable emissions plus a growth allowance. Tables 6 and 7 below show the 2015 Maintenance Projection that was used in the maintenance demonstration modeled by DEQ.

Both VOC and NO<sub>x</sub> emissions are involved in the formation of ozone and the relative amounts of each (VOC/NO<sub>x</sub> ratio) can influence the level of ozone formation. DEQ’s modeling analysis shows of the two pollutants, VOC is the primary driver of ozone formation in the urban Portland and Salem areas. Both VOC and NO<sub>x</sub> emission reduction strategies continue to be important to reducing ozone formation. Figures 4 and 5 below focus on VOC emissions; information regarding NO<sub>x</sub> emissions will be added for the final draft plan.

Figure 4 below shows graphically the 2002 estimate of actual VOC emissions, a 2015 projection reflecting modest employment increases, and the 2015 Maintenance Projection in which industry emissions have been conservatively increased to reflect legally allowable emissions and a growth allowance. Including maximum allowable emissions and the growth allowance, the major industry sector would account for approximately 14% of total 2015 Portland area VOC emissions. Actual emissions from industry in 2015 are expected to be much less than expressed in the worst-case maintenance scenario. Major industry currently accounts for about 2% of total VOC emissions in the Portland area. Under the 2015 maintenance forecast, the majority of VOC emissions (approximately 71% annually) come from the area source sector.

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Figure 5 shows expected growth in VOC emissions for the Salem area, including allowable emissions for existing industry. No industrial growth allowance is established for the Salem-Keizer area. Future growth in that area is expected to be accommodated through the New Source Review process. Including maximum allowable emissions, the major industry sector accounts for under 3% to total Salem area VOC emissions. The majority of VOC emissions (approximately 79% annually) come from the Area Source sector.

**Table 6: Portland-Area VOC and NO<sub>x</sub> Emissions and 2015 Maintenance Projection**

Portland-Area 2015 VOC Emissions (Clackamas, Multnomah, Washington Counties)				Portland-Area 2015 NO <sub>x</sub> Emissions (Clackamas, Multnomah, Washington Counties)			
----- VOC -----				----- NO <sub>x</sub> -----			
Source Type	2002 Actual	2015 Maintenance		Source Type	2002 Actual	2015 Maintenance	
		Projection	% Change			Projection	% Change
AREA	92,946	108,109	16.3%	AREA	5,808	5,822	0.2%
NONROAD	13,260	13,308	0.4%	NONROAD	17,347	17,223	-0.7%
ON-ROAD	23,683	8,538	-63.9%	ON-ROAD	36,786	10,339	-71.9%
POINT	3,056	21,721	610.9%	POINT	2,522	15,191	502.3%
Total	132,944	151,675	14.1%	Total	62,464	48,574	-22.2%

**Table 7: Salem-Area VOC and NO<sub>x</sub> Emissions**

Salem-Area 2015 VOC Emissions (Marion and Polk Counties)				Salem-Area 2015 NO <sub>x</sub> Emissions (Marion and Polk Counties)			
----- VOC -----				----- NO <sub>x</sub> -----			
Source Type	2002 Actual	2015 Maintenance		Source Type	2002 Actual	2015 Maintenance	
		Projection	% Change			Projection	% Change
AREA	20,297	22,594	11.3%	AREA	1,646	1,581	-4.0%
NONROAD	2,401	2,334	-2.8%	NONROAD	3,159	3,062	-3.1%
ON-ROAD	9,331	2,724	-70.8%	ON-ROAD	11,276	3,326	-70.5%
POINT	110	791	621.9%	POINT	290	782	169.7%
Total	32,138	28,443	-11.5%	Total	16,371	8,751	-46.5%



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Figure 4: Portland-Area VOC Emissions (t/yr) and 2015 Maintenance Projection

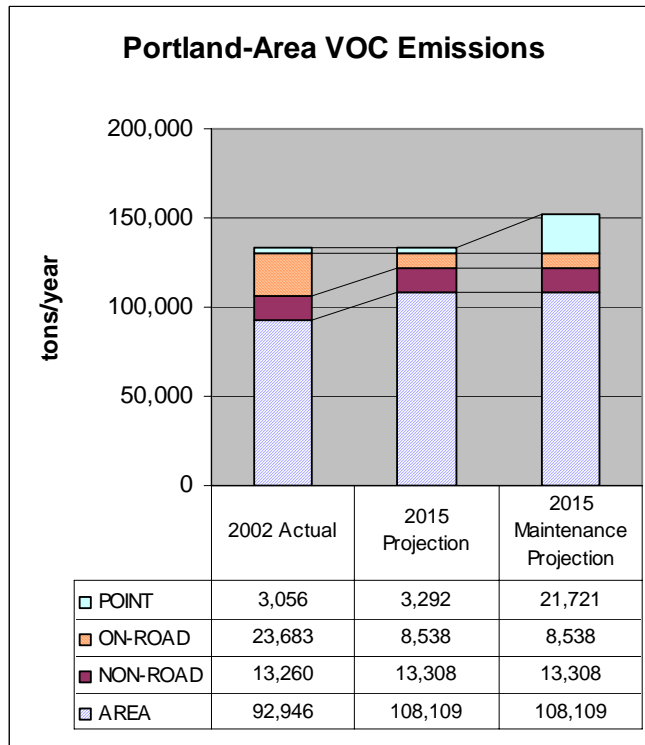
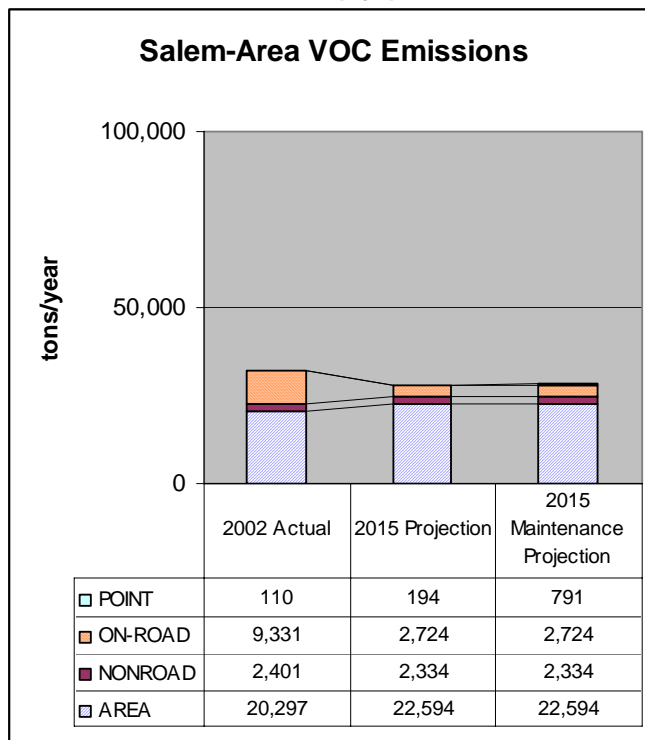


Figure 5: Salem Area VOC Emissions (t/yr) and 2015 Maintenance Projection



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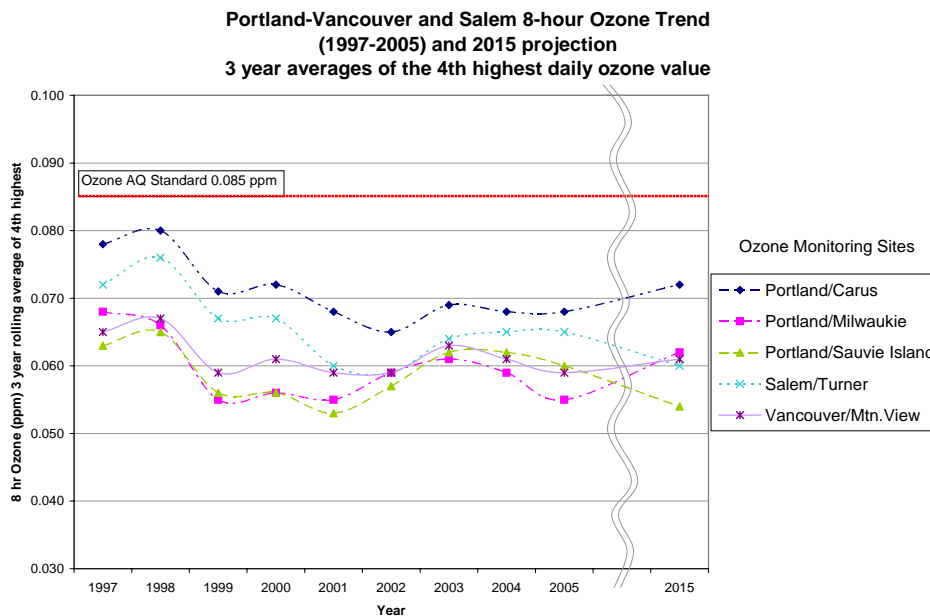
## 4.50.5.4 Maintenance Projection

The Department used the 2015 maintenance emission forecast and worst-case meteorology from the 1998 high ozone event in the CMAQ model to estimate future ozone concentrations for the Portland and Salem areas in 2015. Table 8 shows the predicted maximum 8-hour ozone concentrations predicted for the key Portland, Vancouver, and Salem monitoring sites. Table 8 also shows the 2015 predicted “Design Value”, which is used to compare to the ozone standard for purposes of determining compliance. DEQ’s modeling analysis also confirms that the existing monitoring network is capturing the areas of highest ozone concentrations.

The 8-hour NAAQS for ozone requires the fourth highest 8-hour daily maximum ozone concentration, averaged over three consecutive years, to be equal to or less than 0.08 ppm<sup>3</sup>. Compliance is demonstrated when the modeled estimates of future ozone concentrations are less than or equal to 0.084 ppm.

Figure 6 shows the ozone compliance trend for the Portland-Vancouver and Salem areas, including the 2015 maintenance forecast. Figure 6 and Table 8 show that the Portland-Vancouver and Salem-Keizer areas will remain in compliance with the 8-hour ozone standard. Table 8 also shows that peak ozone concentrations can exceed the standard, illustrating the need for continuing the suite of emission reduction strategies that limit ozone formation in the Portland and Salem areas.

**Figure 6: Portland-Vancouver and Salem Ozone Maintenance Projection**



<sup>3</sup> Because of rounding conventions in which non-significant figures are truncated, a modeling estimate of <0.085 ppm is equivalent to <= 0.08 ppm

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**Table 8: 2015 Maintenance Projection (ozone values)**

8-hour ozone standard = 0.08 ppm  
Exceedance = 0.085 ppm maximum

Monitoring Site	1998 Predicted Maximum	2015 Predicted Maximum	2015 Predicted Design Value*
Portland/Carus	98	94	72
Portland/Milwaukie	92	96	62
Portland/Sauvie Island	82	76	54
Vancouver/Mtn. View	83	81	61
Salem/Turner	88	75	60

\*Predicted Design Value is calculated using the relative reduction factor as described in Appendix 5 and EPA 8-hour ozone modeling guidance.

Again, Figure 6 and Table 8 illustrate that the Portland-Vancouver AQMA and Salem SKATS will maintain compliance with the 8-hour ozone standard through 2015. The Carus monitoring site, downwind of Portland, has traditionally been the site with the highest ozone readings in the region. The model predicted that the Milwaukie site would produce a slightly higher maximum value under meteorological conditions similar to the 1998 episode, and the maximum value would exceed the standard. However, the 4<sup>th</sup> high compliance values show that the Carus site is expected to remain the highest and most important site for determining compliance with the ozone standard.

#### **4.50.6 Air Quality Monitoring (Portland and Salem)**

DEQ will continue to operate an ozone air quality monitoring network in accordance with 40 CFR 58 to verify maintenance of the 8-hour ozone standard in Portland and Salem (see Appendix 1). Any modification to the ambient air monitoring network, such as removal of duplicative or unnecessary monitors, will be accomplished through close consultation with EPA Region 10. Proposed network modifications would be accompanied by technical and statistical analysis sufficient to document a given monitor may be removed because it is unnecessary or duplicative in the case of network reductions, or to justify the value of investing in monitoring network enhancements. In accordance with 40CFR 58, the final network design will be subject to the approval of the Regional Administrator.

#### **4.50.7 Contingency Plan**

The maintenance plan must include a process to quickly prevent or correct any measured violation of the 8-hour ozone standard. This process of investigation and (if needed) corrective action is called the “contingency plan”. Contingency plans typically have several stages of action depending on the severity of monitored ozone levels. Ambient ozone thresholds are established in the contingency plan as early-warning action levels. If monitored ozone levels exceed these action levels, the contingency provisions are triggered.

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## 4.50.7.1 Request To Replace the Portland-Vancouver AQMA 1-Hour Contingency Plan With an 8-Hour Contingency Plan

EPA revoked the 1-hour ozone standard, effective June 15, 2005 (69 FR 23951, April 30, 2004). DEQ hereby requests that the 1-hour ozone contingency plan be removed from the Portland-Vancouver AQMA Ozone Maintenance Plan, and replaced with a contingency plan that addresses the 8-hour ozone standard as described below, in accordance with EPA rules implementing the 8-hour ozone standard (40 CFR 51.905).

## 4.50.7.2 Portland-Vancouver AQMA 8-hour Ozone Contingency Plan

This contingency plan includes two sets of contingency measures. The provisions specified under Part A of the Contingency Plan for the Portland-Vancouver AQMA are linked to ambient concentrations of ozone and would be triggered if measured ozone levels at any of the ozone monitoring sites (Mtn. View, Sauvie Island, Milwaukie, or Carus) exceed the early-warning thresholds below, or if a violation of the 8-hour ozone standards occurs. The provisions specified under Part B of the Contingency Plan are linked to increases in the average amount of vehicle use per person in the Portland metropolitan area, and would only affect the Oregon portion of the Portland-Vancouver AQMA.

### 4.50.7.2.1 Part A, Contingency Plan Based On Ambient Concentrations in Portland or Vancouver

#### PHASE 1: ELEVATED OZONE LEVELS

If the air quality index (AQI) is forecast to be within the "orange" range for ozone air quality (unhealthy for sensitive populations), or 8-hour daily maximum ozone values approach 0.100 ppm or greater, and meteorological conditions conducive to ozone formation are expected to persist, DEQ and SWCAA will issue an advisory to inform the public of air quality levels and voluntary actions they can take to limit exposure to unhealthy air pollution levels and reduce emissions.

#### PHASE 2: RISK OF VIOLATION

If monitored 8-hour ozone levels at any site within the Portland-Vancouver area registers an annual fourth high monitored value of 0.085 ppm or greater within *a single ozone season*, or 0.08 ppm or greater *averaged over two years*, DEQ and SWCAA will assess the likely emissions and meteorological events contributing to elevated ozone levels. DEQ may form a planning group to assist the Department in its review. The DEQ could recommend that no action be taken if it is determined that: (a) elevated ozone levels were caused by an event that is unlikely to occur again within the maintenance planning timeframe, or (b) high ozone levels were caused by an uncontrollable event, or (c) federal regulations that will reduce ozone precursor emissions are scheduled to be implemented within two years. If it is determined that the event was caused by conditions that could occur again, and that new federal, state or local emission reduction strategies will be not implemented and affective within two years, the Department will evaluate options for appropriate action, including the option for additional emission reduction strategies to prevent future exceedances or a violation of the 8-hour ozone standard.

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## PHASE 3: ACTUAL VIOLATION

If a violation of the 8-hour ozone standard occurs, DEQ and SWCAA will determine the emissions and meteorological events contributing to the violation. If the violation is not due to an uncontrollable event, DEQ will identify new strategies necessary to ensure compliance with the 8-hour ozone standard within 18 months of the conclusion of the ozone season that prompted the contingency plan, and revise the maintenance plan as needed to correct the violation. A revised maintenance plan would be submitted to EPA for approval.

