

**A G E N D A**

600 NORTHEAST GRAND AVENUE PORTLAND, OREGON 97232-2736



**METRO**

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

**MEETING: TRANSPORTATION POLICY ALTERNATIVES COMMITTEE**

**DATE: August 1, 2008**

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

**PLACE: Metro Regional Center, Council Chambers**

9:30 AM	1.	Call to Order and Declaration of a Quorum	Andy Cotugno
9:30 AM	2.	Citizen Communications to TPAC on Non-Agenda Items	
9:35 AM	3.	Future Agenda Items <ul style="list-style-type: none"><li>• PSU Bike Study (Aug. 29<sup>th</sup>)</li><li>• ODOT Safety, Preservation &amp; Bridge Programs</li></ul>	Andy Cotugno
	4. *	Approval of TPAC Minutes for June 27, 2008	Andy Cotugno
	5.	<b><u>INFORMATION ITEMS</u></b>	
9:45 AM	5.1 *	Air Quality Update – <u>INFORMATION</u>	Nina DeConcini, DEQ
10:05 AM	5.2 #	RTO Program Update – <u>INFORMATION</u> <ul style="list-style-type: none"><li>• Upcoming Grant Cycle</li><li>• Walk There!</li></ul>	Pam Peck
10:15 AM	5.3 *	Oregon Transportation Commission Reauthorization Project List – <u>INFORMATION/DISCUSSION</u>	Rian Windsheimer
11:15 AM	5.4 *	PDX Master Plan – <u>INFORMATION</u>	Chris Corich, Port of Portland Jay Sugnet, City of Portland
11:45 AM	5.5 #	Regional Choice Engagement Architecture – <u>INFORMATION</u>	Robin McArthur
12:00 PM	6.0	ADJOURN	Andy Cotugno

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Upcoming TPAC Meetings: Friday, Aug. 29, 2008 from 9:30 – 12 pm at Metro Regional Center, Rm 370A/B  
Friday, Sept. 26, 2008 from 9:30 – 12 pm at Metro Regional Center, Rm 370A/B

\* 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 materials will be available at the meeting.

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736  
TEL 503 797 1916 | FAX 503 797 1930



**METRO**

**TRANSPORTATION POLICY ALTERNATIVES COMMITTEE**

June 27, 2008

Metro Regional Center, 370A/B

**MEMBERS PRESENT**

Elissa Gertler  
Susie Lahsene  
Alan Lehto  
Mike McKillip  
Dave Nordberg  
Louis A. Ornelas  
Ron Papsdorf  
John Reinhold  
Satvinder Sandhu  
Paul Smith  
Rian Windsheimer

**AFFILIATION**

Clackamas County  
Port of Portland  
TriMet  
City of Tualatin/Cities of Washington County  
DEQ  
Citizen  
City of Gresham  
Citizen  
FHWA  
City of Portland  
ODOT

**MEMBERS ABSENT**

Jack Burkman  
Bret Curtis  
Sorin Garber  
John Hoefs  
Nancy Kraushaar  
Keith Liden  
Dean Lookingbill  
Sreya Sarkar  
Karen Schilling  
April Siebenaler

**AFFILIATION**

WASDOT  
Washington County  
Citizen  
C-TRAN  
City of Oregon City/Cities of Clackamas County  
Citizen  
SW Washington RTC  
Citizen  
Multnomah County  
Citizen

**ALTERNATES PRESENT**

Clark Berry  
Bob Hart

**AFFILIATION**

Washington County  
SW Washington RTC

**STAFF**

Andy Cotugno, Joshua Naramore, Anthony Butzek, Brian Monberg, Jamie Snook, Richard Brandman, Mark Turpel, Kelsey Newell

**1. CALL TO ORDER AND DECLARATION OF A QUORUM**

Chair Andy Cotugno declared a quorum and called the meeting to order at 9:35 a.m.

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

There were none.

**3. FUTURE AGENDA ITEMS**

The future agenda items were not discussed.

**4. CONSENT AGENDA**

**Approval of TPAC Minutes from May 30, 2008**

**Resolution No. 08-3913, For the Purpose of Amending the 2008-11 Metropolitan Transportation Improvement Program (MTIP) to Reduce the ODOT Region 1 Modernization Program**

**RTO Bylaws Amendment**

MOTION: Mr. Louis Ornelas moved, Mr. Ron Papsdorf seconded, to approve the consent agenda.

ACTION TAKEN: With all in favor, the motion passed.

**5. INFORMATION / DISCUSSION ITEMS**

**5.1 New Proposed FedEx Facility**

**5.1.1 Air Quality Conformity Determination**

Mr. Mark Turpel of Metro provided a brief overview of the new proposed FedEx facility, the Oregon Department of Transportation's (ODOT) Opportunity Fund grant for road improvements for both the Sundial and Swigert roads and the associated air quality impacts.

With the recent adoption of the 2035 Regional Transportation Plan (RTP) air quality conformity determination and its identification of a significant "cushion" on Carbon Monoxide emissions, as well as the cost and time needed to complete a full conformed analysis and the likelihood that this project's impact on air quality would be slight, staff proposed a less extensive qualitative abbreviated analysis of the new facility be completed. The analysis determined that the new proposed FedEx project would not exceed regional Carbon Monoxide air quality standards.

Mr. Dave Nordberg stated that although staff's approach for meeting the regional emissions analysis was not the standard, it does adequately meet the requirements. However, he noted that

there are other areas (e.g. the public comment process) that must be satisfied in order to meet the full air quality conformity determination requirements. Mr. Susie Lahsene indicated that the project was included in 2035 RTP constrained list and therefore should be covered under the original air quality conformity determination. Staff will confirm both accounts and move forward accordingly. (Note: Subsequently staff confirmed that while the project was included in the 2035 RTP financially constrained list, not enough project details were known at that time to include the project in the air quality model. Accordingly an air quality analysis was needed as provided.)

*5.1.2 Resolution No. 08-3962, For the Purpose of Amending the 2008-11 Metropolitan Transportation Improvement Program (MTIP) to Reduce the ODOT Region 1 Modernization Program*

MOTION: Mr. Papsdorf moved, Ms. Lahsene seconded, to approve Resolution No. 08-3962.

ACTION TAKEN: With all in favor, the motion passed.

**5.2 Resolution No. 08-3959, For the Purpose of Approving the Portland to Milwaukie Locally Preferred Alternative and Finding Consistency with the Metro 2035 Regional Transportation Plan**

Mr. Richard Brandman of Metro overviewed Resolution No. 08-3959, which would adopt the Portland – Milwaukie light rail Locally Preferred Alternative (LPA). He highlighted the Willamette River Bridge crossing, light rail alignment and southern terminus recommendations:

1. A new Willamette River bridge for light rail, buses, streetcars, bicycles and pedestrians along a refined Porter-Sherman light rail alignment near the southern boundary of OHSU South Waterfront campus on the west bank and near OMSI on the east bank;
2. A Milwaukie light rail alignment that follows the Tillamook Branch alignment;
3. A southern terminus at Park Avenue.

In addition, Mr. Brandman stated that the Portland – Milwaukie LPA is consistent with the 2035 RTP constrained system. Adoption of the resolution would direct Metro and jurisdictional partner staff to initiate preliminary engineering and the Final Environmental Impact Statement (FEIS) for the project as well as draft a work program for a Minimum Operating Segment (MOS) to Lake Road.

Committee discussion included station locations, McLoughlin Boulevard crossing, and safety and security.

MOTION: Mr. Alan Lehto moved, Mr. Nordberg seconded, to adopt Resolution No. 08-3959.

ACTION TAKEN: With all in favor, the motion passed.

### **5.3 Resolution No. 08-3960, For the Purpose of Endorsing the Locally Preferred Alternative for the Columbia River Bridge Crossing Project and Amending the Regional Transportation Plan with Conditions**

Mr. Brandman overviewed Resolution No. 08-3960 and attachments, which would endorse the Columbia River Crossing (CRC) LPA and amend the 2035 RTP.

Mr. Doug Ficco of the CRC Project, briefed the committee on the project Task Force's findings and resolution. In addition, he detailed the project schedule, support from the Oregon and Washington state governors, and the public and agency comment report.

Committee discussion included tolling, consistency among jurisdictional partner and Task Force resolutions, RTP public comment process and requirements, and demographic representation in the public comment report.

MOTION: Mr. Lehto moved, Mr. Paul Smith seconded, to adopt Resolution No. 08-3960 with the following language and content edits and/or additions:

1. An additional "WHEREAS" clause be added at the beginning of the resolution addressing the national and international significance of the project;
2. An additional "WHEREAS" clause be added at the end of the resolution stating that the Joint Policy Advisory Committee on Transportation (JPACT) recommended adoption of the resolution on \_\_\_\_\_;
3. Additional language be added to "BE IT RESOVLED" #1 concerning freight movement;
4. Revisions to "BE IT RESOVLED" #2 as follows:
  - "Supports as the locally preferred alternative:
  - a. a replacement bridge as the preferred river crossing option,
  - b. light rail as the presented high capacity transit option, extending light rail to Vancouver, Washington, recognizing that the selection of the alignment and terminus should be determined through a combination of:
    - i. Federal New Starts funding eligibility;
    - ii. Public and local stakeholder involvement;
    - iii. CRC project evaluation and technical determination of the terminus that allows for the greatest flexibility for future high capacity transit extensions and connection in Clark County.
  - e. ~~Imposing tolls as soon as legally and practicably permissible on the existing I-5 bridge to reduce congestion by managing travel demand as well as to provide an ongoing funding source for the Project.~~
  - c. The light rail terminus is \_\_\_\_\_."
5. Remove "BE IT RESOLVED" #3.
6. Correct "BE IT RESOLVED" #8 to read, "Defers the determination of the number of auxiliary lanes to a subsequent amendment of the 2035 RTP based on additional analysis."
7. An additional "BE IT RESOLVED" clause be added stating, "In addition, the Metro Council supports the items for additional consideration as reflected in Exhibit A." The content for Exhibit A will include:

- a. Issues already included in Exhibit A from the TPAC version of Resolution No. 08-3960,
- b. Other issues not pertaining to the actual LPA recommendation in the TPAC version of the resolution, such as "Imposing tolls as soon as legally and practicably permissible..." and
- c. New language proposed by the Port of Portland regarding protection of interchanges.

AMENDMENT #1: Mr. Papsdorf moved, Ms. Lahsene seconded, to amend "BE IT RESOLVED" #2 to read, "...a. a replacement bridge with three through lanes in each direction as the preferred river crossing option..."

ACTION ON AMENDMENT #1: With all in favor and one abstained (Berry), amendment #1 passed.

AMENDMENT #2: Mr. Reinhold moved, Ms. Elissa Gertler seconded, to amend "BE IT RESOLVED" #2 to read, "...a. a replacement bridge, with tolls, as the preferred river crossing option..."

*Discussion*: Mr. Papsdorf was concerned that tolling I-5 would create diversion onto I-205. He emphasized the importance of further conversations regarding impacts to I-205 and greater freeway system. Ms. Lahsene supported Mr. Papsdorf comments, stating that the Port of Portland will request that WSDOT and ODOT monitor the impacts to I-205. Mr. Hart indicated that SW RTC would not be including tolls in their resolution.

ACTION ON AMENDMENT #2: With seven in favor, two opposed (Papsdorf and Hart) and two abstained (Berry and Windsheimer), amendment #2 passed.

AMENDMENT #3: Mr. Smith moved, Ms. Lahsene seconded, to amend "BE IT RESOLVED" #4 to read, "...a replacement bridge with three through lanes and tolls designed to manage travel demand as well as provide an ongoing funding source for bridge-project construction, operations and maintenance..."

ACTION ON AMENDMENT #3: With all in favor, amendment #3 passed.

AMENDMENT #4: Mr. Lehto moved, Mr. Smith seconded, to amend "BE IT RESOLVED" #2 to read, "...b. light rail as the preferred high capacity transit option, extending light rail across Hayden Island adjacent to I-5 to Vancouver, Washington, recognizing that the selection of the alignment and terminus should be determined through a combination of...."

ACTION ON AMENDMENT #4: With all in favor and one abstained (Berry), amendment #4 passed.

ACTION ON MOTION: With nine in favor (Gertler, Hart, Lahsene, Lehto, McArthur, Nordberg, Papsdorf, Smith, Windsheimer), one opposed (Reinhold) and one abstained (Berry), the motion passed with the amended language.

Staff will make the appropriate updates to Resolution No. 08-3960 and distribute the document to committee members.

## **6. ADJOURN**

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

Respectfully submitted,

Kelsey Newell  
Recording Secretary

### **ATTACHMENTS TO THE PUBLIC RECORD FOR JUNE 27, 2008**

The following have been included as part of the official public record:

<b>ITEM</b>	<b>TOPIC</b>	<b>DOC DATE</b>	<b>DOCUMENT DESCRIPTION</b>	<b>DOCUMENT No.</b>
<b>5.2</b>	Memo	6/23/08	To: Chair Cotugno & TPAC Members From: Nancy Kraushaar RE: South Corridor LRT LPA	062708t-01
<b>5.2</b>	Resolution	6/27/08	Resolution No. 08-3959 and Exhibit A.	062708t-02
<b>5.3</b>	Resolution	6/27/08	Resolution No. 08-3960 and Exhibit A, B, C, Staff Report and Attachment 1.	062708t-03
<b>5.3</b>	Schedule	N/A	CRC Sponsor Board and Council Decisions/Hearings	062708t-04
<b>5.3</b>	Schedule	N/A	CRC Project Schedule	062708t-05
<b>5.3</b>	Letter	6/19/08	Letter from Oregon and Washington Governors regarding the CRC project.	062708t-06
<b>5.3`</b>	Report/Memo	6/17/08	To: CRC Task Force From: Doug Ficco & John Osborn RE: Public and Agency Comment, May 2 to June 5, 2008: Weeks 1 through 5 of the 60-day Draft EIS comment period.	053008t-07