Measures that would be considered for implementation include the following:

- Reinstatement of the Enhanced Inspection/Maintenance Test for certain model year vehicles (EPA requires that this be considered);
- Other measures as appropriate.

### 4.50.7.2.2 Part B. Contingency Plan Based on Significant Increase in Vehicle Miles Traveled in the Oregon portion of the Portland-Vancouver AQMA

EPA's 8-hour ozone implementation rule (69FR pages 23987-88, April 30, 2004) notes that although states cannot implement conformity for attainment areas as a matter of federal law, they could still work with their metropolitan planning organizations to develop a voluntary program to address motor vehicle emissions growth. Metro has agreed to informally track motor vehicle VOC and NO<sub>x</sub> emissions at the same time as they are demonstrating conformity with the Portland Carbon Monoxide Maintenance Plan emissions budget. In addition, Metro has agreed to the following contingency measures for the Portland Carbon Monoxide Maintenance Plan. These transportation control measures are also appropriate as voluntary measures for addressing ozone precursor emissions within the Portland metropolitan area. However, transportation control measures cannot be adopted or enforced for the Portland-Vancouver AQMA Ozone Maintenance Plan (40 CFR 51.905).

## PHASE 1: 5% VMT INCREASE

Metro will review and verify the local average vehicle miles traveled per capita (VMT/capita) for the Oregon portion of the Portland-Vancouver Air Quality Maintenance Area derived from the most recent estimates of population and daily vehicle miles traveled from federal and state sources.

If daily VMT/capita exceeds 20.5 daily VMT/capita (a 5 % increase above the 2002 rate) for two successive years, the Standing Committee [TPAC, as defined at OAR 340-252-0060(2)(b)(A)(iii)] shall be convened to:

- a) determine whether there is a data problem with the trigger;
- b) if there is not a data problem with the trigger, identify and analyze the effectiveness of those local actions that could reduce air pollutant emissions; and,
- c) determine whether a recommendation should be made to JPACT to initiate local action to reduce VMT/capita until the 2002 level is once again attained.

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## PHASE 2: 10% VMT INCREASE

Metro will review and verify local VMT/capita values derived from the most recent estimates of population and daily vehicle miles traveled from federal and state sources.

If average daily VMT/capita exceeds 21.5 miles (a 10 percent increase above the 2002 rate) for the Oregon portion of the Portland-Vancouver Air Quality Maintenance Area for two successive years, the following measures will become required Transportation Control Measures for the region (as determined by the programming of funds for specified projects) under the Portland Carbon Monoxide Maintenance Plan and would be considered for inclusion in the 8-hour ozone maintenance plan:

- a) Washington County Commuter Rail within six years after exceeding the 21.5 VMT/capita rate,
- b) Interstate 205 Light Rail Transit (I-205 LRT) within six years after exceeding the 21.5 VMT/capita rate;
- c) An increase of efforts for the Regional Travel Options Program sufficient to increase the number of employers reached by the program by at least 5 % per year the number of employers currently subject to the DEQ Employee Commute Options program. Alternatively, specific projects from the Regional Transportation Options program could be substituted.
- d) An increase of funding of at least 5% per year greater than current funding for Transit Oriented Development projects.
- e) Other programs or projects consistent with state and federal law as may be determined by the Metro Council after consultation with the Joint Policy Advisory Committee on Transportation.

### 4.50.7.3 Salem SKATS 8-Hour Ozone Contingency Plan

#### PHASE 1: ELEVATED OZONE LEVELS

If the air quality index (AQI) is forecast to be within the “orange” range for ozone air quality (unhealthy for sensitive populations), or 8-hour daily maximum ozone values reach 0.100 ppm or greater, and meteorological conditions conducive to ozone formation are expected to persist, DEQ will issue an advisory to inform the public of air quality levels and actions they can take to limit exposure to unhealthy air pollution levels and reduce emissions.

#### PHASE 2: RISK OF VIOLATION

If monitored 8-hour ozone levels at any site within the Salem/Turner area registers an annual fourth high monitored value of 0.085 ppm or greater *within a single ozone season*, or 0.08 ppm or greater *averaged over two years*, DEQ will assess the likely emissions and meteorological events contributing to elevated ozone levels DEQ may form a planning group to assist the Department in its review. The DEQ could

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recommend that no action be taken if it is determined that: (a) elevated ozone levels were caused by an event that is unlikely to occur again within the maintenance planning timeframe, or (b) high ozone levels were caused by an uncontrollable event, or (c) federal regulations that will reduce ozone precursor emissions are scheduled to be implemented within two years. If it is determined that the event was caused by conditions that could occur again, and that new federal, state or local emission reduction strategies will be not implemented and affective within two years, the Department will evaluate options for appropriate action, including the option for additional emission reduction strategies to prevent future exceedances or a violation of the 8-hour ozone standard.

## PHASE 3: ACTUAL VIOLATION

If a violation of the 8-hour ozone standard occurs, the Department will determine the probable emissions and meteorological events contributing to the violation. If the violation is not due to an uncontrollable event, DEQ will identify new strategies necessary to ensure compliance with the 8-hour ozone standard within 18 months of the conclusion of the ozone season that prompted the contingency plan, and revise the maintenance plan as needed to correct the violation. A revised maintenance plan would be submitted to EPA for approval.

### **4.50.8 Verification of Continued Attainment (Portland and Salem)**

DEQ will continue to monitor ambient air quality ozone levels as described in the Contingency Plan. DEQ will update countywide emission inventories every three years beginning in 2005 as required by the Consolidated Emission and Reporting Rule (CERR) update of the National Emissions Inventory. If ambient ozone levels appear to be increasing, DEQ will compare CERR updates with the 2002 and 2015 emissions inventories and evaluate the assumptions used in the 2015 emissions projections to determine whether emissions are increasing at a rate not anticipated in the maintenance plan. The triggers in the Contingency Plan should prevent violations of the 8-hour standard in the Portland-Vancouver and Salem area.

### **Appendices**

1. Ozone Monitoring Network (Vancouver-Portland-Salem regional area map and site description)
2. 1992 to 2005 Meteorological Factors Conducive to Ozone Formation in the Portland-Vancouver Area (ODEQ, draft, April 2006)
3. Emission Inventory
  - a. Explanation of growth factors used in 2015 modeling projection, by source type, including assumptions included in the modeling projection
  - b. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), VOC Emissions, lb/seasonal day
  - c. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), NO<sub>x</sub> Emissions, tons/year

# DISCUSSION DRAFT

- d. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), NO<sub>x</sub> Emissions, lb/seasonal day
  - e. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), CO Emissions, tons/year
  - f. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), CO Emissions, lb/seasonal day
4. Historical and Future Ozone Simulations Using the MM5/SMOKE/CMAQ System in the Portland-Vancouver Area (WSU, December 31, 2005)
  5. Economic Report to the Metro Council, 2000-2030 Regional Forecast for the Portland-Vancouver Metropolitan Area (Metro's Data Resource Center, December 2002 final draft)
  6. Maintenance Demonstration (detailed spreadsheet)

## References

- "Maintenance Plan Guidance Document for Certain 8-hour Ozone Areas Under Section 110(a)(1) of the Clean Air Act" (memo dated May 20, 2005 from Lydia Wegman, EPA). The May 20, 2005 guidance applies to areas designated in attainment with the 8-hour ozone standard and preparing maintenance plans under Section 110(a)(1) of the Clean Air Act and 40 CFR 51.905(c) and (d).
- "Demonstrating Noninterference Under Section 110(l) of the Clean Air Act When Revising a State Implementation Plan" (draft EPA Guidance, 6/8/05)
- "1-Hour Ozone Maintenance Plans Containing Basic I/M Programs (memo dated May 12, 2004 from Tom Helms, EPA)
- April 30, 2004 Federal Register (69FR 23951), Final Rule to Implement the 8-Hour Ozone NAAQS-Phase 1
- July 8, 2005 Federal Register (70FR 39413), Notice of Final Rulemaking regarding Nonattainment Major New Source Review Implementation under 8-Hour Ozone NAAQS
- "Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-hour Ozone NAAQS" (EPA-450/R-05-002, October, 2005)
- "Emission Inventory Guidance for Implementation of Ozone and Particulate Matter NAAQS and Regional Haze" (EPA-454/R-05-001, August 2005)
- "2002 Base Year Emission Inventory SIP Planning: 8-hr Ozone, PM 2.5 and Regional Haze Programs" (memo dated November 18, 2002 from Lydia Wegman, EPA)
- "Procedures for Processing Requests to Redesignate Areas to Attainment" (memo dated September 4, 1992 from John Calcagni, EPA)





**TO:** Andy Cotugno, Chair, TPAC  
**FROM:** Mark Turpel, Principal Transportation Planner  
**DATE:** March 17, 2006  
**SUBJECT:** Annual Air Quality Update

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Below is an update of air quality issues of import to the region that have come up over the past year or are likely to be addressed in the coming year. (Our last overall update of TPAC was done at the January 2005 TPAC meeting).

**1. Vehicle miles traveled per capita report.** The EPA approved (January 2006) *Second Portland Area Carbon Monoxide Air Quality Maintenance Plan* requires in its Transportation Control Measures (TCM) section that we annually monitor our vehicle miles traveled per capita as an independent assessment of transportation emissions. The TCM requires that if vmt/capita increases by 5 percent or more than the 200 rate for two years in a row, the region must examine why such increases have occurred and if measures to better manage vmt/capita should be undertaken. Accordingly, the vmt/capita rate that triggers a review is 20.5 vmt/capita.

As shown in the attached documents prepared by David Horowitz, Metro, the latest data (for year 2004) indicate that vmt/capita rate is 20.7 - over the trigger rate. So, if this rate continues for the following year, available likely by December 2006, a detailed assessment would be in order. However, in reviewing these data, some initial issues have arisen. There are areas that have been added to the geographic area analyzed. That is, Wilsonville, Sherwood and Damascus were added, to the calculation while the Stafford Basin was removed. This suggests that a more complete urbanizing area is now being calculated in the 2004 results. However, the 2002 upon which the TCM was based, does not include these areas and makes comparison more difficult. This issue will need additional analysis and consideration in the future.

Conclusion: HPMS data will need to be further analyzed. In addition, Next year's vmt/capita rate should be watched as it could activate a more detailed assessment of the cause of regional vmt/capita increases.

**2. SAFETEA-LU requirements and RTP Update.** With the passage of SAFETEA-LU, new and different requirements for transportation planning were put in place and this also applied to transportation air quality conformity. The EPA produced *Interim Guidance for Implementing Conformity Provisions in SAFETEA-LU* (February 2006, see: <http://www.epa.gov/otaq/traq/conform/420b06901.pdf>). As noted in the *Interim Guidance*, " SAFETEA-LU revised a number of aspects of the Clean Air Act's section 176(c) transportation conformity provisions including:

- . • providing an additional six months to re-determine conformity after new state
- . implementation plan (SIP) motor vehicle emissions budgets are either found adequate,
- . approved or promulgated;
- . • changing the frequency requirements for transportation conformity determinations;
- . • providing an option for reducing the time period covered by conformity determinations;
- . • providing procedures for areas to use in substituting or adding transportation control
- . measures (TCMs) to approved SIPs;

- adding a one-year grace period for conformity lapses; and
- streamlining requirements for conformity SIPs."

Of great interest to this region is that these changes appear to allow updating the RTP on a four year cycle (by March 2008) instead of the previous three year cycle. More assessment of other conformity triggers is underway to determine whether this four year cycle is possible.

Conclusion: SAFETEA-LU appears to allow a four year RTP cycle, (which would be March, 2008) but additional work is needed to ensure that other federal air quality conformity triggers do not force an earlier RTP conformity determination. In addition, state OAR, based on pre-SAFETEA-LU federal policy are being assessed to determine whether there are any state policies which would not allow for a four year RTP cycle.

**Portland Area Carbon Monoxide Maintenance Plan.** This second plan for the Portland area, produced by the Oregon DEQ, revised the motor vehicle emission budgets (and these were used for the 2006-2009 MTIP conformity determination approved by the USDOT on November 2005), transportation control measures and other maintenance plan aspects and was approved by EPA effective February 23, 2006.

Conclusion: Motor vehicle emission budgets consistent with the new EPA required air quality model (MOBILE6.2h) are in place. This provides consistent and comparable maximum carbon monoxide emissions from transportation sources with model results. In addition, transportation control measures have been updated and while rigorous, are now consistent with current and expected future conditions.

**Ozone Maintenance Plan.** While the Metro area is now in attainment with both 1 hour and 8 hour ozone standards, the Oregon DEQ is still required to produce a maintenance plan. However, there is no longer any ozone conformity determination needed for the RTP or MTIP.

Conclusion: Conformity determinations no longer require ozone calculations. The updated Ozone Plan will be brought to TPAC and JPACT in the near future for review and recommendations. (Also, see below)

**Review of National Ambient Air Quality Standards for Ozone.** As noted above, the region is in attainment for ozone. However, a first draft of a national review conducted by EPA (see: <http://www.epa.gov/ttn/naaqs/standards/ozone/data/O3-SP-11-14-05b.pdf>), suggests that: *"These initial analyses suggest that meeting the current 8-hour O3 standard would likely result in substantial reductions in exposures of concern and associated risks of serious health effects above a level of 0.08 ppm O3. On the other hand, these analyses also suggest that there is risk of moderate or greater lung function decrements in children, hospital admissions, and mortality from O3 resulting from exposures across the range of levels allowed by the current standard. Staff concludes that the estimates discussed above are indicative of risk that some might reasonably judge to be important from a public health perspective. Thus, staff believes that it is appropriate to perform additional analyses so as to be able to consider the potential reduction in exposures and risks from alternative standards that may provide more health protection beyond that afforded by the current O3 primary standard."*

Conclusion: These results are preliminary and it is unclear whether any change in ozone standards might be considered. However, it does support the continued monitoring of transportation based ozone emissions by including ozone calculations in future conformity determination modeling and the monitoring of vmt/capita.

**Oregon Air Toxics** The Oregon DEQ has an Air Toxics Program, the technical review of which is conducted through meetings of its Air Toxics Science Advisory Committee (ATSAC). On February 7, 2006, DEQ published a notice of rulemaking proposing to adopt ambient benchmarks for 49 air toxics. Currently, there are no federal requirements for air toxics benchmarks, however there are federal data on the toxicity of various air pollutants. The proposed rules reflect the scientific consensus of ATSAC, which reviewed existing federal air toxics reference values in order to establish air toxics benchmarks for Oregon that reflect the best available science. In some cases ATSAC recommended using existing federal values, while, in other cases, ATSAC recommended different values based on newer science. ATSAC also recommended establishing reference values for pollutants not covered by the federal program. Comments are due to DEQ by 5 pm, April 4, 2006. (see: [http://www.deq.state.or.us/news/publicnotices/uploaded/060207\\_5621\\_05-AQ-002\\_Benchmarks.pdf](http://www.deq.state.or.us/news/publicnotices/uploaded/060207_5621_05-AQ-002_Benchmarks.pdf) for more information.)

Conclusion: While adopting benchmarks will not have a direct effect on transportation in the region, at least several of the 49 compounds are or can be emitted from transportation vehicles (for example, benzene, methanol, etc.). In the future, these benchmarks could have implications for transportation fuel handling, use and storage as well as transportation vehicle design and operation. Accordingly, the region may wish to provide comments to DEQ, perhaps requesting that DEQ work with transportation organizations in the region to understand which of these compounds may be transportation related and ways such compounds might be reduced. (Also, see below).