# Air Quality and the Metro Region

August 2008



Metro | *People places. Open spaces.*

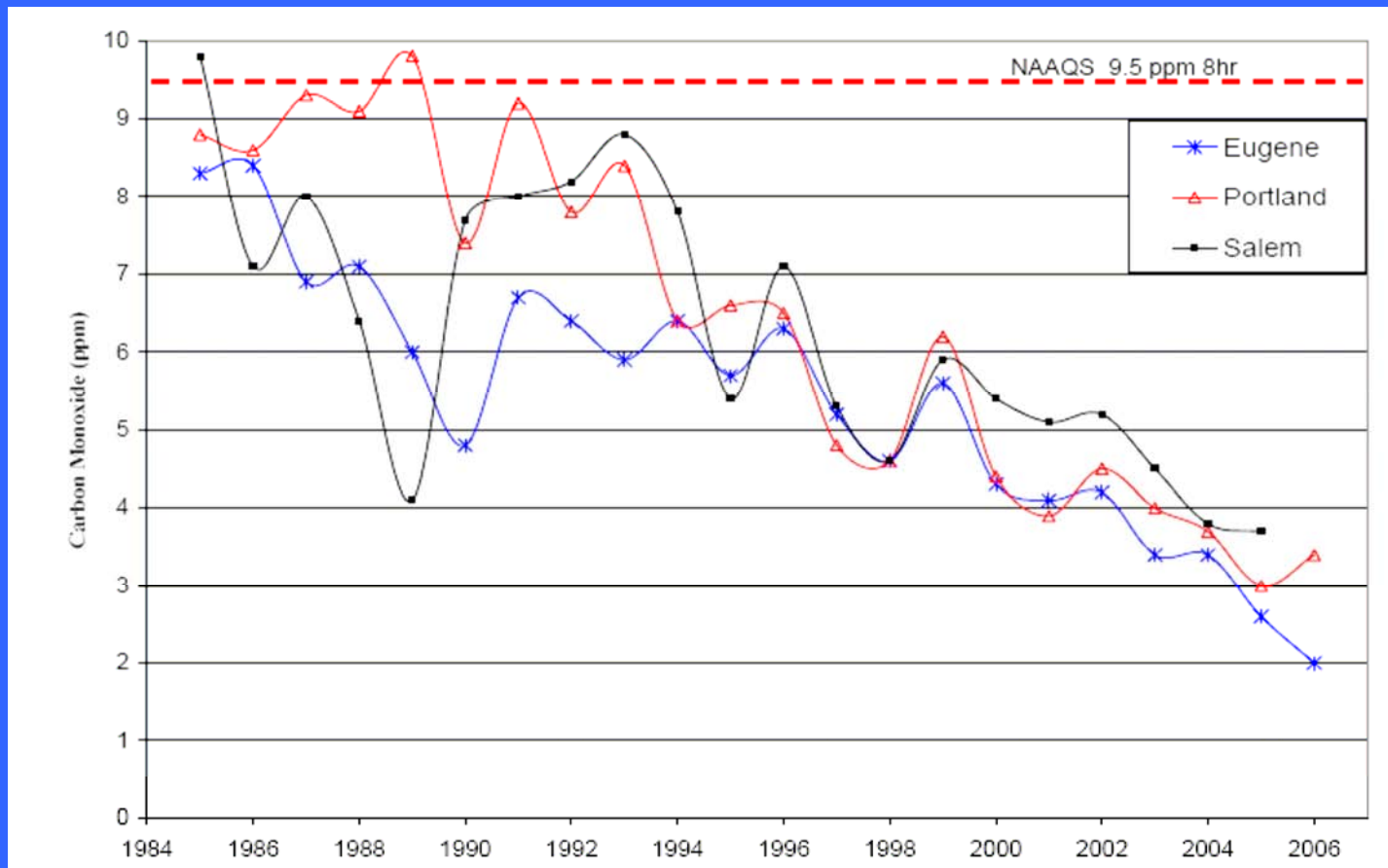


# The Region's Past Air Quality Success

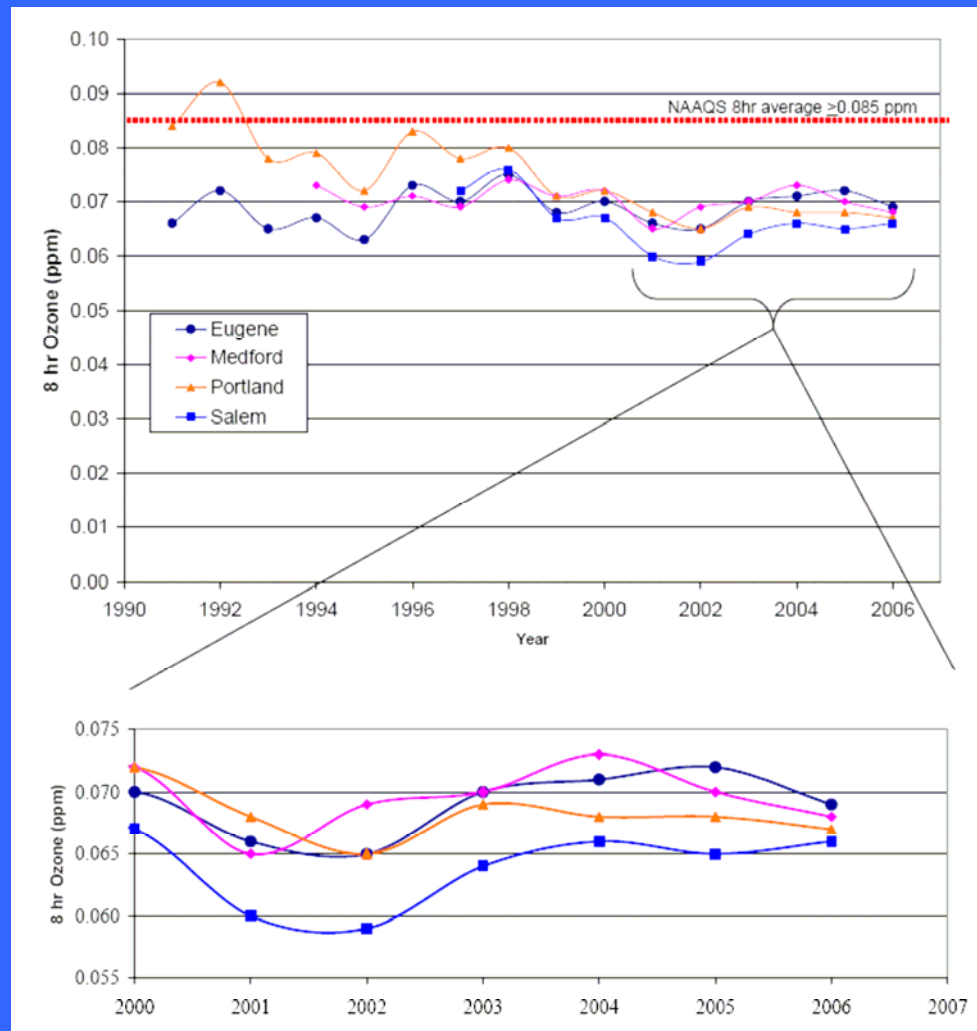


# Carbon Monoxide

## Carbon Monoxide Trends – Total Emissions, All Sources



# Ozone (Smog)



# Future Air Quality Challenges



# Metro Council Goals

## Goal 2: Healthy Environment

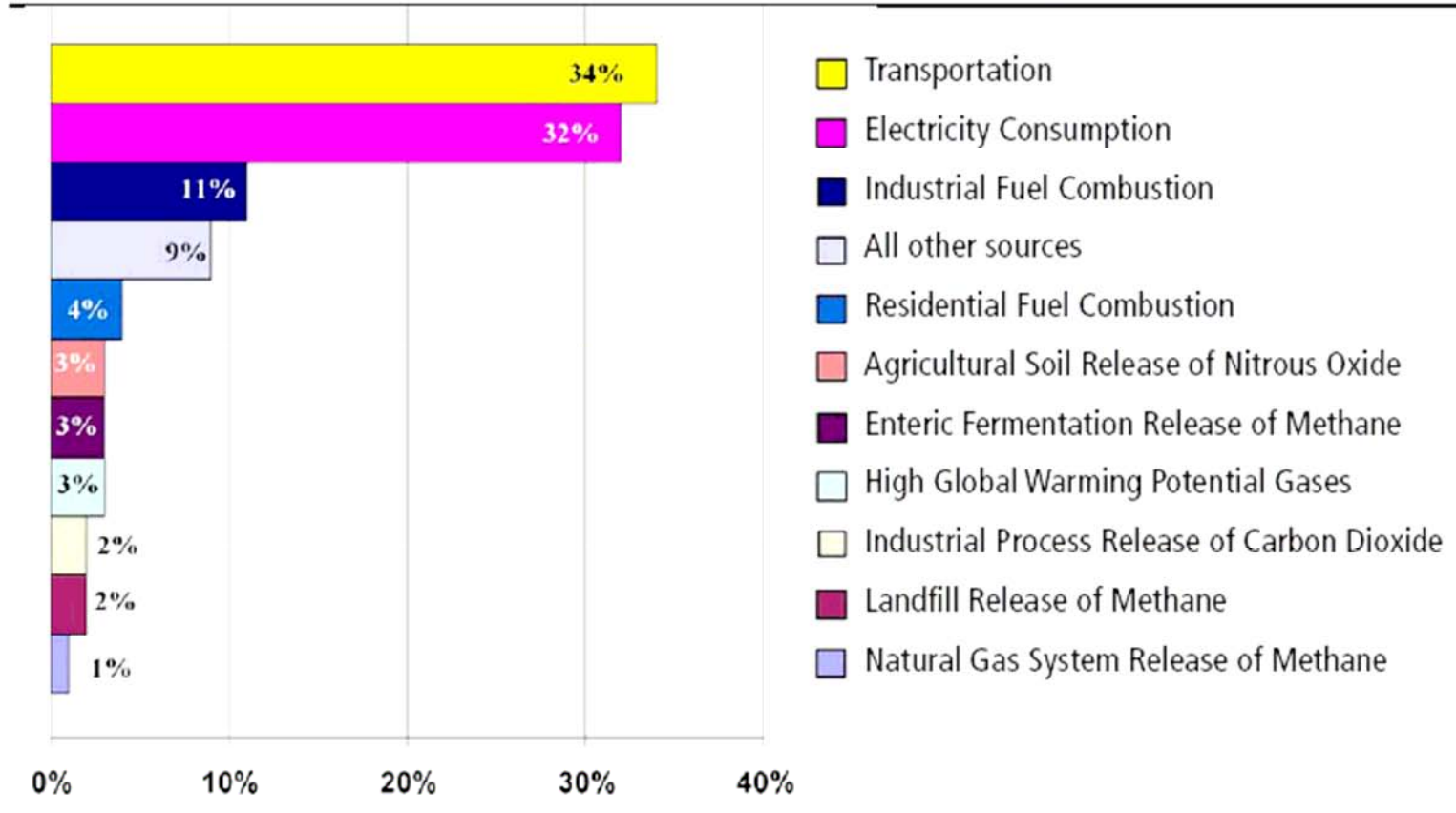
Objective 2.6: Residents' health is enhanced by exceptionally clean air and water

High Level Outcome 2.6.1 Tons of carbon/greenhouse emissions released annually



# Transportation is the Primary GHG Source in Oregon

Figure 3: Major Sources of Greenhouse Gas Emissions in Oregon (2004)



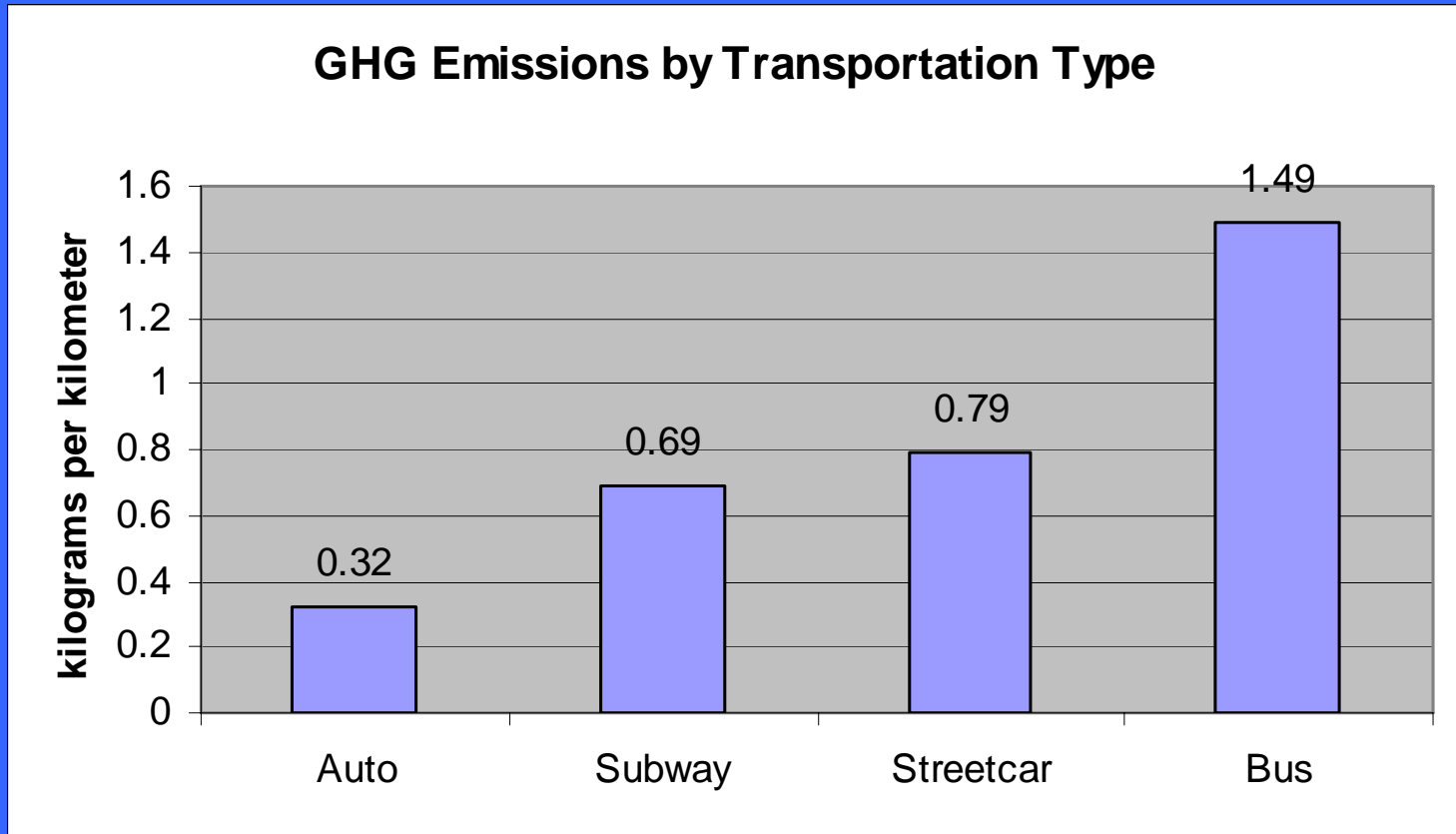
Source: The Governor's Climate Change Integration Group: Final Report January 2008