**EPA Hazardous Air Pollutants from Mobile Sources.** The EPA published a proposed rule on February 28, 2006 for certain air toxics, some of which are also included in the Oregon DEQ proposed rulemaking. (see <http://www.epa.gov/OMS/regs/toxics/420f06021.pdf>). A 60 day comment period ends April 28. As EPA states: "*Air toxics emitted by motor vehicles and other moving sources (called "mobile source air toxics," or MSATs) contribute significantly to the nationwide risk from breathing outdoor air toxics. The proposed standards would significantly lower emissions of benzene and the other air toxics in three ways: (1) by lowering benzene content in gasoline; (2) by reducing exhaust emissions from passenger vehicles operated at cold temperatures (under 75 degrees F); and (3) by reducing emissions that evaporate from, and permeate through, portable gasoline containers (gas cans). and " Many MSATs are part of a larger category of mobile source emissions known as volatile organic compounds (VOC), which contribute to the formation of ozone and possibly particulate matter (PM). "*

Conclusion: This proposed EPA rule identifies a possible health threat and proposes specific solutions that pertain to transportation. If approved, this rule may help address some of the compounds included in the DEQ air toxics benchmark list.

**2008-2011 MTIP.** This MTIP update is scheduled to be completed in 2007. An air quality conformity determination for CO will need to be conducted prior to final action by the region.

Conclusion: The tentative schedule has air quality conformity determination of the 2008-2011 MTIP beginning in June 2007, with local action in August and USDOT approval in September 2007.

**May Federal Air Quality Review** Federal Highways has requested a meeting in May 2006 to review Metro's air quality conformity determination process. This review is in addition to the federal certification.

Conclusion: Staff will convey results of the review when available.

**Diesel Emissions Reductions Funding Forum.** Several interested parties, including Oregon DEQ, ODOT, Washington Department of Ecology, SW Washington Regional Transportation Council, Federal Highway Administration and Metro are sponsoring a two day forum in the near future to raise awareness of the health and environmental impacts of diesel exhaust and provide mitigation technologies and practices and identify specific projects for implementation.

Conclusion: This forum could kick-off projects that could address some of the air toxics that both federal and state programs have targeted.

**Oregon Low Emission Vehicle Standards.** This Oregon DEQ program is a proposal to adopt rules that require, beginning in 2009, that new cars and light duty trucks sold in Oregon meet California vehicle emission standards. This action is the result of the West Coast Governors agreement to address the harmful effects of global warming by reducing greenhouse gas emissions. The proposed standards will also reduce smog forming emissions and air toxics emanating from motor vehicles.

Conclusion. Again, this is an example of actions, that if adopted, could address some of the federal and state air toxic concerns.

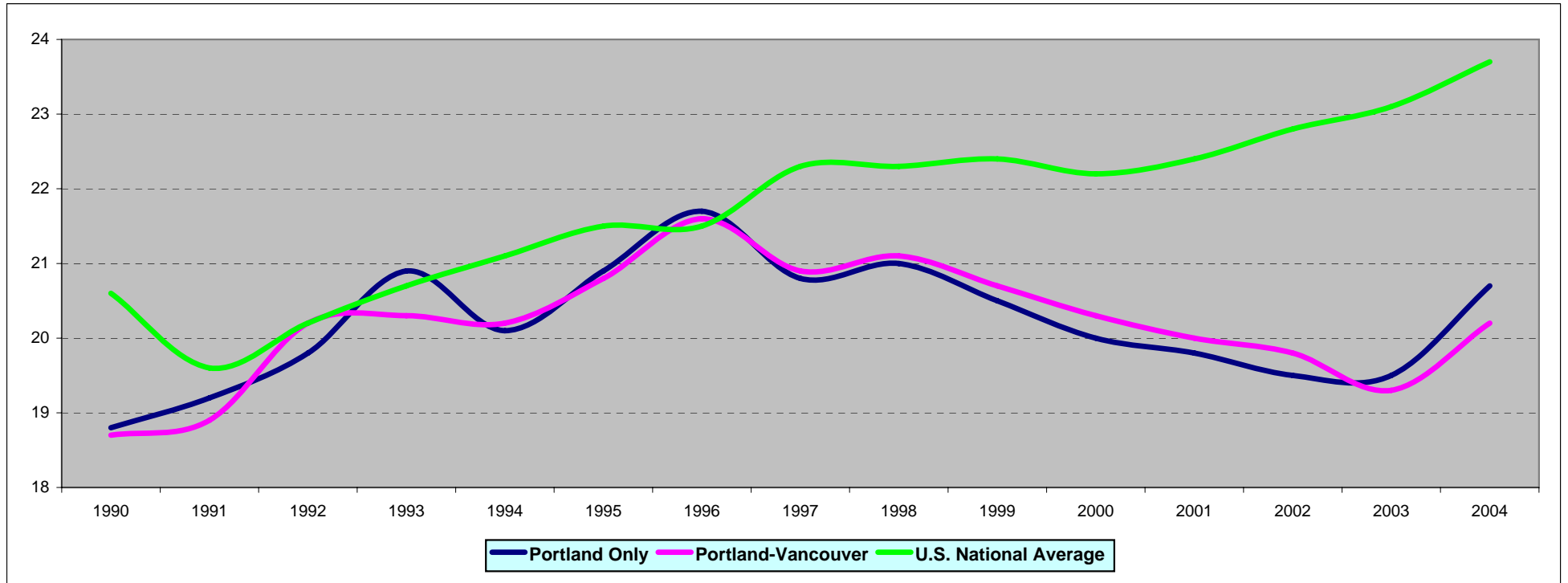
The above items demonstrate a wide range of air quality concerns and possible actions. Should you wish to discuss any one of these in detail I would be happy to provide expert speaker(s) on one of more of these topics.

## Daily Vehicle Miles of Travel Per Person\* - 1990 To 2004

### Portland, OR Only, and Portland-Vancouver OR-WA, Compared With U.S. National Average Data

(Data Shown In Miles Per Person)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Portland Only</b>	18.8	19.2	19.8	20.9	20.1	20.9	21.7	20.8	21	20.5	20	19.8	19.5	19.5	20.7
<b>Portland-Vancouver</b>	18.7	18.9	20.2	20.3	20.2	20.8	21.6	20.9	21.1	20.7	20.3	20	19.8	19.3	20.2
<b>U.S. National Average</b>	20.6	19.6	20.2	20.7	21.1	21.5	21.5	22.3	22.3	22.4	22.2	22.4	22.8	23.1	23.7



Sources: Portland, OR only and Portland-Vancouver, OR-WA data are both the FHWA in Washington, DC and from ODOT's Highway Performance Monitoring System (HPMS) program in Salem, Oregon - 1990 through 2004. National DVMT/ Person is from the FHWA booklet "Highway Statistics," 1990-2004; Table HM-72, 'Urbanized Areas - Selected Characteristics', Publication No. FHWA-PL-03-010.

THE BICYCLE TRANSPORTATION ALLIANCE



**Blueprint for Better Biking  
40 Ways to Get There**



# A Blueprint: 40 Ways to Get There

Portland's investment in bikeways has paid off, with bicycling as a means of transportation more than tripling in the last decade.

## A Great Start

The Bicycle Transportation Alliance is Oregon's voice for cyclists. Thanks in part to the BTA's advocacy and educational efforts, Portland leads the country in bike-friendliness for a city its size, being named America's Best Bicycling City three times by *Bicycling* magazine. We're continuing to push the envelope to discover new ways to provide more transportation choices for people in the Portland metro area.

Since the BTA's start in 1990, Portland has quadrupled our miles of bikeways, tripled the number of people riding bikes, and developed a vibrant bicycle culture. Our efforts are working. But we need to do more.

## Setting the Scene

Fueled by a desire to be designed the nation's first "Platinum-rated" bicycling city (a designation by the League of American Bicyclists), and create a clear path for our future, the BTA is launching a campaign to focus the region's decisionmakers on a set of forty tangible improvements.

The *Blueprint for Better Biking* provides a list of 40 priority projects that would help the Portland Metro area achieve a new level of success in bicycling. We recommend innovative, popular, and realistic solutions to substantially increase cycling. We feature low-cost, high-return solutions and projects that fill serious gaps in the current network. We offer solutions based on a set of consistent principles that are appropriate to the different urban and suburban contexts.

This project defines the future direction of the BTA's bicycling advocacy. It is intended to inspire cyclists and our agency partners, and develop partnerships and advance cycling for the good of all. The BTA brings you the *Blueprint for Better Biking: 40 Ways to Get There*.

## Goals of the Blueprint Report

The goal of the *Blueprint for Better Biking* is to identify a consistent set of bicycling facilities, policies, and programs that will drastically increase bicycling among a wide range of users including adults, elderly and youth.

- Implementing our recommendations will:
- Increase the safety, accessibility and convenience of all major bike routes.
  - Inspire new bicyclists by making cycling a viable option for all types of transportation trips and recreational and fitness purposes.
  - Increase the quality of experience for cyclists.



PHOTO BY CHRIS HO, CHRISHOPHOTO.COM

# What People Want..

## Process: People Generated our Vision

In our quest to develop a vision that increases bicycling, we focused on listening to people. The BTA worked with experts and listened to everyday and novice cyclists.

Starting in 2004, the BTA:

- Convened a cabinet of experts on bicycling facilities, programs, and policy to serve as our advisory committee.
- Surveyed over 900 Portland area residents about cycling.
- Met with bicycling planners, presented at bicycle advisory committees, and ran a series of ground-truthing bike rides called “Ride the Region.”
- Researched cost-effective techniques that will attract current and emerging cyclists.

## Themes and Challenges

Our research identified four major themes summarizing the challenges common to everyday bicycling:

### 1. Cycling Around Cars

Cycling in traffic, around automobiles, is the top concern of cyclists of all levels of skill and experience. Increasing the number of low-traffic bicycling routes is especially important for parents and families, people with limited cycling experience, seniors, and those who simply prefer an aesthetically pleasing ride.

### 2. Complete Routes

Bicycle lanes and facilities often end, disappear, or have key gaps. Gaps at dangerous intersections are a major barrier to inexperienced cyclists.

### 3. Motorist Behavior

As congestion, speeding, and driver aggression increases, driver behavior has become an increasing concern for cyclists. Cyclists feel endangered when motorists speed, run red lights, fail to yield, and drive while drunk or talking on cell phones.

### 4. Quality of the Facilities

Debris, poor street conditions, and lack of clear signs and markings are critical problems cited by many regular cyclists, especially in suburban areas. Conditions that are acceptable for motorists can be barriers for cyclists.

### Action

The *Blueprint for Better Biking* defines a vision that addresses these four themes.

The BTA’s strategy to increase bicycling focuses on both current and potential bicyclists. We identify different kinds of cyclists and discuss facilities to accommodate each type. Our strategies focus on generating the largest increase in bicycling among the total population.

Nearly 500,000 Americans ride their bicycles to work on a daily basis, and 52 percent of Americans want to bike more than they do.



PHOTO BY HUGH BYNUM





# Blueprint for Success

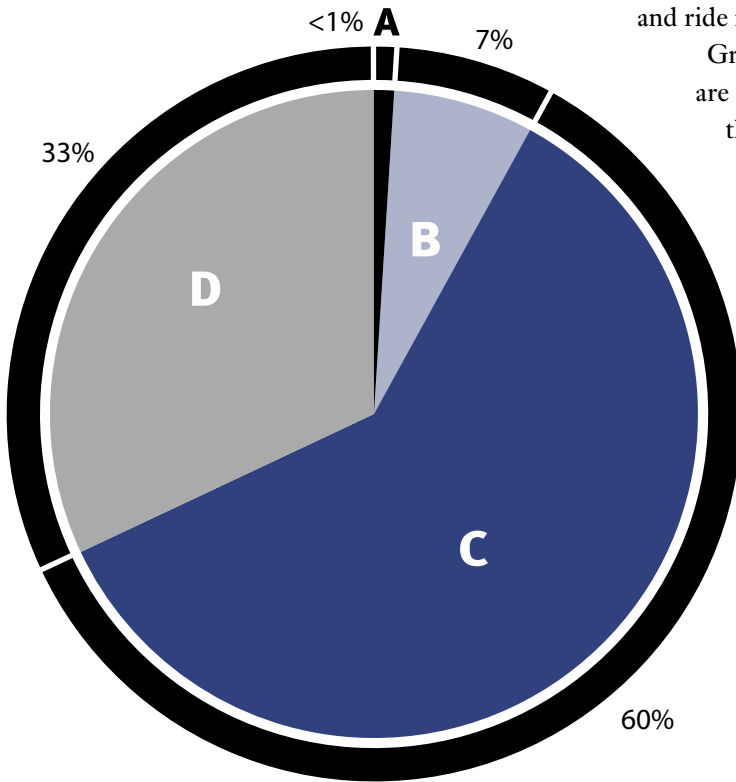
**BTA Vision:** create a network of bicycle routes that attracts all people, using clearly identified, well-maintained, and connected bikeways that minimizes exposure to automobile traffic.

## 1. Increased User Base

Research shows that most Portlanders enjoy bicycling and would bicycle for recreation, exercise, and to get around. We have categorized these people into three groups:

**Group A** is a small group of “strong and fearless” riders who ride anywhere, on any road. **Group B** are “enthused and confident” cyclists who ride regularly on most types of bikeways. **Group C**, the “interested and concerned,” are the largest group that ride in smallest numbers. They require low-traffic and no-traffic routes to feel safe and ride more often.

Groups B and C are roughly two-thirds of the population.



- A** FEARLESS
- B** CONFIDENT
- C** INTERESTED
- D** NON-CYCLISTS

The potential is great to drastically increase bicycling rates in the metro area by creating new low-traffic, well-placed bikeways.

## 2. Comprehensive Bikeway Network

A comprehensive network of connected bikeways is key to attracting Group B and C cyclists. Low-traffic bicycle streets will link to off-street or higher traffic, longer-distance routes. Each type of route should be designed for appropriate user groups.

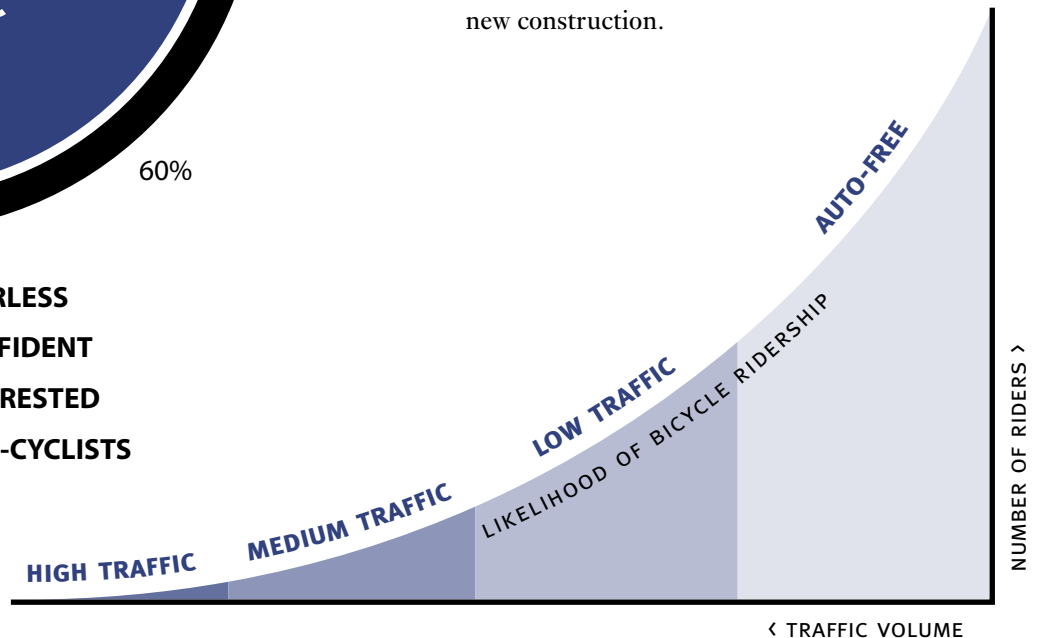
### Low Traffic Streets

**Bicycle Boulevards** - Streets where bicycles are prioritized. Boulevards provide connected routes and are easily identified with pavement markings and signs. The most effective boulevards restrict automobile travel and improve major intersection crossings.

**Woonerfs**, the Dutch word for “living streets,” are extremely low traffic, low speed streets where walkers and bicyclists share the road with autos.

### Bike Lanes: A tool for major roadways

Striping bike lanes is a low-cost way to convert primary streets into bicycle-friendly streets. Bicycle lanes on mid-traffic streets are primary commuting routes for Group A and B cyclists; they should be included in new construction.



### 3. Solutions for the Suburbs

Bicycling in the suburbs is less common and logistically more difficult than in older urban areas. Urban centers, including Portland's, have a network of connected lower-traffic streets; most suburban through-streets have higher volumes and speeds.

Suburban areas often start with bike lanes on high-traffic streets, providing access for Group A cyclists. A wider range of solutions will appeal to more riders.

### 4. Cultural Shift

Targeted marketing and promotions are effective in increasing first time and continued bicycling. Examples include:

#### Car Free Sundays

On any given Sunday, two million of Bogotá, Columbia's seven million residents take to the streets on bicycle and foot using the 120 km of streets that are closed to cars.

#### Travel Smart

A social marketing program that identifies and works with individuals that want to change the way they travel. In Portland's pilot programs, participants reduced car trips by 12%.

#### Safe Routes to School

Nationwide only 15% of children walk and bike to school. Ongoing efforts in pilot communities have doubled children's bicycling and walking to school.

#### Financial Incentives and Employer Support

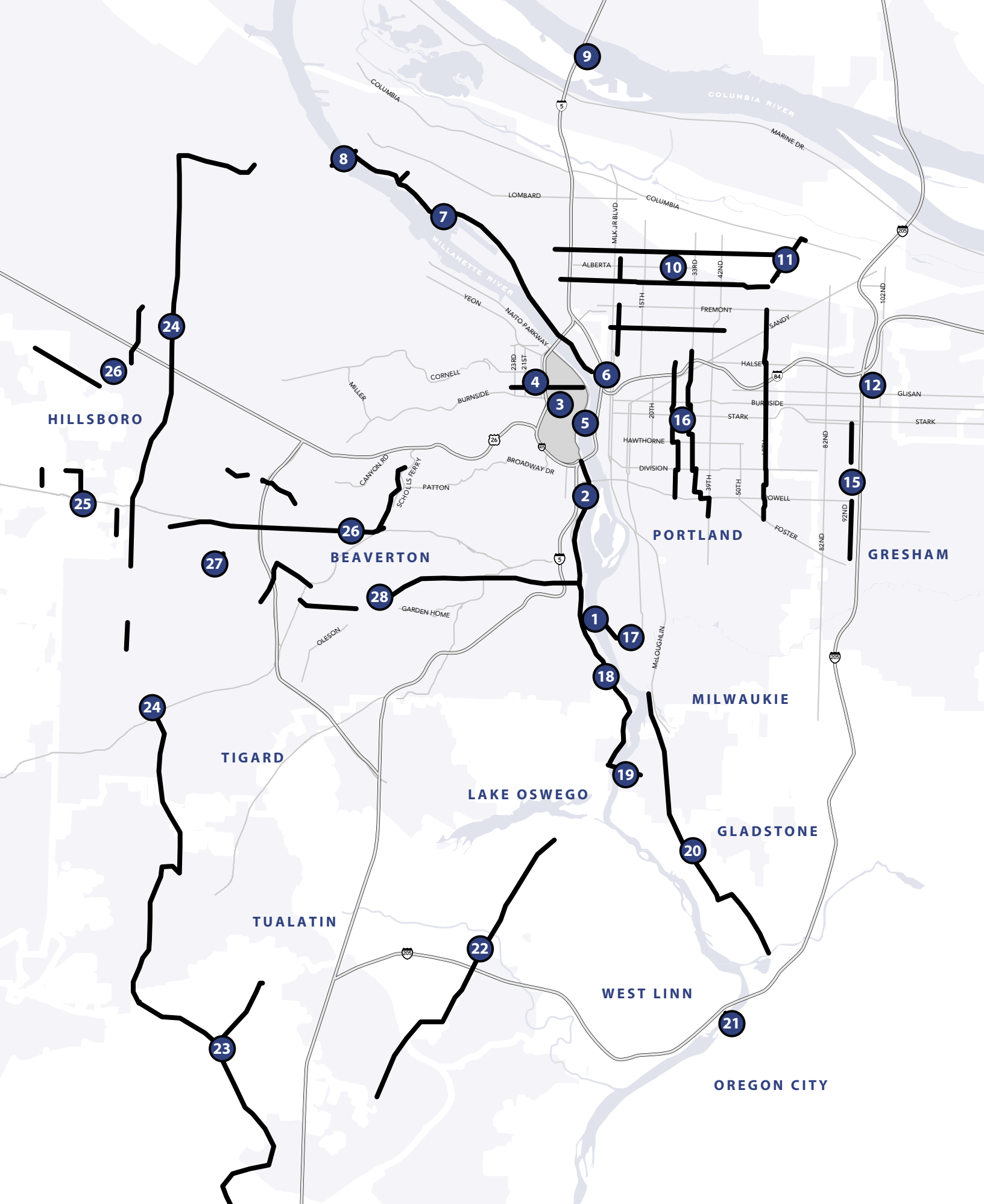
Would a \$200 cash-out compensation entice more bikers? Federal law allows employers to offer tax-exempt incentives to employees who take transit or carpool. This could be extended to bicycling.

### SUBURBAN SOLUTIONS:

BIKEWAY TYPE	ATTRIBUTES
Shared Use Paths	Build paths with new developments along power lines, waterways, utilities and in parks.
Low-traffic Network	Identify and mark existing low-traffic suburban streets. Add bicycle "cut-throughs" to schools, parks, and between subdivisions.
Safe Routes to Schools	Develop programs and parent-coalitions to help more children walk and bike to school.
Centers and Campuses	Focus high-cost facilities in town centers and on campuses to encourage limited auto use areas.



PHOTO BY HUGH BYNUM





# The Top 40 Projects

## 1: Sellwood Bridge

The biggest barrier identified by Portland-area, the Sellwood Bridge is nearly uncrossable. Bicyclists cannot legally use the narrow sidewalks, and the busy traffic lanes are narrow. The bridge is over three miles from a safe alternative.



## 2: South Waterfront Path

The South Waterfront development district will transform Portland’s waterfront with new residential and employment districts. This area is also a major gap in the Willamette riverfront trails system.

## 3: Central City Bicycle Plan

Getting to and around Portland’s central city is a challenge for cyclists. The downtown Bicycle Plan update will target west-side access and accommodations for less-experienced cyclists. Other issues include: access to and from Waterfront Park; north-south bikeways; signs and markings; and bicycle parking.



## 4: NW Flanders St.: Bike Boulevard

Flanders Street was identified as a future bicycle boulevard in the Burnside Street plan. This new bicycle route will connect the Pearl and Nob Hill business district with a bike- and pedestrian-only bridge over I-405.

## 5: Morrison Bridge

The Morrison Bridge connects SE Portland and the Esplanade to central downtown Portland. Bicyclists cannot safely cross the bridge and must detour to bridges either north or south.

## 6: Rose Quarter

The Rose Quarter is a “black hole” for cyclists; the direct and intuitive connection between the well-used Eastside Esplanade and the Vancouver/Williams bikeways is prohibited through the Rose Quarter Transit Center.

**Focus on Bottlenecks.**  
Bridges and freeway crossings are non-negotiable; even a well-designed network fails if cyclists can’t cross the rivers and freeways.



: This symbol marks the projects most likely to increase cycling

**Note:** projects 29-40 not shown on this map



## Top 40 Projects (cont'd)



PHOTO BY HUGH BYNUM

**Vancouver's Waterfront Renaissance Trail runs 3.5 miles and costs \$3.5 million. The trail has helped catalyze over \$300 million in private redevelopment along the inner waterfront and downtown.**

### 7: North Willamette Greenway Trail

Part of the Willamette River Greenway vision, this trail creates a new route from the Eastbank Esplanade north through Swan Island to the St. Johns. It will connect major employment centers, the Lewis and Clark Discovery Greenway Trail, and Marine Drive.

### 8: St. Johns Bridge

The only bridge for 5 miles, the St. Johns is very dangerous for cyclists. If improved it would connect North Portland to Forest Park, job sites in industrial Northwest Portland, and Sauvie Island. A possible two-lane solution with bike lanes would accommodate all users.

### 9: I-5 Bridge Access: Portland

Traveling from Portland to Vancouver is confusing and disconcerting, even for experienced cyclists. The I-5 bridge crossing lacks adequate markings and has gaps, especially at Jantzen Beach, deterring bicycling between the cities.

### 10: North/NE Portland – New East-West Bikeways

North and Northeast Portland lack high-quality, connective low-traffic bikeways running east-west (such as SE Ankeny and SE Lincoln/Harrison). Improvements can be made on existing routes such as NE Tillamook or Knott; a new set of bicycle boulevards are recommended (e.g. N Failing, N Mason, and N Bryant).



### 11: NE Cully Boulevard

NE Cully improvements will serve an economically challenged community and improve a dangerous gap for cyclists.

### 12: I-205 Bike Path Crossings

The I-205 path has dangerous crossings at a number of major streets; the crossing at NE Glisan is particularly hazardous. Trails target new and inexperienced users, making safe trail crossings especially important to protect all users.

### 13: Gresham Fairview Trail

This trail will be a major north-south connection in east Multnomah County. Starting at the Springwater Corridor in Gresham, it crosses the eastside MAX light-rail and will continue at the Columbia River connecting to the existing Lewis and Clark Discovery Greenway Trail along Marine Drive.

### 14: Springwater Corridor to Mt. Hood

Extending the popular Springwater Corridor southeast to Mt. Hood, connecting to the Pacific Crest Trail will provide an outstanding destination for bicycle tourists and a recreation opportunity for metro-area residents.

### 15: 92nd Ave

SE 92nd Ave will fill gaps in the connection between the Lents neighborhood and other parts of Portland, including Rocky Butte. The Route must develop an innovative and easily identifiable way to cross I-84.

### 16: North-South Eastside Bikeways

NE and SE Portland lack safe and accessible north-south connections. Crossing I-84 is especially challenging. Possible improved/new crossings include 7th, 24th, 28th, 52nd, and 74th Avenues.

### 17: Close the Springwater Gap

Connecting the final gap in the popular Springwater Trail corridor will complete the off-street route between Boring and downtown Portland.

### 18: Highway 43 and Willamette Shoreline Trail

Cyclists going between West Linn/Lake Oswego and Portland face Highway 43, one of the most dangerous and challenging gaps in the region. The "Willamette Shoreline" corridor might include an updated streetcar line, must include a high-quality bicycling route.



**19: Lake Oswego to Milwaukie Crossing**

Crossing the river is again a barrier for cyclists, here between Lake Oswego and Milwaukie/Gladstone. A possible solution is to convert an existing railroad bridge into a bicycle/pedestrian river crossing.

**20: Trolley Trail**

This north-south route will connect Sellwood, Milwaukie, Oregon City, and Gladstone along a former streetcar line. It will connect to the Springwater Corridor and to the Willamette River trail network.

**21: West Linn to Oregon City Crossing**

Recreational and transportation cyclists have no safe way to cross the river between West Linn and Oregon City. An improved crossing added to the historic bridge will provide a necessary link between two important town centers.

**22: Stafford Road**

Stafford Road has no shoulders, fast-moving traffic, and is located in a rapidly-growing area. It is also a popular route for recreational riders. Addition of safety shoulders or bike lanes will greatly improve bicyclist safety on Stafford.

**23: Tonquin Trail**

The Tonquin Trail is a proposed 19-mile path linking Wilsonville, Tualatin and Sherwood. The Mt. Scott-Scouter's Loop Trail is a proposed trail that would link Happy Valley and the Sunnyside Road area to future development in Pleasant Valley, Damascus and the Sunrise Corridor.



**24: Beaverton Powerline Trail**

A powerline corridor owned by PGE and BPA runs from the Tualatin River north to Forest Park. More than two miles of this 16-mile trail concept are complete.

**25: Low-Traffic Suburban Routes**

To increase cycling among suburban residents, well-marked low-traffic bicycle networks must be developed. Even among current cyclists, many suburban riders develop their own circuitous neighborhood routes. A formalized network will creatively identify existing routes and mark them with high-visibility treatments.



**26: Gaps in Suburban Bikeways**

Suburban bicycle routes are often high-traffic streets with bicycle lanes. These bikeways must be connected and major gaps fixed. Sample gaps to be fixed are: SW Garden Home Road; Beaverton-Hillsdale Highway at Scholls Ferry; SW Walker Road; SW Barbur Blvd.; Bethany Road.

**27: SW Hall Boulevard**

SW Hall Blvd. leads directly in and out of downtown Beaverton. An unmanageable gap is a barrier for shoppers, recreational cyclists, MAX users and folks just trying to visit Beaverton's renowned Farmer's Market.

Every day thousands of bicyclists travel downtown to work and shop. Every cyclist frees up a parking space, improving the economic vitality of downtown.



PHOTO BY HUGH BYNUM

## Top 40 Projects (cont'd)

### Effective low-traffic

#### bikeways include:

- Low car volumes

obtained by diverting auto traffic at intersections with arterial streets.

- Low traffic speeds

obtained through design (traffic calming, skinny streets, street trees, striping), markings, and enforcement.

- Innovative signs and markings for designated bikeways that raise driver awareness, slow vehicle speeds, and make the street welcoming for bicyclists.

- Connected network that allows cyclists to travel to major destination centers.

### 28: Fanno Creek Trail

Beginning at Willamette Park, this trail will stretch 15 miles south-west through Beaverton, Tigard, and Durham, ending at the Tualatin River. With half of the trail complete or under construction, this trail network will provide access to other north-south trails and the Willamette River Greenway trails.



### 29: Low-Speeds/Low-Volume Bikeways

Portland's Bicycle Boulevards and European Woonerfs are successful street treatments that reduce speeds in residential neighborhoods and provide cyclists with excellent cross-town routes. Building more of these facilities will be a cost-effective way to attract new riders.



### 30: Signs and Markings

Bikeway signage and pavement markings indicate routes and provide navigation, safety, and security functions. Ideal systems are easily seen, on-street markings visible by both cyclists and drivers. Markings are used to indicate bicycle boulevards, to direct cyclists to major routes and paths, indicate route shifts, and alert drivers to cyclists' expected presence.

### 31: Maintenance of Bikeways

Bikeway maintenance is a core concern for cyclists. Maintenance includes sweeping bike lanes and paths, paving and pothole repair, landscaping, and street marking repainting. Jurisdictions must schedule regular sweeping and improve responsiveness, especially in Washington County and for blue bike lanes.

### 32: Employer-Based Incentive Programs

Current law provides employer-based tax breaks for car parking and transit. Developing employer-based programs that offer cyclists cash-out or other incentives will increase the number of people who bike or walk.

### 33: Tourism Center

A regional tourism center and office will increase bicycle tourism by promoting bicycling, providing tourism information and offering services to people interested in traveling in Oregon.