# Metro/DEQ IGA

Agreement to estimate emissions from transportation sources for the following:

- Greenhouse Gas (Carbon Dioxide)
- Air Toxics
  - Acetaldehyde
  - Acrolin
  - Benzene
  - 1,3 butadiene
  - Formaldehyde
  - PM 10
  - PM 2.5

# GHG Emission Rates





# Most Efficient, lowest GHG Emission Vehicle

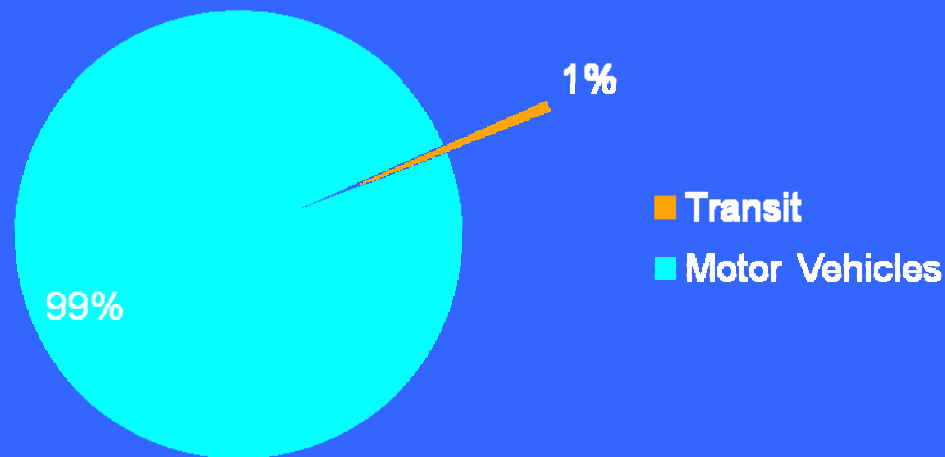


Energy (in calories) used per passenger mile

bicycle - 35

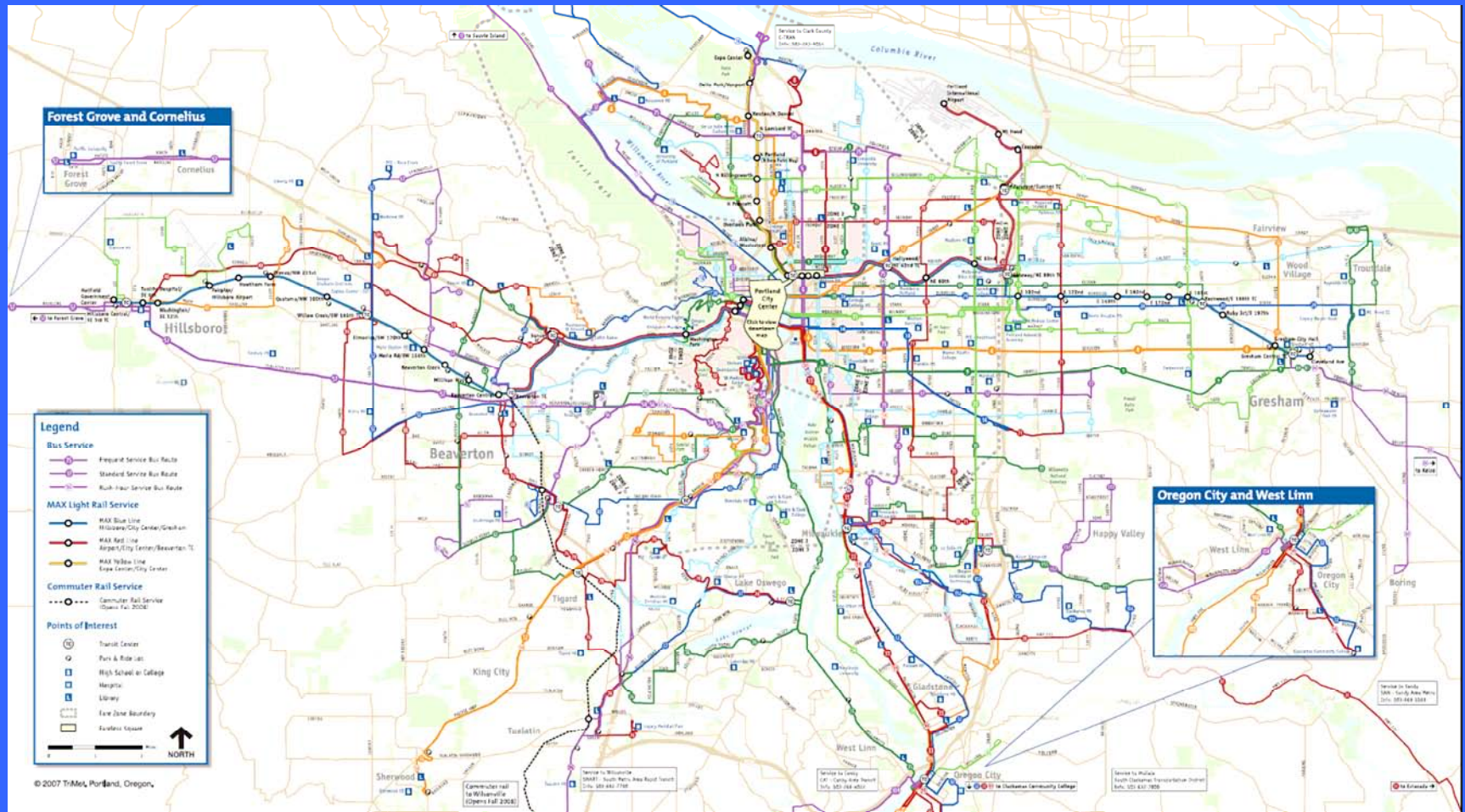
auto - 1,860

# Energy Use – Motor Vehicles and Transit in PDX

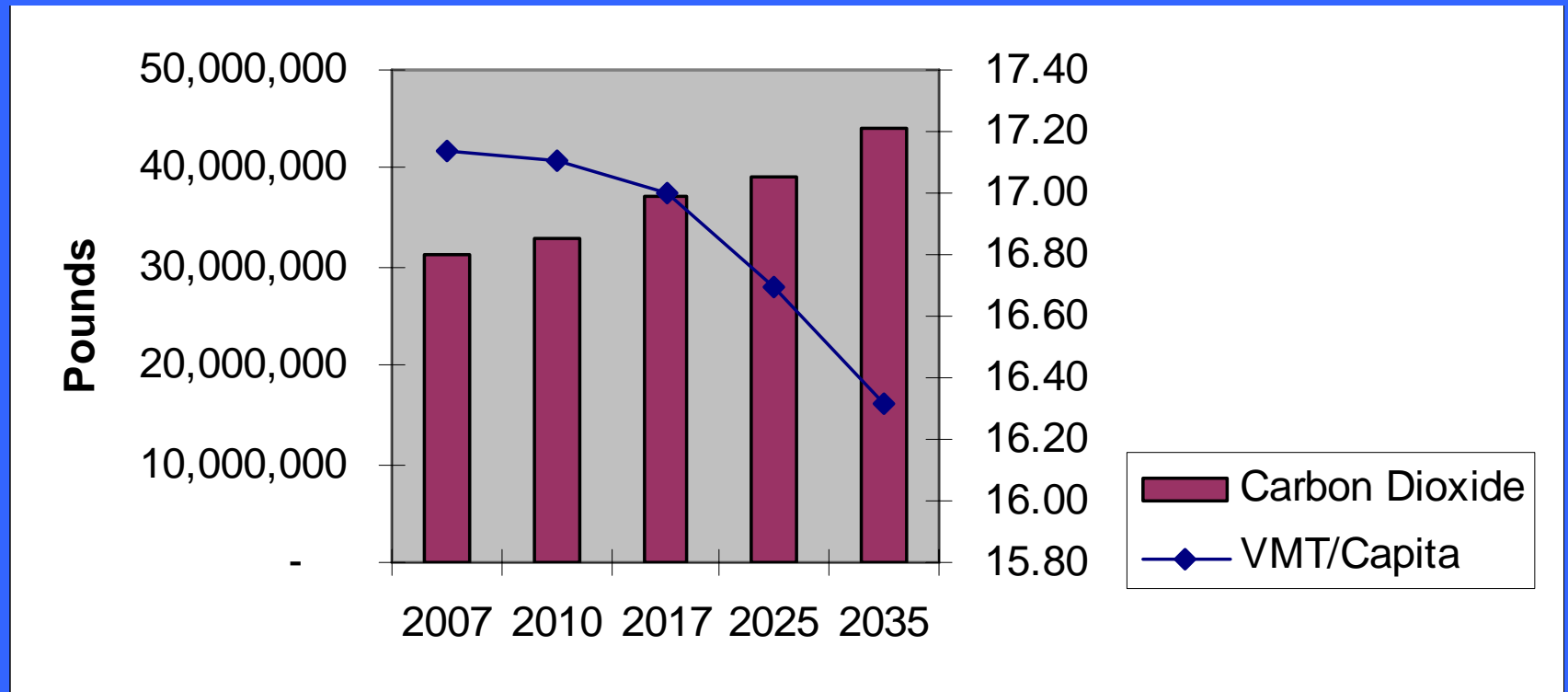


Source: Metro, DEA Associates, 2008 Portland Milwaukie LRT SDEIS

# Transit System Coverage



# Metro Transportation Forecasts



# The Trouble with Forecasts

- Vehicle speed not taken into consideration - up to a 60% error in calculating GHG.
- Doesn't consider
  - New Federal CAFÉ standards.