### 34: Enforcement Campaigns

Enforcement campaigns targeting the most dangerous violators will increase safety. Motorist violations include running red lights; aggressive and drunk driving, failure to yield, and speeding in low-speed zones. Cyclist violations include wrong-way riding, improper lights, and red light running. Police liaisons will help facilitate community-based enforcement and coordinate with engineers. Diversion programs will increase public acceptance.



### 35: Education Campaigns

Education campaigns will teach the rights and responsibilities of bicycling. Institutionalized education programs are preferred, such as mandatory drivers' education, improved DMV literature and testing, and outreach via Commercial Driver's Licensing. Billboard and advertising campaigns can communicate public messages and raise visibility.

### 36: Car-Free Events

Worldwide, cities host events to make walking and biking easier for families, children, and the elderly. The most successful are regular, weekly events that close a portion of the roads. Others prohibit auto use in a larger zones. In Portland, Bridge Pedal is one event that touches these concepts, with 20,000 bicyclists and walkers!

**37: Safe Routes to School**

Safe Routes to School programs increase bicycling and walking to school through a comprehensive approach that includes engineering, education, encouragement, and enforcement components. Programs engage schools, parents, children and community groups.



**38: Bike Parking**

Improved end-of-trip bike parking, both long-term and short-term, will increase the number of people who bike to retail and commercial districts, transit stops, campuses, and jobsites.

**39: MAX Station Bicycle Hubs**

In order to connect transit and cycling, bicycle hubs should be placed at every MAX station. They will include signage, bike-route maps, on-demand bike lockers, and bike tourism information. Safe and well-marked bike routes leading to each stop will enhance the system.

**40: Oregon Center for Bicycling and Walking**

Founding this institute at Portland State University will incubate, test, and evaluate, and propose innovative bicycle and walking plans, street treatments, etc., as well as providing a center for learning and research.

Bicycling at a moderate pace for just 30 minutes, three times a week, provides great improvements in cardiovascular health, body weight, and mental health.





# Blueprint for Better Biking

The Blueprint for Better Biking is a project of the Bicycle Transportation Alliance. Contact us at 503.226.0676 or [www.bta4bikes.org](http://www.bta4bikes.org)

## BTA Project Team

Scott Bricker, Project Manager  
Jessica Roberts, Project Associate, Technical Lead  
Anna Scalera, Technical Associate, Ride the Region  
Catherine Ciarlo, Project Development  
Evan Manvel, Executive Director

## Advisory Cabinet

Mia Birk, Alta Planning and Design  
Councilor Rex Burkholder, Metro  
Jennifer Dill, P.h.D., Portland State University,  
School of Urban Studies & Planning  
Linda Ginenthal, BTA Board Member  
Councilor Karl Rohde, Lake Oswego

## Design

Grapheon Design, [www.grapheon.com](http://www.grapheon.com)  
Map data: Alta Planning and Design

## Photography

Hugh Bynum Photography, Chris Ho Photography

## Ride the Region Leaders

Craig Bachman, BTA Board Member  
Joe Blowers, Teacher, Advocate  
David Guettler, River City Bicycles  
Gregg Leion, Washington County Planner  
Rose Rummel-Eury, Advocate, Lake Oswego

*Special thanks to Roger Geller for information on bicyclist types and Mia Birk for editorial support.*

*Thank you participants, including the over 900 survey respondents and Bicycle Advisory Committees.*

## Metro Area Bicycling Resources

City of Portland: Roger Geller 503-823-7671  
City of Portland Parks: Gregg Everhart  
503-823-6009  
City of Gresham: Jonathan David 503-618-2321  
Multnomah County: Matthew Larsen  
503-988-5050x29640  
City of Lake Oswego: Tom Tushner 503-675-3990  
City of Milwaukie: JoAnn Herrigel 503-786-7508  
Clackamas County: Lori Mastrantonio-Meuser  
503-353-4511  
Beaverton: Margaret Middleton 503-526-2424  
Hillsboro: John Wiebke 503-681-5358  
Washington County: Gregg Leion 503-846-3969  
Metro, Transportation: John Mermin  
503-797-1747  
Metro, Parks and Trails: Mel Huie 503-797-1731  
Oregon Department of Transportation Bicycle  
Program: Michael Ronkin 503-986-3555  
Oregon Department of Transportation –  
Metro Area: Basil Christopher 503-731-3261  
Oregon Department of Transportation –  
Bicycle Safety, Julie Yip 503-986-4196

## You and Your Role

To make sure these projects are built, we need your help. The BTA's 4,000 members make all of our advocacy work possible. Join today and activate!



[www.bta4bikes.org/join](http://www.bta4bikes.org/join)





**METRO**

DATE: April 18, 2006  
TO: TPAC and Interested Parties  
FROM: Lanie Smith: ODOT Planning and Development Manager  
Ted Leybold: Metro MTIP Manager  
SUBJECT: Proposed STIP Modernization recommendation process

\* \* \* \* \*

**Schedule**

- April 27 TPAC: Schedule defined, review/comment on prioritization criteria and evaluation materials.
- May 11 JPACT: Briefing on schedule and technical materials.
- May 26 TPAC: Technical evaluation of projects, brief on public comment report. Recommendation on 100% modernization list.
- June 8 JPACT: Technical evaluation of projects, brief on public comment report. Action on 100% modernization list (if TPAC recommendation reached).
- June 12 TPAC: Special TPAC meeting if necessary for Recommendation on 100% modernization list.
- June 22 JPACT: Special JPACT meeting if necessary on Action on 100% modernization list.
- June 22 or 29  
Metro Council: Adopt 100% Modernization List recommendation to OTC.

**Process**

JPACT and the Metro Council will make a recommendation to the Oregon Transportation Commission on a prioritized list of projects within the Metro area for modernization funding in the 2008-11 STIP. TPAC will be presented with a qualitative technical evaluation by ODOT and Metro staff, a summary of public comments from the public comment period, and a draft recommendation of prioritized projects and asked to forward a recommendation for consideration by JPACT.

The first step is confirmation that providing new funds to fully fund existing projects committed from 2006-09 STIP is first priority and defines a remaining funding amount and list of remaining projects competing for those funds.

### **Qualitative Technical Evaluation Criteria**

The Oregon Transportation Commission has adopted two criteria for eligibility of Modernization projects and six criteria that need to be considered when prioritizing projects for Modernization funding.

#### Eligibility:

- consistency with acknowledged Transportation System Plan
- consistency with Oregon Highway Plan policy on Major Improvements

#### Prioritization:

- project readiness
- projects that best support the policies of the Oregon Highway Plan
- projects that support freight mobility
- projects that leverage other funds and public benefits
- Class 1 and 3 projects that have completed an environmental milestone of a Record of Decision or Finding of No Significant Impact.

ODOT and Metro staff is working together to define a draft set of evaluation factors consistent with these criteria. A draft of these evaluation factors is expected to be available by the TPAC meeting on April 27<sup>th</sup>.

Projects identified in the ODOT 150% Modernization list and those identified in the JPACT and Metro Council comment letter will be evaluated relative to these criteria. The evaluation would be descriptive and provide a relative ranking of the projects as they address each prioritization factor.

Metro and ODOT staff will also be coordinating our respective planning and project development programs for clarification on work plan scope and budgets through the 2008-11 time frame. Proposals for programming some 2008-11 Modernization funding to these activities under the Development-STIP may be

generated as a result of this coordination. Such proposals may be subject to additional evaluation under Development STIP prioritization criteria as defined by the OTC.

The technical analysis will serve as a basis, along with public comments received during the comment period, for making a recommendation on a final list of projects whose costs are balanced against the modernization fund target for Region 1. The Metro area expects to prioritize projects to receive approximately 80% of ODOT Region 1 Modernization target funding based on historical sub-allocations of these funds.

M E M O R A N D U M

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



**METRO**

DATE: April 19, 2006  
TO: TPAC and Interested Parties  
FROM: Ted Leybold, Mark Turpel  
SUBJECT: Portland Metro area SAFETEA-LU High Priority Projects Conformity Consultation

\* \* \* \* \*

As the Portland metropolitan area is in maintenance status for CO, an air quality conformity analysis and consultation is required prior to programming new projects into the Metropolitan Transportation Improvement Program. Following is the air quality analysis and draft conformity determination for High Priority Project funding authorized to transportation projects in the Portland metropolitan area air quality maintenance boundary through SAFETEA-LU legislation, for a project award of discretionary Transportation Enhancement funds, and a change in local funding scheduled for two city of Gresham projects.

### **Proposed Process**

This memorandum outlines the proposed air quality methodology to be used to conform the proposed projects to the state implementation plan for air quality and is the basis for consultation with air quality staff and TPAC. In most cases, the project air quality analysis and methodology includes a statement of finding that the project conforms to the SIP. After consultation, these projects will proceed through the amendment process to be added to the TIP.

In some cases, the methodology to determine findings are summarized without a complete analysis and findings of conformity. In these cases, a resolution to amend these projects into the TIP will not be processed until the complete analysis and findings of conformity are shared with air quality staff and TPAC.

## **New MTIP Projects**

### **Projects Needing Assessment as to Whether Air Quality Conformity Analysis is Needed and Consultation**

The following projects will be new projects in the Portland area MTIP and not exempt from air quality conformity or a regional emissions analysis.

**Barber Road: Kinsman to 110th:** \$3,700,000 for engineering, right-of-way and construction of a 3-lane arterial street in Wilsonville.

Air Quality Assessment: Funding of this project on the proposed schedule is consistent with the 2005 MTIP Conformity analysis. The 2005 conformity analysis projected this facility would be constructed and operating in 2011-15 time frame, consistent with this earmark.

**Columbia Corridor Rail:** \$11,000,000 to construct freight rail projects that relieve rail congestion.

Air Quality Assessment: This type of project is not included in transportation conformity determinations, as only on-road transportation modes are analyzed.

**Willamette Falls Locks:** \$425,300 (\$324,300 federal Transportation Enhancement) to rehabilitate and provide for temporary operation of the historic locks and canal for seasonal operation.

Air Quality Assessment: This type of project is not included in transportation conformity determinations, as only on-road transportation modes are analyzed.

**I-205/Airport Way Interchange:** \$15,000,000 (\$1,000,000 federal) for planning and project preliminary engineering and right-of-way work up to but not including acquisition. Other work includes an Interchange Area Management Plan (IAMP), environmental work, preliminary and final plans for construction, specifications and estimates for construction.

Air Quality Assessment: This project was included in the 2005 air quality conformity determination.

**Macadam Avenue and South Waterfront Access:** \$11,000,000 to construct a new exit ramp from I-5 Northbound to N Macadam Avenue that will fly-over N. Macadam to land on the right lane to allow access to the South Waterfront area.

Air Quality Assessment: This project was included in the 2005 air quality conformity determination.

**Gresham Civic LRT Station and Plaza:** \$1,170,400 to construct a light rail station with adjoining public plaza and station area development.

Air Quality Assessment: This station was included in the transit network, accounting for the light rail operation schedule. However, the transportation analysis zone (TAZ) surrounding the Gresham Civic Station was connected to the next light rail

station. Metro travel forecasting staff have concluded that while connecting the TAZ to the Gresham Civic Station would slightly change the ridership and vehicle miles traveled, such a change would be very very small. Further, as there is no park and ride facility at this station, such a change would not significantly change the regional air quality emission total. Accordingly, staff recommend that this qualitative assessment suffice and no quantitative air quality analysis be done (This would entail re-running the travel model and rerunning the MOBILE6.2h, air quality model).

**190th Avenue, City Limits to Cheldelin (RTP # 7036):** Widen to five lanes with sidewalks and bike lanes. Project is in the RTP financially constrained system but local System Development Charge funds will finance construction of this facility by 2009 rather than the planned 2016-2025 time frame.

Air Quality Assessment: This project was included in the 2005 MTIP air quality conformity determination. This change would result in a project being built sooner than that modeled in 2005. However, Metro staff concludes that this change (and the next one, RTP #7040) would not likely amount to enough additional region -wide emissions to exceed the motor vehicle emission budget (the maximum allowed) for carbon monoxide.

**Giese Road, 182nd to 190<sup>th</sup> (RTP #7040):** Upgrade street to urban standards with sidewalks and bike lanes. Project is in the RTP financially constrained system but local System Development Charge funds will finance construction of this facility by 2009 rather than the planned 2016-2025 time frame.

Air Quality Assessment: See 190th Avenue assessment, above.

### **Projects that are not regionally significant**

**Lake Road: Hwy 224 to SE 21<sup>st</sup>:** \$4,000,000 to reconstruct Lake Road and add sidewalks and pedestrian enhancements and bike lanes.

Air Quality Assessment: Funding of this project on the proposed schedule is consistent with the 2005 MTIP Conformity analysis. The existing conformity analysis projected this facility would be constructed and operating in 2011-15 time frame. Furthermore, as no new travel lanes will be added as part of this reconstruction project, the project is not regionally significant. There is no affect on motor vehicle capacity that could be measured by a regional model travel demand and emissions model effort. Therefore, the project is conformed to the State Transportation Plan for air quality.

**Tualatin River Wildlife Refuge Access:** \$793,600 to construct transportation facilities at the Tualatin River Wildlife Refuge. **Michele Thom sending description.**

Air Quality Assessment: This project is not regionally significant and will not result in any measurable results from the regional travel demand model or air quality emissions model. Therefore, the project is conformed to the State Transportation Plan for air quality.

### **Regional Emissions Analysis not required per Table 3**

**OR 10: Oleson/Scholls Ferry Rd Intersection:** \$3,000,000 for preliminary engineering and right-of-way to reconfigure the intersection of Beaverton-Hillsdale highway (OR 10), Oleson and Scholls Ferry Road. Oleson Road will be relocated approximately 600 feet to the east to improve motor vehicle safety and intersection operations. Project will also add bike lanes and sidewalks and improve bus transit stops at the intersection.

Air Quality Assessment: Project is exempt from Regional Emissions Analysis per Table 3. Project modifies the configuration of this signalized intersection. Funding schedule is consistent with the 2005 MTIP Conformity analysis of this facility being constructed and operating in 2011-15 time frame.

### **Exempt Projects per Table 2**

**Portland Streetcar:** \$3,000,000 for planning and project development work (environmental and preliminary design) for extensions to the Portland streetcar system. Potential extensions are east across the Broadway bridge to serve the Lloyd District, central eastside and OMSI and south through the South Waterfront district to Lake Oswego.

Air Quality Assessment: This work is exempt from air quality conformity determination per Table 2: Other; Specific activities which do not involve or lead directly to construction, such as planning and technical studies.

**I-205/Highway 213 Interchange:** \$3,000,000 for to complete an interchange area management plan and conduct environmental work.

Air Quality Assessment: This work is exempt from air quality conformity determination per Table 2: Other; Specific activities which do not involve or lead directly to construction, such as planning and technical studies.

**Interchange Enhancements at I-84 and 257<sup>th</sup>:** \$1,000,000 for planning and project development work to develop alignment design and preliminary environmental work for interchange and surrounding access roads.

Air Quality Assessment: This work is exempt from air quality conformity determination per Table 2: Other; Specific activities which do not involve or lead directly to construction, such as planning and technical studies.

**US 26: Cornelius Pass to 185<sup>th</sup>:** \$992,000 for planning and project development work to develop feasibility of widening of highway and preliminary environmental work.

Air Quality Assessment: This work is exempt from air quality conformity determination per Table 2: Other; Specific activities which do not involve or lead directly to construction, such as planning and technical studies.



**Additional Funding to Existing Projects**  
**Administrative change to TIP**

Sunrise Corridor: I-205 to 122<sup>nd</sup> Avenue: \$19,000,000  
Boeckman Road: \$800,000  
I-205 Widening: \$3,000,000  
I-5 Delta Park: \$16,200,000  
I-5 Trade Corridor: \$14,220,000  
Sellwood Bridge Replacement: \$7,000,000  
NE 102<sup>nd</sup> Avenue: Weidler to Washington: \$4,200,000  
East Burnside: E 14<sup>th</sup> to Bridge: \$5,200,000  
SE Stark: 190<sup>th</sup> to 197<sup>th</sup>: \$2,000,000  
OR 217: Northbound lane TV Highway to US 26: \$8,745,600  
I-5/99W Connector: \$10,248,000

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE 2006- ) RESOLUTION NO. 06-3684  
09 METROPOLITAN TRANSPORTATION )  
IMPROVEMENT PROGRAM TO ADD NEW ) Introduced by Councilor Rex Burkholder  
PROJECTS RECEIVING FUNDING FROM THE )  
2005 FEDERAL TRANSPORTATION )  
AUTHORIZATION ACT AND FROM AN )  
AWARD OF THE STATE TRANSPORTATION )  
ENHANCEMENTS DISCRETIONARY FUND )

WHEREAS, the Metropolitan Transportation Improvement Program (MTIP) prioritizes projects from the Regional Transportation Plan to receive transportation related funding; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council must approve the MTIP and any subsequent amendments to add new projects to the MTIP; and

WHEREAS, the JPACT and the Metro Council approved the 2006-09 MTIP on August 18, 2005; and

WHEREAS, various transportation agencies in the region were awarded funding in the 2005 federal transportation authorization act (Safe, Accountable, Flexible and Equitable Transportation Efficiency Act – a Legacy for Users or SAFETEA-LU); and

WHEREAS, the director of the Oregon Department of Transportation has nominated the restoration and temporary operations support of the Willamette Falls Locks in Clackamas County for funding from discretionary Transportation Enhancements funds; and

WHEREAS, these projects have been assessed for impacts to regional air quality analysis and found to comply with the State Implementation Plan for air quality; and

WHEREAS, these projects have are consistent with the policies and objectives of the Regional Transportation Plan; and

WHEREAS, these are new transportation projects requiring amendment into the Metropolitan Transportation Improvement Program prior to these funds being made available to the projects; and

WHEREAS, new projects to be amended into the MTIP require approval by JPACT and the Metro Council; and

WHEREAS, the new projects to be added to the MTIP are listed in Exhibit A; and

BE IT RESOLVED that the Metro Council hereby amends the 2006-09 Metropolitan Transportation Improvement Program to include to include the projects as described in Exhibit A.

ADOPTED by the Metro Council this 18<sup>th</sup> day of May 2006.

---

David Bragdon, Council President

Approved as to Form:

---

Daniel B. Cooper, Metro Attorney

# Exhibit A

Resolution 06-3684

The Portland metropolitan area received several project funding earmarks through the SAFETEA High Priority Project and/or Transportation Improvements Program funding, an award of discretionary Transportation Enhancements funds, and locally funded projects in the City of Gresham. Programming of funds to these projects is outlined in tables below.

## SAFETEA High Priority Project - Transportation Improvements Program earmarks

	2006	2007	2008	2009
Barber Road: Kinsman to 110th				
PE - Final Design	\$1,480,000			
Right-of-Way		\$740,000		
Construction			\$740,000	\$740,000

	2006	2007	2008	2009
Columbia Corridor Rail				
PE - Final Design	\$4,400,000			
Construction		\$2,200,000	\$2,200,000	\$2,200,000

I-205/Airport Way Interchange	2006	2007	2008	2009
PE - Final Design	\$400,000	\$200,000	\$200,000	\$200,000

	2006	2007	2008	2009
Macadam Avenue and South Waterfront Access				
PE - Final Design	\$4,400,000			
Right-of-Way		\$2,200,000		
Construction			\$2,200,000	\$2,200,000

	2006	2007	2008	2009
Gresham Civic LRT Station and Plaza				
PE - Final Design	\$468,160			
Construction		\$234,080	\$234,080	\$234,080

	2006	2007	2008	2009
Lake Road: Hwy 224 to 21 <sup>st</sup> Avenue				
PE - Final Design	\$1,600,000			
Right-of-Way		\$800,000		
Construction			\$800,000	\$800,000

	2006	2007	2008	2009
Tualatin River Wildlife Refuge Access				
PE - Final Design	\$317,440			
Right-of-Way		\$158,720		
Construction			\$158,720	\$158,720

	2006	2007	2008	2009
OR 10: Oleson/Scholls Ferry Rd. Intersection				
PE - Final Design	\$1,200,000	\$600,000	\$600,000	
Right-of-Way				\$600,000

Portland Streetcar	2006	2007	2008	2009
Planning	\$1,500,000	\$1,500,000		

I-205/Highway 213 Interchange	2006	2007	2008	2009
Planning	\$1,200,000	\$600,000	\$600,000	\$600,000

Interchange Enhancements at I-84 and 257 <sup>th</sup> Avenue	2006	2007	2008	2009
Planning	\$400,000	\$200,000	\$200,000	\$200,000

US 26: Cornelius Pass to 185th	2006	2007	2008	2009
Planning	\$396,800	\$198,400	\$198,400	\$198,400

**Discretionary Transportation Enhancement Fund Project**

Willamette Falls Locks	2006	2007	2008	2009
Construction - Operations	\$324,300			

**Local Programming - City of Gresham**

190 <sup>th</sup> Avenue: City Limits to Cheldelin	2006	2007	2008	2009
PE - Final Design	\$			
Right-of-Way				
Construction				

Giese Road: 182 <sup>nd</sup> to 190 <sup>th</sup>	2006	2007	2008	2009
PE - Final Design				
Right-of-Way				
Construction				

# Exhibit B

Resolution 06-3684

**DATE:** April 13, 2006

**TO:** Oregon Transportation Commission

**FROM:** Matthew L. Garrett  
Director

**SUBJECT:** Transportation Enhancement (TE) Discretionary Funding  
Willamette Falls Locks: Rehabilitation and Interim Operations

**Requested Action:**

Approve an amendment to the 2006-2009 Statewide Transportation Improvement Program to add the Willamette Falls Locks: Rehabilitation and Interim Operations project. Funding of \$318,300 in TE Discretionary funds to support seasonal operation costs at Willamette Falls Locks for a two-year period.

**Background:**

The Willamette Falls Locks, operated by the U.S. Army Corps of Engineers, connect the upper and lower sections of the Willamette River at Oregon City and West Linn, providing the only passage for boats around the 40-foot high Willamette Falls. The Corps' operating budget has been steadily decreasing in recent years, and the 2006 budget puts the locks in "caretaker" status, essentially closing the locks for all uses except the one-day Lock Fest event and rare emergencies. The locks are in imminent danger of being permanently closed unless local or state funding and operation can be arranged.

Continued operation of Willamette Falls Locks is designated an Oregon Solutions project by the Governor. State, federal, and private-sector partners have been meeting since October 2005 to plan for long-term operation and funding of the Locks. In the meantime, the locks are essentially closed, but a number of industrial and recreational users want to utilize the locks as early as June 2006.

To meet these short term needs, and provide time to develop the longer-term strategy, the Oregon Solutions partners (including the Corps of Engineers) are working to secure funds for interim operations in Fiscal Years 2006 and 2007. The request for TE funds is part of that effort.

The request is for "rehabilitation and operation" funds to allow seasonal operation of the historic Willamette Falls locks and canal for a two year interim period. \$410,300 is needed to provide service five days a week for five months a year between May and October. The main costs are: lock operator salaries (not otherwise in the Army Corps of Engineers budget); essential training; materials, supplies and service costs; routine maintenance; and minor repairs critical for safe operation. There will also be public tours and other activities to educate the public about the historic nature of the locks. Over 25 percent of the cost will be paid by the partner agencies and through contributions from recreation and historic preservation interest groups, and the business community.

The proposed two-year term of this project underscores that this is interim funding. The Oregon Solutions partners are confident that during those two years, they can successfully arrange for continued operations and secure long-range funding.

Permanent closure of the locks would mean losing an important historical asset, the oldest continuously operating multi-lock system in America, and a legacy of Oregon's industrial development. It would divide the Willamette River just at a time when communities are focusing on the river in their community revitalization and economic development efforts.

Continuation of locks operations will create an opportunity to turn the locks into a cultural destination in themselves, and promote recreational and tourist commercial boat traffic from Portland to areas upriver from the falls. The Governor recently celebrated the opening and further plans for the Willamette River Water Trail.

**Discussion:**

September 10, 2004 was the application deadline for 2006-2008 TE funding through the competitive process. The first inquiry about the subject project was in October 2005. The application period now under way (February 1– June 30, 2006) is for projects going to contract in 2009 and later. This project cannot wait that long. It is important to ensure continued operation of Willamette Falls Locks on at least a seasonal basis to avoid irretrievable loss of an important transportation link and a significant historic resource.

The Transportation Enhancement program provides federal funds for projects that strengthen the cultural, aesthetic, or environmental value of our transportation system.

In April 2002, the Oregon Transportation Commission approved a TE Discretionary Account with funding at \$2 million per year starting in 2006. This allows the Oregon Department of Transportation to apply TE funds to qualified projects as needs become known, separate from the statewide competitive process. Use of the Discretionary Account is guided by a general policy adopted by the OTC in November 2003, and detailed implementing procedures adopted by the TE Advisory Committee. Projects are subject to the same eligibility criteria and selection priorities used in the competitive process.

This project is eligible for TE funding under TE Activity #7: Rehabilitation and Operation of Historic Transportation Facilities. The request for funds is part of an Oregon Solutions team effort. Matching funds from more than ten public and private sector partners will cover about 30 percent of the overall cost. Short-term and long-range planning efforts have been under way since October 2005. If funding is approved, the locks will be open to commercial and personal river traffic on a regular schedule between May and September in 2006 and 2007, while long-range financing is secured. TE Discretionary Account funds needed for this project can be advanced from the Fiscal Year 2007 allocation for use in 2006 and 2007.

**Attachments:**

1. Focus Areas for the FY 2008-2011 Funding Cycle
2. Excerpts from "Implementing Procedures for the Discretionary Account"  
Vicinity and Location Maps



Oregon Transportation Commission

April 13, 2006

Page 3

Copies (w/attachments) to:

Doug Tindall

Joan Plank

Mike Marsh

Patrick Cooney

John Jackley

Marty Andersen

Pat Fisher

Jason Tell

## **Transportation Enhancement Program Focus Areas for the FY 2008-2011 Funding Cycle**

In January 2006 the Oregon Transportation Commission decided that the highest priority for Transportation Enhancement funding in Fiscal Years 2008 through 2011 will go to projects that fall into one or more of the following project types:

- Bicycle and pedestrian facilities
- Repair and operation of historic transportation buildings
- Landscaping and scenic preservation
- Control of highway-related water pollution
- Main streets and streetscape projects

Projects that address the following will also receive preference in the project selection process:

- Benefits a state highway or state-owned transportation facility.
- Benefits a rural/distressed community or a county facing a severe drop in road funds due to the loss of Secure Rural Schools and Community Self Determination Act of 2000
- Benefits a Special Transportation Area (STA).
- Supports or augments an upcoming pavement preservation project, mixed-use or compact development, or Governor's Economic Revitalization Team effort.
- Directly supports existing tourism and economic development efforts or that has tourism promotion or economic development as its primary focus.

### **Qualifying Transportation Enhancement Activities**

<ol style="list-style-type: none"><li>1. Provision of facilities for pedestrians and bicyclists</li><li>2. Provision of safety and educational activities for pedestrians and bicyclists</li><li>3. Acquisition of scenic easements and scenic or historic sites (including historic battlefields).</li><li>4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities)</li><li>5. Landscaping and other scenic beautification</li><li>6. Historic preservation</li></ol>	<ol style="list-style-type: none"><li>7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals)</li><li>8. Preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails)</li><li>9. Inventory, control and removal of outdoor advertising</li><li>10. Archaeological planning and research</li><li>11. Environmental mitigation—to address (i) water pollution due to highway runoff; or (ii) reduce vehicle-caused wildlife mortality while maintaining habitat connectivity</li><li>12. Establishment of transportation museums</li></ol>
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Excerpts from “**Implementing Procedures for the Discretionary Account**”

**I. Purpose**

The purpose of the TE Discretionary Account is to allow ODOT to apply TE funds directly to qualified projects as needs become known, separate from the competitive selection process. It provides a means for funding TE activities that have a desired delivery time less than the typical two to four years, and it allows ODOT to leverage TE funds with other funding when opportunities arise outside the defined TE application period.

Most TE funds are awarded through a statewide competitive process on a two-year cycle. The TE Discretionary Account allows for expedited consideration and funding of projects that cannot wait for the next selection cycle. These funds are not meant for projects that could have competed in the previous selection cycle, or that can likely be completed with other funds. They may be used only when other sources of financial support are unavailable or insufficient.

**II. Intended Projects**

TE Discretionary funds are primarily for start-up or “gap” funding on multi-agency projects, though stand-alone projects advanced by a single applicant can also qualify. Projects must be ready to proceed. Most will have design or development efforts already in progress. Projects that directly support tourism or economic development receive preferential consideration.

Prospective projects must meet the same eligibility and technical requirements as TE projects awarded through competitive selection. They must fit the existing “project selection criteria” and represent an effective use of funds for efforts that promote the intent of the TE program. Projects must also demonstrate:

- A clear sense of urgency, including a convincing reason why the project cannot wait for the next selection cycle, and why it was not submitted in the last cycle.
- Strong local support for advancing the project immediately.

**VI. Application and Review Process (summary)**

**1. Notice of Intent**

Applicant submits a NOI to the TE Program Manager. The narrative must explain the elements of urgency, readiness, and local support that justify immediate action.

**2. Eligibility Determination**

TE Program Manager determines if the proposal is eligible for TE funding.

## Attachment 2

### 3. **Urgency/Need Determination**

TE Advisory Committee considers the project's urgency, readiness and local support to determine if TE Discretionary funds are appropriate. They then decide to endorse or oppose advancing it for technical review and scoring.

### 4. **Application and Supporting Documents**

Applicant provides a complete application, with detail and supporting documents sufficient for technical review and scoring.

### 5. **Technical Review and Scoring**

ODOT staff conducts a technical review, and with that information the TE Advisory Committee scores the proposal according to pre-established selection criteria.

### 6. **ODOT Director Review**

TE Program Manager forwards the proposal to the ODOT Director. Director may endorse it as is, or return it to Committee or applicants for clarification and revisions.

### 7. **Request to OTC**

ODOT Director submits the funding request for OTC approval.

### 8. **OTC Approval**

OTC approves TE Discretionary funds and approves adding the project to the Statewide Transportation Improvement Program (STIP).

# M E M O R A N D U M

600 Northeast Grand Avenue | Portland, Oregon 97232-2736  
(tel) 503-797-1700 | (fax) 503-797-1797



METRO

DATE: April 20, 2006  
TO: TPAC  
FROM: Ted Leybold, MTIP Manager  
**RE: *Transportation Enhancement (TE) Program***

## **Overview of Transportation Enhancement Program**

Transportation Enhancement (TE) is a statewide program that allocates federal funds for transportation related projects every two years. The Oregon Department of Transportation (ODOT) with participation from local agency liaisons and a TE advisory committee manage the program. Eligible projects are consistent with approved TE activities, have a clear relation to surface transportation and are over and above what is routine or required on transportation projects. Projects are required to be a minimum of \$200,000, follow design and construction standards, comply with transportation plans and goals and follow state and federal regulations, and federal-aid contracting process. The application process involves submission of a Notice of Intent and a final application with support documents. Potential projects go through a narrowing process and then final selection from the TE Advisory Committee. The final project list is then reviewed by Federal Highway Administration and ODOT and then approved by the Oregon Transportation Commission.