  - Oregon Low Emission Vehicle standards.



## Metro Estimates Suggest Even with New Fleet Regs, GHG Increase

**Projected Ozone, Air Toxics and Greenhouse Gas Emissions from On-Road Sources for the Metro Region (assumes 2035 Regional Transportation Plan) (Pounds per day)**

[illegible]

# What Can be Done?

- Use MOVES – next generation EPA designed air quality model.
- Peer review.



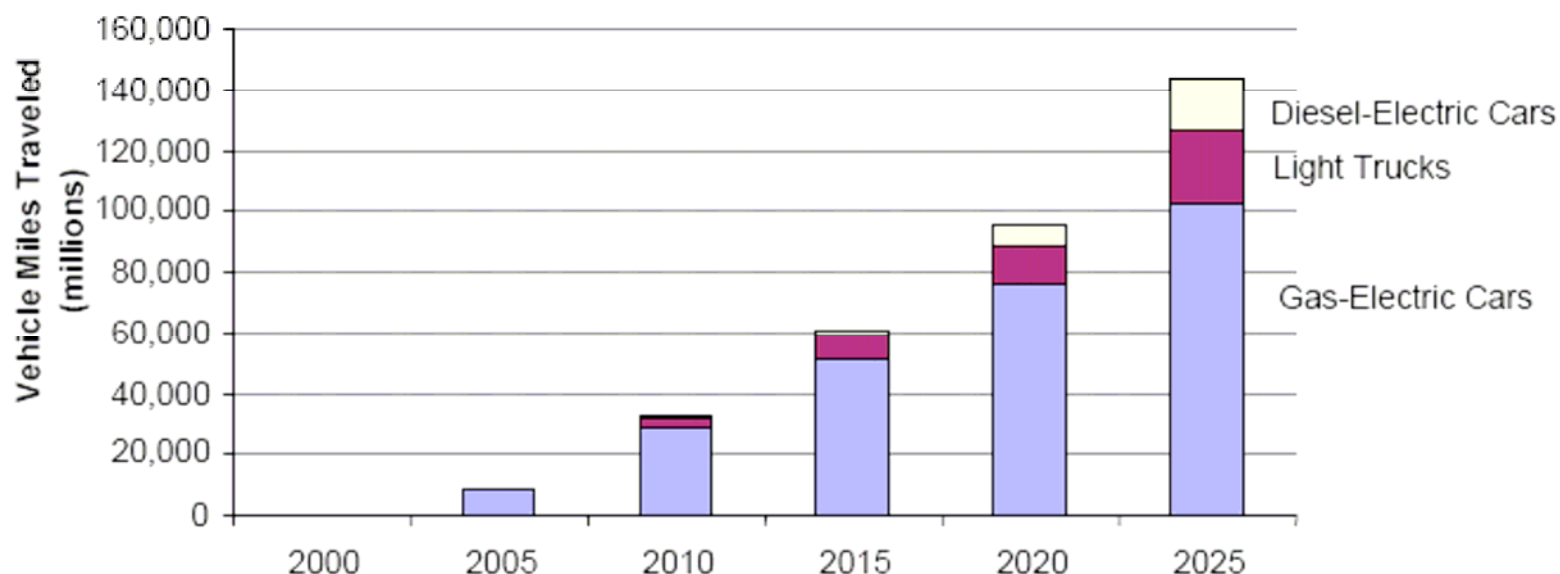
Air and Radiation

EPA420-S-05-002  
March 2005

## A Roadmap to MOVES2004

# Future Fleet Make-up Will Make a Difference

**Figure 11-2. Historical and Projected VMT from Gasoline- and Diesel-Electric Hybrid Vehicles, 2000–2025**

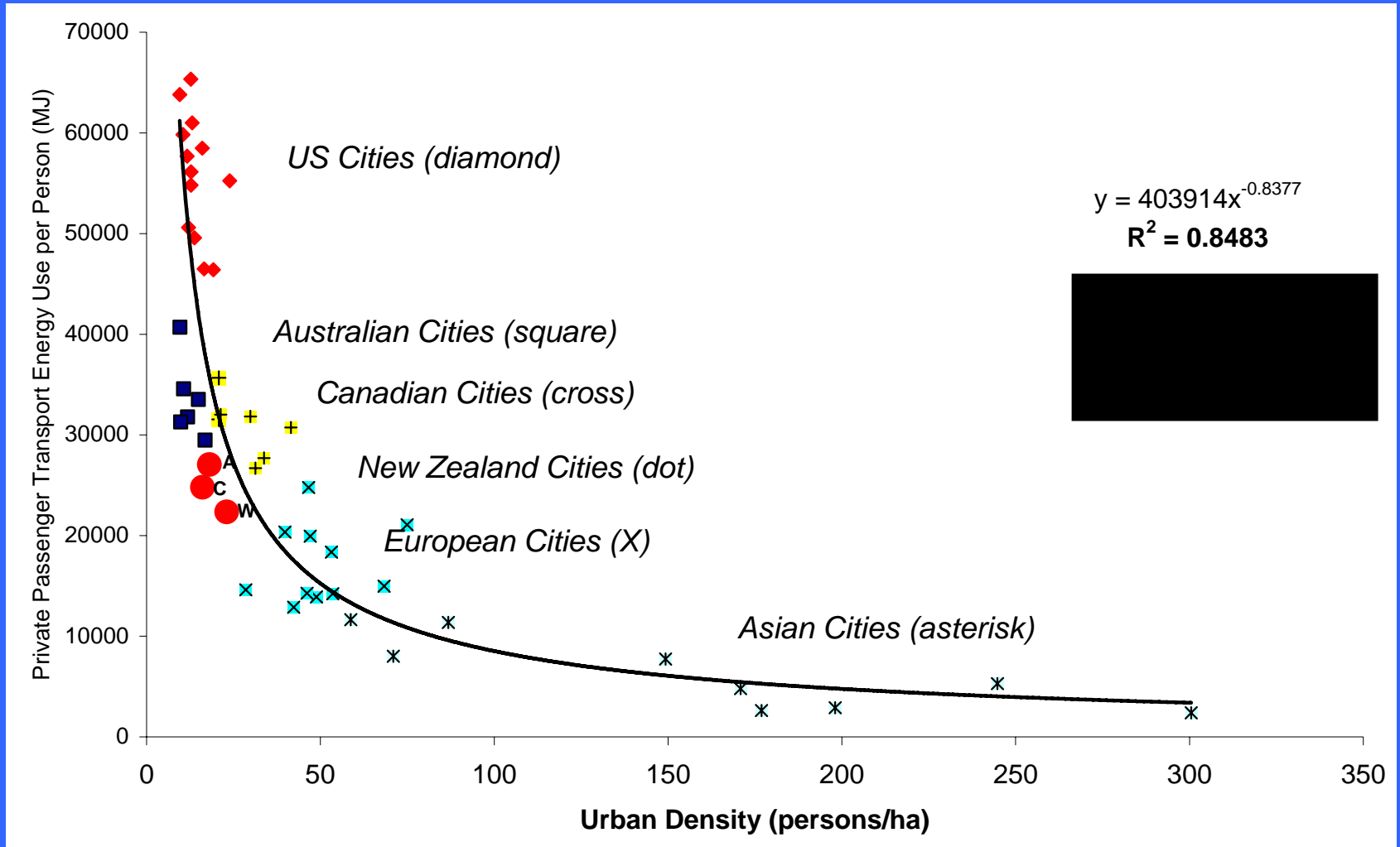


Source: Browning, L., 2003. "VMT Projections for Alternative Fueled and Advanced Technology Vehicles through 2025," 13th CRC On-Road Vehicle Emissions Workshop.