## **Metro's Role in TE Process**

Metro's role in the TE process is to review project applications and apply eligibility criteria to gauge consistency with Metro policies and guidelines. Projects that meet the eligibility criteria will receive a letter of endorsement from Metro that will be submitted with final applications. Additionally, following the public comment period on the eligible project list, JPACT and the Metro Council may decide to engage in a process to prioritize project applications from within the region to submit as input to the State TE Committee and the Oregon Transportation Commission (OTC).

## **Eligibility Criteria**

In order to receive a letter of endorsement from Metro, applications must meet the eligibility criteria developed to determine consistency with Metro policies and guidelines. Each project application will be reviewed using the following criteria, as appropriate:

- Is the project consistent with goals and policies of the Regional Transportation Plan?

- Is this type of project required to be in the RTP?
- Is the project in the RTP?
- Is the project in the Financially Constrained System of the RTP?
- If the project is not in the Financially Constrained System, is the project exempt from air quality conformity or regional emissions analysis? (Note: exemption from conformity or regional emissions analysis is required in order for exchange with a financially constrained project of similar cost.)
- Does the project meet Metro's street design guidelines, if applicable?

\*See Attachment 1 for project specific information and eligibility criteria.

### **Next Steps**

Metro staff will evaluate project applications relative to the criteria outlined above. Letters of endorsement will be issued to those applicants whose projects meet the eligibility criteria by May 15, 2006. If there are further questions regarding this process, please contact Amy Rose at 503-797-1776 or [rose@metro.dst.or.us](mailto:rose@metro.dst.or.us).

CC: Pat Fisher

**Attachment 1. Proposed Eligibility Criteria for Endorsement of Metro area Transportation Enhancement Applications**

Applicant	\$ Requested	Description	Is project consistent with the goals & policies of the RTP?	Is this type of project required to be in the RTP?	Is project in RTP?	Is project in Financially Constrained System of RTP?	If not in Financially Constrained System, is the project exempt from conformity or regional emissions analysis? *	Does the project meet Metro's Street Design Guidelines, if applicable? **
Happy Valley	unknown	129th Ave: Mountain Gate Rd - King Blvd Sidewalk & Bike Lane						
Milwaukie	\$ 1,360,000	17th Ave Bike Ped/ Connector						
Multnomah County (223rd Ave)	\$ 250,000	223rd Ave: Bike /Ped Passage at Sandy Blvd RR Crossing						
Multnomah County (Beaver Crk)	\$ 400,000	Beaver Creek Culvert/Bridge (Stark Street)						N/A
ODOT Region 1 (McLoughlin)	\$ 1,004,512	Historic ODOT Region 1 Headquarters Building						N/A
Oregon City	\$ 484,000	McLoughlin Promenade, Bluff overlooking Downtown Oregon City						N/A
Portland Office of General Services & PDC	\$ 1,000,000	Union Station						N/A
Portland Office of Trans (Bike Blvd)	\$ 4,070,000	Bike Boulevards in 2000, 5000 & 7000 blocks NE & SE						N/A
Portland Parks & Rec (Columbia)	\$ 1,077,000	Columbia Slough Trail: N Portland Rd - N Marine Drive						N/A
Portland Parks & Rec (Springwater)	\$ 584,460	Springwater Trail: SE Umatilla - SE 19th						N/A
Tigard	\$ 200,000	Hall Blvd Sidewalk Improvements						
TriMet	\$ 200,000	Bike and pedestrian safety @ Rose Quarter						?
Washington County	\$ 707,800	Barnes Road Pedestrian Enhancement						
West Linn (Hwy 43)	\$ 920,000	Willamette - Bolton Bike lanes						
Wilsonville	\$ 750,000	I-5 interchange & Wilsonville Rd interchange Pedestrian/bike						
Wood Village (Arata)	\$ 850,000	Arata Road Bikelanes and Sidewalks						

\* Exemption from conformity or regional emissions analysis is required in order for exchange with a financially constrained project of similar cost.

\*\* Applicable projects include street ROW improvements

**Attachment 1. Proposed Eligibility Criteria for Endorsement of Metro area Transportation Enhancement Applications**

<b>Applicant</b>	<b>\$ Requested</b>	<b>Description</b>	<b>Is project consistent with the goals &amp; policies of the RTP?</b>	<b>Is this type of project required to be in the RTP?</b>	<b>Is project in RTP?</b>	<b>Is project in Financially Constrained System of RTP?</b>	<b>If not in Financially Constrained System, is the project exempt from conformity or regional emissions analysis? *</b>	<b>Does the project meet Metro's Street Design Guidelines, if applicable? **</b>
Wood Village (Halsey)	\$ 200,000	Halsey Street Bike and ped improvements.						
Gresham	\$ 800,000	Gresham-Fairview Trail: Overpass @ Powell Blvd/US26						N/A
Hillsboro	\$ 900,000	Rock Creek Trail: Signal Crossings @ Evergreen Pkwy & Cornell Rd						
Hillsboro	\$ 2,736,765	Jackson Bottom Boardwalk						N/A
Cornelius	\$ 1,250,000	OR-8: 10th St - 14th St. STA Sidewalk & Boulevard Amenities						
Forest Grove	\$ 657,000	Hwy 47 - B St: Multi-use Path Connector						N/A

\* Exemption from conformity or regional emissions analysis is required in order for exchange with a financially constrained project of similar cost.

\*\* Applicable projects include street ROW improvements



Materials following this page were distributed at the meeting.

**Local Programming – City of Gresham**

190 <sup>th</sup> Avenue: City Limits to Cheldelin	2006	2007	2008	2009
PE – Final Design	\$375,000			
Right-of-Way	\$1,065,000	\$1,065,000		
Construction		\$2,125,000		

Giese Road: 182 <sup>nd</sup> to 190 <sup>th</sup>	2006	2007	2008	2009
PE – Final Design	\$330,000			
Right-of-Way		\$260,000		
Construction		\$1,920,000		

**Mark Turpel - RE: Fed Earmarks - AQ Conformity review for Metro area projects**

---

**From:** "Eraut, Michelle" <Michelle.Eraut@fhwa.dot.gov>  
**To:** "Mark Turpel" <turpelm@metro.dst.or.us>, <elson.wayne@epamail.epa.gov>, "Gehrke, Linda <FTA>" <Linda.Gehrke@fta.dot.gov>, "Radmilovich, Thomas <FTA>" <Thomas.Radmilovich@fta.dot.gov>, <Dave.Nordberg@state.or.us>, <Marina.J.Orlando@state.or.us>, <SelingeP@trimet.org>  
**Date:** 4/27/2006 9:18 PM  
**Subject:** RE: Fed Earmarks - AQ Conformity review for Metro area projects  
**CC:** "Tom Kloster" <klostert@metro.dst.or.us>, "Ted Leybold" <leyboldt@metro.dst.or.us>, "Young, Jon" <Jon.Young@fhwa.dot.gov>, "Conroy, Ned <FTA>" <Ned.Conroy@fta.dot.gov>

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Mark,

I apologize that I was unable to provide this comments by noon today as your e-mail requested. I have been out of the office since your e-mail was sent.

There are several projects that are discussed in your memo for which I need more information to determine if a regional analysis and conformity determination are needed.

I cannot tell from the information provided on the Barber Road project what analysis year this project was assumed in the last determination and what analysis year this project now should be included, given the HPP funding.

It is difficult to determine the extent of the Columbia Corridor Rail project given the limited description. Will **no** road way improvements be included with this project? Does general conformity apply?

For the Macadam Avenue off ramp, I cannot tell if the HPP funding would move this project to a new analysis year.

For the Gresham Civic LRT Station and Plaza, if the interagency consultation determines that this does not require a new regional emissions analysis, then we should document that we will correct the centroid connector the next time a regional emissions analysis is conducted.

For the 190<sup>th</sup> Avenue project, to my knowledge, unfortunately the conformity rule contains no provisions that allow single project calculations to be estimated and 'additive' to previous regional emissions analysis.

I cannot tell if the Giese Road project is a road widening project. I assume it is since it has been included in the 'Projects Needing Assessment as to Whether Air Quality Conformity Analysis is Needed and Consultation'.

How can we determine that the Tualatin River Wildlife Refuge Access is not regionally significant before we have a description of the project?

Further consultation is needed with FHWA. Thank you.

Michelle

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**From:** Mark Turpel [mailto:turpelm@metro.dst.or.us]  
**Sent:** Wednesday, April 19, 2006 1:25 PM  
**To:** elson.wayne@epamail.epa.gov; Eraut, Michelle; Gehrke, Linda <FTA>; Radmilovich, Thomas <FTA>;

\*Dave.Nordberg@state.or.us; Marina.J.Orlando@state.or.us; SelingeP@trimet.org

**Cc:** Tom Kloster; Ted Leybold

**Subject:** Fed Earmarks - AQ Conformity review for Metro area projects

As you know, with the passage of SAFETEA-LU, there were certain projects earmarked which may not have been included in our air quality conformed plan or MTIP. In order to ensure that air quality conformity determinations regulations have been addressed, the attached assessment has been completed.

We request that you review the attached memo and if you have comments - or wish to have a more formal meeting - please advise me by **noon on Thursday, April 27th**.

We will also be bringing this assessment to TPAC the following day and would like to be able to report any comments that you may have.

Thank you for your consideration of this request.

Mark Turpel, AICP  
Planning Department  
Metro  
600 NE Grand Avenue  
Portland, OR 97232  
voice: 503/797-1734  
fax: 503/797-1949  
email: [turpelm@metro.dst.or.us](mailto:turpelm@metro.dst.or.us)  
Metro web page: [www.metro-region.org](http://www.metro-region.org)

**Prioritization Factors  
Used to Select Projects for Funding from the Pool of Eligible Projects**

<b>Development STIP</b> Major projects	<b>Construction STIP</b>		
	Modernization projects	Preservation projects	Bridge replacement/rehabilitation projects
Priority shall be given to: <ul style="list-style-type: none"> <li>◆ D-STIP project suitability (an assessment of the level of work completed to achieve the planned D-STIP milestone).</li> <li>◆ Projects that best support the policies of the Oregon Highway Plan.<sup>2</sup></li> <li>◆ Projects that have already completed one or more D-STIP milestones.</li> <li>◆ Projects that have funding identified for development or construction<sup>3</sup></li> <li>◆ Major Modernization Projects that leverage other funds and public benefits.<sup>4</sup></li> </ul>	Priority shall be given to: <ul style="list-style-type: none"> <li>◆ Project readiness (an assessment of the likelihood of a project getting to construction in the timeframe contemplated).<sup>7</sup></li> <li>◆ Projects that best support the policies of the Oregon Highway Plan.<sup>8</sup></li> <li>◆ Projects that support freight mobility.<sup>9</sup></li> <li>◆ Projects that leverage other funds and public benefits.<sup>10</sup></li> <li>◆ Class 1 and 3 projects that have completed an environmental milestone of a Record of Decision (ROD) or Finding of No Significant Impact (FONSI) (see footnote for Class 2 projects).<sup>11</sup></li> </ul>	Priority shall be given to: <ul style="list-style-type: none"> <li>◆ Project readiness (an assessment of the likelihood of a project getting to construction in the timeframe contemplated).<sup>13</sup></li> <li>◆ Projects that best support the policies of the Oregon Highway Plan.<sup>14</sup></li> <li>◆ Projects that leverage other funds and public benefits.<sup>15</sup></li> </ul>	Priority shall be given to: <ul style="list-style-type: none"> <li>◆ Projects that support the approved Bridge Options Report. (This prioritization factor is not intended to limit bridge projects to those identified in the Bridge Options Report, but to give priority to those identified in the report.)<sup>17</sup></li> <li>◆ Projects that best support the policies of the Oregon Highway Plan.<sup>18</sup></li> <li>◆ Projects that leverage other funds and public benefits.<sup>19</sup></li> </ul>

**Project Eligibility Criteria and Prioritization Factors  
For the 2008-2011 Development STIP and Construction STIP  
Process Overview  
Eligibility Criteria**

Development STIP Major projects	Construction STIP* Preservation projects		
<p>Development work on major projects may be eligible for funding if it:</p> <ul style="list-style-type: none"> <li>Supports the definition of "Development STIP" approved by the Oregon Transportation Commission</li> <li>Addresses an unmet transportation need in the applicable acknowledged transportation system plan(s) (TSP) or, in the absence of an applicable acknowledged TSP(s), the applicable comprehensive plan and any applicable adopted TSP(s). or Addresses project need, mode, function and general location for a transportation need identified in an acknowledged TSP. or Is identified as a project of statewide significance or as a federal discretionary project.</li> <li>Has funding adequate to complete the identified milestone.<sup>1</sup></li> </ul>	<p>Modernization projects may be eligible for funding if they:</p> <ul style="list-style-type: none"> <li>Are consistent with the applicable acknowledged transportation system plan (TSP) or, in the absence of an applicable acknowledged TSP, the applicable comprehensive plan and any applicable adopted TSP.<sup>5</sup></li> <li>Are consistent with the Oregon Highway Plan policy on Major Improvements (Policy 1G, Action 1, G.1), where applicable.<sup>6</sup></li> </ul>	<p>Pavement Preservation projects may be eligible for funding if they:</p> <ul style="list-style-type: none"> <li>Are identified through the Pavement Management System process.<sup>12</sup></li> </ul>	<p>Bridge replacement/rehabilitation projects</p> <p>Bridge replacement and rehabilitation projects may be eligible for funding if they:</p> <ul style="list-style-type: none"> <li>Are identified through the Bridge Management System process.<sup>16</sup></li> <li>Are improvements or work needed to rebuild or extend the service life of existing bridges and structures (includes replacement of an existing bridge).</li> </ul>

\* To the extent that legislative action (e.g., HB 2041) applies, the criteria in the legislation will control in the event of a conflict.