Note: "Light Trucks" category includes both Gas-Electric and Diesel-Electric Vehicles



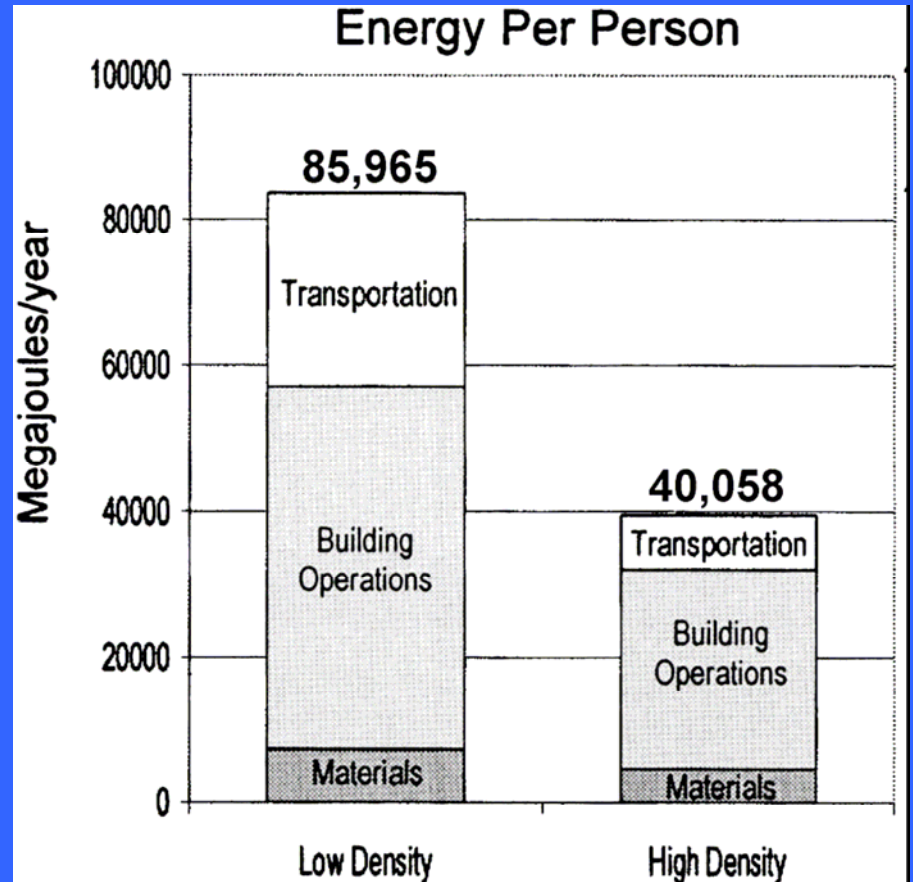
# Urban Transportation Energy



Source: Peter Newman 2008

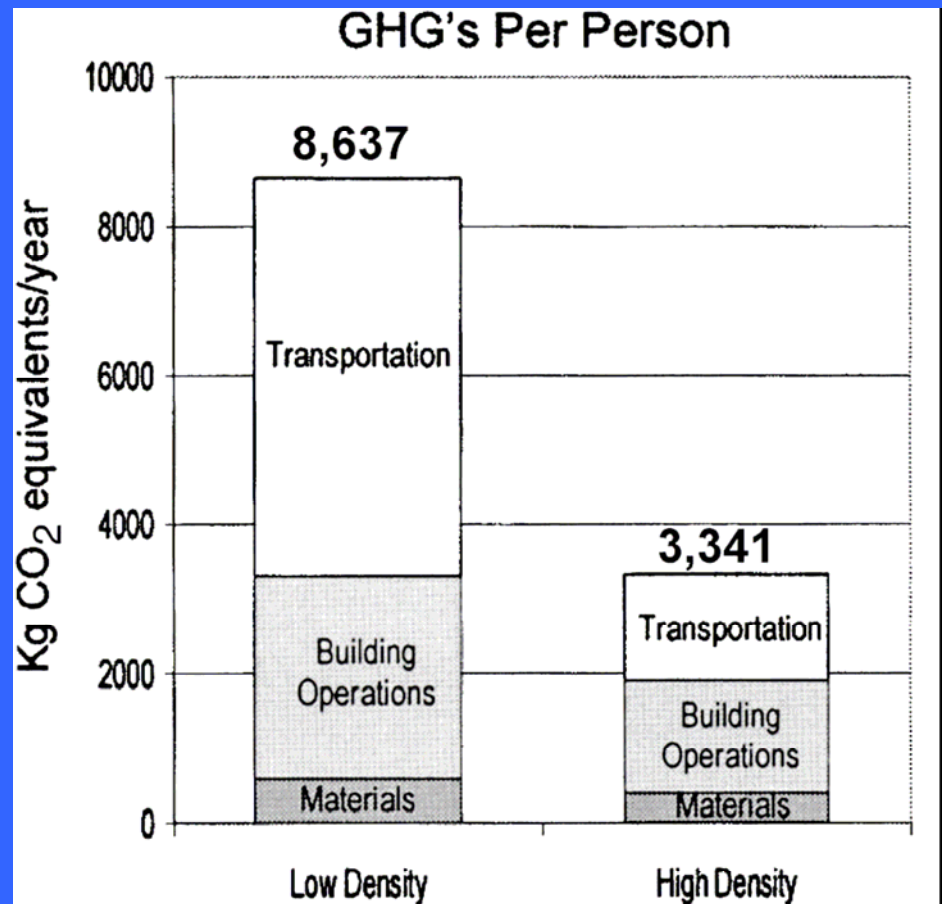
# Land Use & Energy

- High density residents can use up to 2 times less energy than low density residents



# Land Use – Density Matters

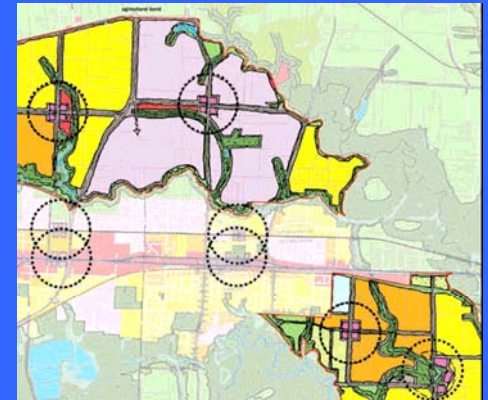
- Comparing annual total low and high density residential can be as much as 2.5 times different.



# Metro Greatest Places - Choices

## Four Tracks:

- Investments
- Urban and rural reserves
- Performance based growth management
- Transportation



# Metro Projects will use GHG metrics

**WINTER 2008**

**MAKING THE  
Greatest  
PLACE**

**Focus on urban and rural reserves**

**MESSAGE FROM COUNCILOR KATHRYN HARRINGTON**

We live in a special place. We have vibrant communities and town centers interwoven with beautiful natural areas that enable wildlife to thrive and provide us with extraordinary recreational activities close to home. And we have a diverse agricultural community that plays an important role in our region's economy.

This did not happen by chance. For more than 30 years, as this region has grown by more than a million people, we've made conscious decisions to reinvest in our existing communities, protect nature, use land more efficiently and minimize the impact of new development on farm and forest land while accommodating population growth and welcoming the economic opportunities it offers.

Although our efforts to manage our land and natural resources more efficiently have made us a national model for other metropolitan regions to emulate, the current process for making urban growth management decisions has also been highly contentious. It has offered no predictability or certainty for the protection of valuable rural lands, and it has not considered a variety of factors for accommodating growth in ways that strengthen local communities. It also does not weigh the costs of new development in expansion areas against those for redevelopment of existing downtowns and main streets within the current urban growth boundary.


*Continued on page 2*

"The new urban and rural reserves are seen as an alternative to the existing growth management system, which is based on mandatory though somewhat arbitrary expansions of the urban growth boundary onto farms and forestlands." **The Oregonian**, "Reserves alter land-use talks," Jan. 2, 2008


**Metro region cities**  
Beaverton  
Cornelius  
Dunsmuir  
Gresham  
Happy Valley  
Hillsboro  
Johnson City  
King City  
Lake Oswego  
Maywood Park  
Milwaukie  
Oregon City  
Portland  
Rivergrove  
Sherwood  
Tigard  
Troutdale  
Tualatin  
West Linn  
Wilsonville  
Wood Village

**Metro region counties**  
Clackamas County  
Multnomah County  
Washington County

**METRO**



[www.metro-region.org](http://www.metro-region.org)

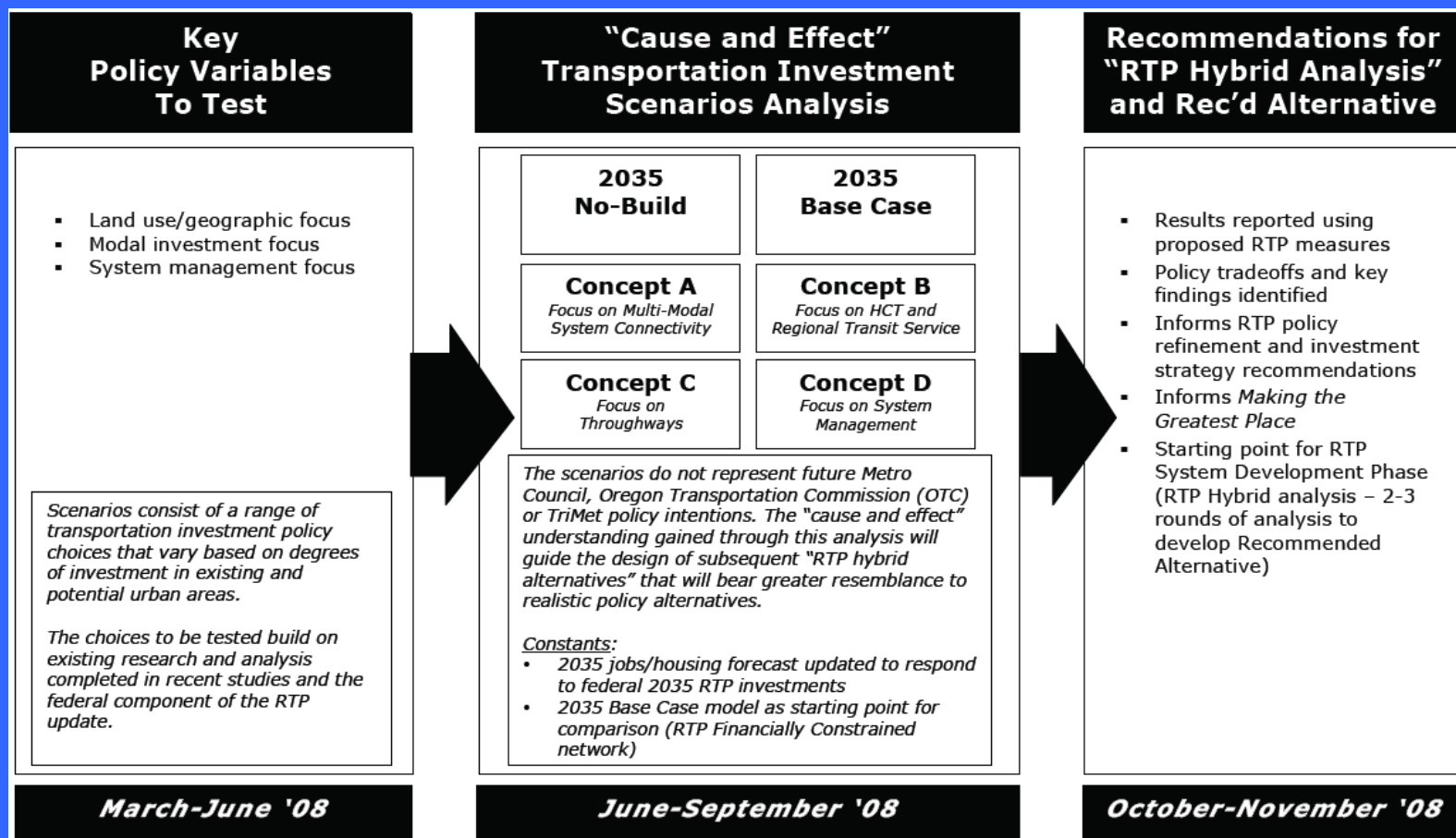


**Final Draft  
for USDOT Review  
January 18, 2008**

**2035**  
**REGIONAL TRANSPORTATION PLAN**

**Metro | Joint Policy Advisory Committee on Transportation**

# Scenario Analysis Will Use GHG Metric



# Stay Tuned for Results!







# **Air Quality overview for TPAC**

## **August 1, 2008**

**Nina DeConcini**





## **Clean Air Act (CAA)**

- **sets maximum levels for six air (“Criteria”) pollutants to protect human health.**
- **Criteria Pollutants include:**
  - Carbon Monoxide
  - Lead
  - Nitrogen Oxide
  - Ozone (O<sub>3</sub>)
  - Particulate Matter (PM<sub>2.5</sub>)
  - Particulate Matter (PM<sub>10</sub>)
  - Sulfur Dioxide
- **MPO’s and the State must be in compliance/approved by EPA.**



## Metro Area Criteria Pollutants

- **Pollutants in the Portland area that involve transportation:**
  - Ozone (O<sub>3</sub>),
  - Carbon Monoxide (CO) and
  - Particulate Matter (PM)
- **Ultimate Clean Air Act penalty is withdrawal of the state's transportation funds.**



## **Metro Area Criteria Pollutants (continued)**

### **Ozone (O<sub>3</sub>) :**

- Metro region in “non-attainment” status until 1996.
- then “maintenance”.
- In 2000, change in federal standards resulted in attainment status.
- Strategies through 2016 likely to keep us there, but standard could be lowered, creating new challenges.



## **Metro Area Criteria Pollutants (continued)**

### **Carbon Monoxide (CO):**

- Violated standards one of every three days in 1970's.
- No violations since 1984.
- In maintenance through 2017.
- Unlikely to have recurrence of violations.
- Strategies adopted: Parking Lid, Central City Transportation Management Plan, Oxy Fuel, New car standards, Vehicle Inspection Program contributed to success.
- Portland is subject to Conformity for CO through 2017.



## **Metro Area Criteria Pollutants (continued)** continued)

### **Particulate Matter (PM):**

- Diesel exhaust makes PM a transportation-related pollutant.
- Woodstoves cause most of the PM problem.
- Because of a recent lowering of the standard, future non-attainment very possible, which would trigger consequences for the region such as: stricter emission control requirements for industry, off-sets, conformity and CMAQ funds.



## Air Toxics

- EPA has identified 188 known substances shown to be harmful to human health.
- Not regulated at the Federal level like “criteria” pollutants.
- **Leading Air Toxics in Portland area:**
  - Benzene (a carcinogen from gasoline, exhaust and wood burning),
  - Diesel Particulate (diesel exhaust), and
  - PAHs (carcinogens from burning organic matter).
- **Oregon’s air toxics program is a departure from how we’ve regulated air pollution in the past:**
  - Scientific advisory committee recommended health based bench marks to protect Oregonians
  - EQC (DEQ’s governing body) adopted benchmarks to achieve no more than 1 death/million per lifetime
  - Geographic approach-Portland region first
  - Broad advisory committee to develop strategies (both regulatory and voluntary) to achieve air toxics reductions.



## Greenhouse Gas (GHG) Emissions

Transportation sources contribute 34% according to Oregon Dept of Energy.

- Governor has established climate change as a priority, HB 3543 has goals: 2010 = Arrest GHG Growth, 2020 = 10% lower than 1990, 2050 = 75% lower than 1990
- Agencies involved: Energy, DEQ ODOT & DLCDD (for transportation) and Governor's Global Warming Commission
- DEQ has legislative package prepared for 2009 Legislative session which includes resources for staff to work on:
  - GHG reporting rule (industry),
  - Cap and Trade (WCI expected to include fuels in Cap and Trade in 2015)
  - Implementation of OR LEV



## Strategies and pollutant reduction

<u>Action</u>	<u>VOC/NOx</u>	<u>PM</u>	<u>CO</u>	<u>Toxics</u>	<u>GHGs</u>
• Diesel Retrofits	X	X		X	
• Refinery Benzene Cap (done)				X	
• Low Emis. Vehicles (done)	sX			X	X
• New CAFE					X
• Low Emis. Vehicles II					X
• Gas Station Control (Stage I)	X			X	
• Low Carbon Fuel Standard					X
• Idle Reduction Efforts	X	X	X	X	X
• Area NESHAP (autobody, etc.)	X			X	
• Landfill Methane Capture					X





## Strategies and pollutant reduction (continued)

<u>Action</u>	<u>VOC/NOx</u>	<u>PM</u>	<u>CO</u>	<u>Toxics</u>	<u>GHGs</u>
• Eco Biz Certification				X	
• Low Rolling Resist. Tires	X	X	X	X	X
• Shore Power for Ships (Hoteling)	X	X	X	X	X
• Retail Ban of R-134					X
• Woodstove Upgrade	X	X	X	X	
• Truck Improvements (aero, wt.)	X	X		X	X
• Alt. Fuels Hwy.					X
• Transit System	X			X	X
• Tire Inflation Program	X	X	X	X	X
• Ban SF6 (electronics clnr.)					X
• Stds. for aerosol products					X
• VMT reduction	X		X		X

# **Proposed JPACT Earmark Recommendation List**

In the Oregon Transportation Commission's policy on Federal Reauthorization Highway Program Earmark Requests, Area Commissions on Transportation (ACTs) and ACT-like bodies, including JPACT, are asked to consider reauthorization project proposals submitted by ODOT staff and local governments and make recommendations to the Commission on which projects should be selected by the Commission to request as earmarks from Congress. When a project is put on the Commission's Earmark Request List, the Commission makes a commitment to deliver the project or a project phase if an earmark of an adequate size is secured, so it is important that all projects are financially feasible.