**2008-2011 STIP DEVELOPMENT TIMELINE**

CALENDAR YEAR		FEDERAL FISCAL YEAR		STATE FISCAL YEAR		Activity
Jan	2005	2005	2005	2005	2005	
Feb						
Mar						Begin 08-11 STIP update, begin data collection, draft performance goals
Apr						Data collection continues
May						Data collection complete, compile and review information
June						Develop funding allocation scenarios
July						Develop funding allocation recommendation
Aug						Assemble funding allocation materials for stakeholder input and OTC
Sept						Funding allocation recommendation distributed to OTC, stakeholders, ACTs, and MPOs
Oct						OTC/ODOT Management discuss funding allocation and program goals for 08-11 STIP
Nov						OTC approves project eligibility criteria and prioritization factors
Dec						OTC approves program goals and funding allocations for 08-11 STIP
Jan	2006	2006	2006	2006	2006	Project selection/scoping begins, region funding targets distributed
Feb						Project selection/scoping continues, STIP development manual ready
Mar						Project selection/scoping continues
Apr						Project selection/scoping complete, PCSX open for input of projects
May						Regions prepare draft program for review by stakeholders
June						Regions complete draft program for review by stakeholders
July						Targets to actuals process begins
Aug						Targets to actuals process continues, regions review Draft STIP database with ACTs, MPOs, other stakeholders
Sept						Targets to actuals process continues, Draft STIP printed, mailed, provided to OTC, regions, the public
Oct						Targets to actuals process continues, public review process begins
Nov						Targets to actuals process continues, public review process complete, comments summarized
Dec						Targets to actuals process complete, public comments reviewed by OTC, ACTs, MPOs, regions
Jan	2007	2007	2007	2007	2007	Adjust program if necessary based on OTC direction, funding allocations
Feb						Air quality conformity determinations and modeling begins
Mar						Air quality conformity determinations and modeling continues, PCSX closed to regions
Apr						Air quality conformity determinations and modeling continues
May						Air quality conformity determinations and modeling completed, constrain STIP to estimated available revenue
June						Add MPO TIPs, prepare Final STIP for review
July						Regions review Final STIP with ACTs, MPOs, other stakeholders
Aug						OTC review and approval of Final STIP, submit to Federal DOT, MTIPs to governor for signature
Sept						Federal DOT review and approve Final 08-11 STIP
Oct						
Nov						Transition amendment completed, Final STIP printed and distributed

2004-2007 STIP in place

2006-2009 STIP in place

2008-2011

2005 LEGISLATIVE SESSION  
Ongoing State and Local Planning Activities

2007 LEGISLATIVE SESSION  
Ongoing State and Local Planning Activities

STIP = Statewide Transportation Improvement Program    ACT = Area Commission on Transportation    RCST = Regional Community Solutions Team    MPO = Metropolitan Planning Organization  
 OTC = Oregon Transportation Commission    ODOT = Oregon Department of Transportation    DOT = Department of Transportation

## ACT - 1 Membership List

Salutation	F-Name	L-Name	Entity	Title	Address	City	Phone	E-Mail
Mr.	Grant	Armbruster	Columbia Sportswear		14375 NW Science Park Rd	Portland OR 97229	503.985.4000, ext. 4203	garmbruster@columbia.com
Mr.	Steve	Bates	Redmond Heavy Haul		PO Box 11269	Portland OR 97211	503.285.3816	sbates@babler.com
Mr.	Dee	Burch	Advanced American Construction		PO Box 1630	Oregon City OR 97045	503.285.0856	deeb@aadiving.com
The Honorable	Rex	Burkholder	METRO	Councilor	600 NE Grand Ave	Portland OR 97232-2736	503.797.1546	burkholder@metro.dst.or.us
Mr.	Steve	Clark	Community Newspapers		6605 SE Lake Rd.	Portland OR 97222	503.546.0714	steveclark@portlandtribune.com
Ms.	Ann	Gardner	PFC/Schnitzler Steel		3200 NW Yeon Avenue	Portland, OR 97296-0047	503.417.2041	egardner@schiniv.com
Mr.	Fred	Hansen	TriMet		4012 SE 17th Ave.	Portland OR 97202	503.962.4831	hansenf@trimet.org
The Honorable	Sam	Adams	Portland	Commissioner	1221 SW 4th Av, Room 220	Portland OR 97204	503.823.1120	commissionersam@ci.portland.or.us
The Honorable	Tony	Hyde	Columbia County	Commissioner	230 Strand St.	St. Helens OR 97051	503.397.7202, ext. 8302	hyde@co.columbia.or.us
Ms.	Monica	Isbell	Starboard Alliance		17307 NW Camelback Lane	Oregon City OR 97045	503.310.7781	monica@starboardalliance.com
The Honorable	Bill	Kenemer	Clackamas County	Commissioner	2051 Kaen Rd.	Beaverton, OR 97006	503.742.7025	billken@co.clackamas.or.us
Ms.	Susie	Lahsene	Port of Portland		121 NW Everett St.	Portland OR 97209-4049	503.944.7517	susie.lahsene@portofportland.com
The Honorable	Lynn	Peterson	Lake Oswego	Councilor	PO Box 369	Lake Oswego OR 97034	503.957.0324	lpeterson@ci.oswego.or.us
The Honorable	Roy	Rogers	Washington County	Commissioner	155 N First Av, S 300, MS22	Hillsboro OR 97124	503.846.8681	cao@co.washington.or.us
The Honorable	Paul	Thalhofer	Troutdale	Mayor	104 SE Kibling Ave	Troutdale OR 97060-2099	503.674.7234 503.665.5175	dstickney@ci.troutdale.or.us



**ACT #1 Meeting Schedule**

**May 2th - Initial Review of ALL ACT #1 Members Rating**

**May 19th - Consensus Meeting (IF NEEDED)**

**ConnectOregon ACT-1 Applicant Summary Ranking**

Project Name	Tier Level	Number of Projects	ConnectOregon Loan/Grant Request	Percent of Total	COMMENTS
<b>Projects of Statewide Significance</b>					
		<b>SWS</b>	<b>4</b>	<b>\$24,200,000</b>	<i>These projects meet all criteria established for the ConnectOregon Program and are of significant statewide implications.</i>
<b>Projects of Region wide Significant/Multiple Partners Infrastructure</b>					
		<b>RMS</b>	<b>11</b>	<b>\$15,469,076</b>	<i>These projects are important to the regional infrastructure. It is recommended that these projects be included in the 2nd ConnectOregon program.</i>
<b>Projects to be Considered in Next ConnectOregon Cycle</b>					
		<b>NCO</b>	<b>7</b>	<b>\$17,720,334</b>	
		<b>22</b>	<b>\$57,389,410</b>		

## Projects of Statewide Significance

Applicant No.	Project Name	ConnectOregon Loan/Grant Request	Ranking Score	COMMENTS
095-06	Terminal 4 Grain Facility Modernization - Barge Facility	\$7,500,000	85	Existing and future major concentration of Port operations.
086-06	Ramsey Rail Yard Improvements Rivergate Industrial District	\$6,800,000	80	Significant improvement to Port's operations BUT will not necessarily improve statewide rail issues.
088-06	Terminal 4 Grain Facility Modernization/3rd Lead	\$2,400,000	75	Related and helpful in achieving benefits to T-4 operations.
087-06	Container Terminal 6 - Post-Panamax Crane	\$7,500,000	75	This apparently is a new (subcontracted) improvement at the Port. Dredging is another issue.
<b>Total Estimated Cost</b>		<b>\$24,200,000</b>		

## Projects of Region wide Significant (RWS)

Applicant No.	Project Name	ConnectOregon Loan/Grant Request	Ranking Score	COMMENTS
059-06	Rail Switching Yard - Tigard	\$2,951,171	70	Related to Wash. Co. Commuter rail, effects Beaverton downtown. Important to keep freight customers.
055-06	City of Portland Streetcar Lowell Extension Project	\$2,100,000	65	Very important to provide some transportation to South Waterfront District. Connects to regional transportation network.
040-06R	Teevin Terminal Dolphin Additions	\$223,100	65	Low cost; innovative doubling of existing facility. Market potential is sector limited.
062-06	Seghers Branch 286K Railroad Upgrade	\$3,495,825	55	Upgrade to allow high weights to businesses that ship high weight commodities. Multiple existing users.
039-06	Oregon / Western Rail Spur	\$600,000	55	Project to improve rail access to Oregon Iron Works.
071-06	188th Street Light Rail Station Reconstruction	\$2,181,500	50	Important to Gresham Renewal District could attract economic development.
076-06	Oregon Plant Project Wilsonville, Oregon	\$510,000	45	Proto-type units for nursery industry. Margins are small - east coast markets may be available with this product.
098-06	Transfer Dry-dock Retrofit	\$1,300,000	45	Loan/Grant application (1:3 ratio). Project expands applicant's market.
068-06	Oregon City Trolley Acquisition	\$166,480	45	An additional trolley/bus to the existing fleet for use in the O.C. business dist. Limited parking in downtown.
082-06	Swan Island Lead Track/Shipyard Commerce Center	\$1,141,000	45	Benefit to Vigor Industrial property and may increase Swan Island rail users.
038-06	City of Sandy Transit Operation Facility	\$800,000	45	Significant operational savings which could increase service +20%.
<b>Total Estimated Cost</b>		<b>\$15,469,076</b>		

## Projects that should be considered in the Next Connect Oregon Cycle (NCO)

Applicant No.	Project Name	Connect Oregon Loan/Grant Request	TOTAL	COMMENTS
080-06	Port Westward Industrial Intermodal Rail Project	\$4,000,000	40	Port of St. Helens project seems to offset debt service payments for rail improvements. Three business opportunities are power plant, ethanol and bio-diesel facilities.
003-06	Transit and Public Works Maintenance Facility - Wilsonville	\$2,316,585	40	Benefits transit in Wilsonville with limited improvements to other modes.
007-06	Hood River County Transportation District Multimodal Transportation	\$550,280	40	Low project cost. Very limited alternative funding sources. No network linkage. No increase in mobility.
093-06	Railroad Track Replacement Work - Region 1 Portion of the Line	\$568,802	30	Improvements to track and trestle/bridge work to Tillamook Bay railroad (state owned). Market expansion limited.
021-06	Marine Park Entrance Port of Cascade Locks	\$1,718,000	25	Limited freight application. Assists in tourism in Cascade Locks.
054-06	Oregon Implementation of Enhanced General Aviation (OMEGA)	\$7,340,000	25	Expands TSA monitoring in the Columbia-Snake transportation corridor. Application does not have many specifics.
079-06	Integrated Intermodal Safety (Security/Efficiency Enhancement for Columbia River)	\$1,226,667	25	Maritime proposal in increase security. Specific details are limited in the application.
<b>Total Estimated Cost</b>		<b>\$17,720,334</b>		



METRO  
PEOPLE PLACES  
OPEN SPACES

## Schedule for Development of 2035 RTP Update Work Program and Public Participation Plan

Date	Time/Location	Meeting	Purpose
March 7	2:15-3:15 p.m. Council Chambers	Council work session	Contractor facilitates discussion on RTP issues/principles/parameters
March 9	7:30-9 a.m. Council Chambers	JPACT	Contractor facilitates discussion on RTP issues/principles/parameters
March 15	9:30-noon Room 370 A/B	MTAC	Informational update
March 22	5-7 p.m. Council Chambers	MPAC	Informational update
March 31	9:30-noon Room 370 A/B	TPAC	RTP 101 - Informational update
April 6	2-4 p.m. Council Chambers	Council work session	New Look/RTP - Informational update
April 13	7:30-9 a.m. Council Chambers	JPACT	Informational update
April 19	9:30-noon Room 370A/B	MTAC	RTP 101 – informational update
April 20	8-11 a.m. OCC, room A106	RTP Forum	Contractor facilitates discussion of RTP issues and process with key stakeholders
May 9	2:15-3:15 p.m. Council Chambers	Council work session	Contractor facilitates discussion of draft work plan and PIP
May 10	5-7 p.m. Council Chambers	MPAC	Members debrief on RTP forum and discuss draft work plan and PIP
May 11	7:30-9 a.m. Council Chambers	JPACT	Contractor facilitates discussion of draft work plan and PIP
May 11	1:30-3 p.m. Room 270	RTO Subcommittee	Discuss draft work plan and PIP
May 15	2-4 p.m. Rom 370 A/B	Joint TPAC/MTAC workshop	Discuss draft work plan and PIP
May 17	9:30-noon Rom 370 A/B	MTAC	Discuss draft work plan /recommendation to MPAC
May 24	1-3 p.m. Council Chambers	Council work session	New Look • RTP 101 – informational update
May 24	5-7 p.m. Council Chambers	MPAC	Considers draft work plan and PIP/recommendation to JPACT and Council
May 26	9:30-noon Room 370 A/B	TPAC	Considers draft work plan and PIP/recommendation to JPACT
June 7	6- 8 p.m. Room 270	MCCI	Discuss draft PIP/recommendation to Council
June 6	2:15-3:15 p.m. Council Chambers	Council work session	Discuss draft work plan/PIP if needed
June 8	7:30-9 a.m. Council Chambers	JPACT	Considers draft work plan and PIP/recommendation to Council
June 15	2-4 p.m. Council Chambers	Council meeting	Considers draft work plan and PIP and Res. 06-0661

April 27, 2006

COMMUNITY BUILDING & SERVING

ESTABLISH FACTS/INFO

SCALE OF FUNDING

REGIONAL - NW & BEYOND

SAFETY

MOVING GOODS & PEOPLE

MOBILITY & ACCESS

QUESTION ASSUMPTIONS

BROADER LOOK AT TRANS/LU COMM.

MEETING CONSTITUENT NEEDS

EFFRANCY

REALISTIC LOOK & OUTCOMES

HIGHLIGHT CAPABILITIES & TRADE-OFFS

OUTCOMES

PROMOTE HEALTHY LIFESTYLES

TECHNOLOGICAL CHANGE

COST-BENEFIT ANALYSIS

MAINTENANCE & PRESERVATION

BALANCING OLDER & NEWER AREAS (SYSTEM)

FREIGHT MOBILITY

JOBS-HOUSING MIX

BETTER CONNECTIONS

EFFICIENCY

COMMON STANDARDS & VALUES

WHERE ARE WE NOW?

TRACK CURRENT PROGRESS

MODAL BALANCE

FOUNDING LEVELS

CRITERIA

MORE RIDGE IN THE SELECTION OF PROJECTS

"BANG FOR THE BUCK"

TRANSOPERATOR SERVICES

INDIVIDUAL JURISDICTIONS

INNOVATIVE METHODS

USE OTHER SUCCESSFUL MODELS

CONSISTENT MESSAGE & INFO

ENGAGE - ELECTED OFFICIALS - SILENT MAJORITY

IDENTIFY KEY BARRIERS

GET FIRST HOT BUTTON ISSUES

UNIQUE PARTNERSHIPS - HEALTH, INVESTORS, ETC

POLING

MULTILINGUAL

TAKE TIME TO GET STAFF STRAIGHT



- STRATEGIC ABOUT FUNDING ENHANCEMENTS
- SUSTAINABILITY
- ENERGY (MODEL DEEP SCENARIOS)
- LU & TRANSPORTATION - MAKE THE CONNECTION
- BE REALISTIC ABOUT REVENUE
  - NOT JUST DO LESS W/ LESS, IF WE HAVE PROJECTS THAT NEED FUNDING - "WHY?"
  - PRIVATIZATION? - COST/BENEFIT?
  - NO BUILDS?
  - RENEWABLE DRIVER? "WANT TO MAKE?"
- CONSIDER ALL COSTS, NOT JUST \$
- COORDINATE/LINK W/ OTHER PLANNING EFFORTS
- ARE WE ACHIEVING THE VISION?
- BANG FOR THE BUCK
- FREIGHT
- REALISTIC
- EFFICIENCY
- BETTER CONNECTIONS
- JOBS-HOUSING MIX
- FREIGHT MOBILITY
- COMMON STANDARDS & VALUES
- WHERE ARE WE NOW?
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- ENGAGE - ELECTED OFFICIALS - SILENT MAJORITY
- IDENTIFY KEY BARRIERS
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- UNIQUE PARTNERSHIPS - HEALTH, INVESTORS, ETC
- POLING
- MULTILINGUAL
- TAKE TIME TO GET STAFF STRAIGHT



- EXPLORE PAIR EFFORTS/STRATEGIES
- DEVELOPER & BUILDING COMMUNITIES
- CROSS-GROUP COORDINATION (PROMOTION)
- AVOID LEAP FROGGING LOCAL GOVERNMENT
- AVOID BIASED FUNDING
- REACH OUT TO YOUTH
- TECHNOLOGY BASED OUTREACH
- SIMULATION & MODELING
- COORDINATE W/ WASH
- SOUND RESEARCH
- PRESERVING CONTINUITY - TENANTS
- TAP INTO BUSINESS COMMUNITY (ECONOMIC IMPACT)
- INITIATIVE FOLKS - IDENTIFY INVOLVE
- COMMUNITY BUILDING & SERVING
- ESTABLISH FACTS/INFO
- SCALE OF FUNDING
- REGIONAL - NW & BEYOND
- SAFETY
- MOVING GOODS & PEOPLE
- MOBILITY & ACCESS
- QUESTION ASSUMPTIONS
- BROADER LOOK AT TRANS/LU COMM.
- MEETING CONSTITUENT NEEDS
- EFFRANCY
- REALISTIC LOOK & OUTCOMES
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- OUTCOMES
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