In response to a request from ODOT for project proposals, local governments and ODOT staff submitted 10 proposals for projects they wish to see the OTC include on its Earmark Request List to the congressional delegation. ODOT has reviewed all proposals and screened them based on a number of factors. At this early stage in the process, the primary screening mechanism for these projects is whether earmark funding plus additional available funding (in the STIP and from other sources) is likely to be sufficient to complete the project or a project phase. Based on this and other factors, including benefit to the state's transportation system, ODOT has assigned each project into one of three categories: projects that likely will be recommended for the JPACT list (Tier 1); projects that may be recommended for the JPACT list (Tier 2); and projects that will probably not be recommended for the JPACT list (Tier 3). ODOT has divided the High Priority Project proposals as follows:

## ***Tier 1: Likely to recommend to JPACT***

- I-205/I-5 interchange (ODOT, \$14.4 million)
- I-84 eastbound to I-205 northbound merge lane (ODOT, \$14.4 million)

## ***Tier 2: Possible recommendations to JPACT***

- Airport Way to northbound I-205 interchange (Port of Portland, \$13 million)
- Sunrise Corridor Phase 1 (Clackamas County, \$15 million)
- OR 99W Corridor Phase 3 (City of Tigard, \$4.5 million)

## ***Tier 3: Unlikely to recommend to JPACT***

- US 26 Springwater interchange (City of Gresham, \$18.7 million)
- I-84/257<sup>th</sup> Avenue (Troutdale Interchange) (Port of Portland, \$12 million)
- US 26 Bethany overcrossing (Washington County, \$15 million)

In addition to these High Priority Project recommendations, ODOT will ask JPACT to endorse ODOT's request for megaproject earmark funding for the I-5 Columbia River Crossing from a discretionary earmark program such as Projects of National and Regional Significance. Requesting funds in this manner will ensure that CRC competes at the national level against other similar megaprojects rather than competing against other regional priorities for federal funds.

ODOT also recommends that TPAC/JPACT direct the TSMO group to review regional ITS projects and put forward proposals for any projects that should be considered by the Oregon Transportation Commission.

### **High Priority Project Proposals**

#### ***Tier 1: Likely to recommend to JPACT***

##### **I-205 southbound to I-5 southbound merge lane**

*Project cost:* \$16 million

*Earmark request:* \$14.4 million

*Project description:* This project would build an acceleration/auxiliary lane that would allow traffic from the I-205 southbound ramp additional time to safely merge onto I-5 without slowing traffic in the travel lanes. ODOT would also explore building an extended exit lane on northbound I-5 that would allow vehicles to more efficiently exit I-5 and enter northbound I-205.

*Explanation:* This project would have significant benefit to traffic flow at relatively little cost. Moreover, the project could be constructed with an earmark and additional resources from the STIP. If full funding is not received, the project can be phased.

##### **I-84 eastbound to I-205 northbound merge lane (\$14.4 million)**

*Project cost:* \$16 million

*Earmark request:* \$14.4 million

*Project description:* This project would extend the exit lane from eastbound I-84 to northbound I-205 back to the Halsey exit to the junction with the I-205 northbound on-ramp.

*Explanation:* This project would have significant benefit to traffic flow at relatively little cost. The project could be constructed with an earmark and additional resources available in the STIP with only minimal risk of facing a significant shortfall that would need to be covered from the STIP.

#### ***Tier 2: Possible recommendations to JPACT***

##### **Airport Way to northbound I-205 interchange**

*Project cost:* \$33.1 million

*Earmark request:* \$14.4 million

*Project description:* The project will expand the capacity and efficiency of the intersection at the foot of the on-ramp from Airport Way to I-205 north, the I-205 mainline, and related surface streets.

*Explanation:* ODOT will work with the Port of Portland to determine whether this project should be recommended to JPACT. Key questions to be answered include whether ODOT and the Port can determine how to appropriately phase the project and agree how to share the cost of closing any funding gaps that remain after securing an earmark.

##### **Sunrise Corridor Phase 1**

*Project cost:* To be determined

*Earmark request:* \$15 million

*Project description:* Funding could be used for purchase of right of way for the Sunrise project or to construct improvements on the Highway 212/224 corridor.

*Explanation:* Clackamas County presented ODOT a menu of options for potential use of an earmark on the Sunrise Corridor project. ODOT will work with the county to determine which of these options are financially viable and potentially scalable or phasable.

### **OR 99W Corridor Phase 3**

*Project cost:* \$5 million

*Earmark request:* \$4.5 million

*Project description:* This project would improve capacity and address additional problems at the intersection of Highway 99W with Gaarde and McDonald Streets in Tigard.

*Explanation:* ODOT will work with the City of Tigard to determine financial responsibility for any funding shortfalls on this project.

### ***Tier 3: Unlikely to recommend to JPACT***

#### **US 26 Springwater interchange**

*Project cost:* \$59.8 million

*Earmark request:* \$18.7 million

*Project description:* This project would purchase right of way to eventually build a high capacity, grade separated interchange on US 26 just south of the current at-grade intersection of US 26 and 267th.

*Explanation:* Because of this project's size, an earmark would be unlikely to cover a substantial portion of the project's cost, and ODOT would bear significant risk of having to make up a large shortfall out of limited STIP resources or risk failing to deliver the project.

#### **I-84/257<sup>th</sup> Avenue (Troutdale Interchange)**

*Project cost:* \$30.3 million

*Earmark request:* \$12 million

*Project description:* This project would make improvements to the I-84 Troutdale interchange.

*Explanation:* This project may have limited opportunities for phasing, and very few resources have been dedicated to the project to date. Unless a phasing strategy can be developed that is acceptable to all parties, an earmark may not be able to cover much of the cost of building the project, leaving a significant funding gap that could not be filled out of limited STIP resources.

#### **US 26 Bethany overcrossing**

*Project cost:* \$10.8 million

*Earmark request:* \$15 million

*Project description:* This project would increase capacity on the Bethany overcrossing over US 26 and also make improvements to other local roads near the overcrossing.

*Explanation:* This is a lower priority than other projects in Washington County, such as the US 26 Staley's Junction interchange in the western portion of the county, and may be more appropriate as a local request.

### **ITS Projects**

The City of Gresham proposed an earmark for a multi-element ITS project that would improve signal timing and traveler information in Gresham and on the I-84 corridor. Rather than having JPACT endorse the only ITS project proposed without considering other ITS needs, ODOT proposes that TPAC/JPACT direct the TSMO group to review regional ITS projects and put

forward proposals for any projects (or a single package of projects) that should be considered by the Oregon Transportation Commission. This would ensure that the best regional ITS projects are considered and selected. The Gresham proposal should be among the projects considered by TSMO and may be part of an ODOT regional ITS request.

**Additional Information**

Due to the large number of projects proposed across the state, the OTC may not include all of the projects on JPACT's Earmark Recommendation List on its Earmark Request List.

No local agency would be precluded from requesting projects on or connected to the state highway system that are not on the OTC Earmark Request List, though ODOT cannot make any commitment that projects that are not on the OTC's list will be delivered if partial funding is received.



*Airport Futures* is a collaborative effort between the City of Portland, Port of Portland, and the Portland-Vancouver metropolitan community to create an integrated long-range development plan for Portland International Airport (PDX). Beginning in fall 2007 and concluding in spring 2010, the Port will update the airport master plan and the City will create a land use plan recognizing PDX's role in the regional economy while managing City infrastructure and livability. The three-year process will reinforce Portland's planning legacy and PDX's reputation as one of the premier airports in the country, and incorporate principles of sustainability and livability. The City and Port are committed to planning for future cargo and passenger aviation needs of the region while using reasonable efforts to avoid, reduce, or mitigate potential impacts to the community.

### **Joint Planning Process**

PDX currently operates as a "conditional use" in an industrial zone. This process requires the Port to apply for a permit from the City every 8-10 years to operate PDX as an airport. In 2003, the City and Port agreed to replace the current conditional use process with a legislative process which would recognize the airport as an "allowed use" as part of a planning process that addresses the complex issues of growth at the airport. This process will be guided by a 2004 City-Port Intergovernmental Agreement, and a joint City-Port Public Involvement Program.

### **Public Involvement**

To support the integrated planning process, the City and Port have developed a comprehensive Public Involvement Program. A centerpiece of the process is the joint 30-member Planning Advisory Group (PAG) to serve as an advisory body to the City and Port. The PAG will be comprised of community, government, and commercial interests. In addition to the PAG, public involvement will be sought to inform decision-making at key milestones in the joint planning process. Those milestones are:

- Scope of Work Development and Project Initiation
- PAG Kick-off, Issue Identification and Goal Setting
- Aviation Demand Forecasts
- City Early Land Use Proposal and Forecasted PDX Facility Requirements
- PDX Follow-on Studies
- Airport Alternatives Analysis and City Land Use Alternatives
- Adoption of PDX Master Plan and City Land Use Plan

To ensure adequate input at these milestones, the City and Port plan to schedule 19 PAG meetings, 14 public meetings, six City of Portland Planning Commission meetings, four Portland City Council meetings, six Vancouver City Council meetings, and five briefings of the Port Commission. There will also be ongoing meetings with neighborhood coalitions and key stakeholder groups to provide regular updates and receive input. A project web site at [www.pdxairportfutures.com](http://www.pdxairportfutures.com) will provide additional opportunities for public input and information throughout the planning process.

### **Need more information?**

Jay Sugnet, Portland Planning Bureau, 503-823-5869, [jsugnet@ci.portland.or.us](mailto:jsugnet@ci.portland.or.us)  
Lise Glancy, Port of Portland, 503-460-4018, [lise.glancy@portofportland.com](mailto:lise.glancy@portofportland.com)

[www.pdxairportfutures.com](http://www.pdxairportfutures.com)

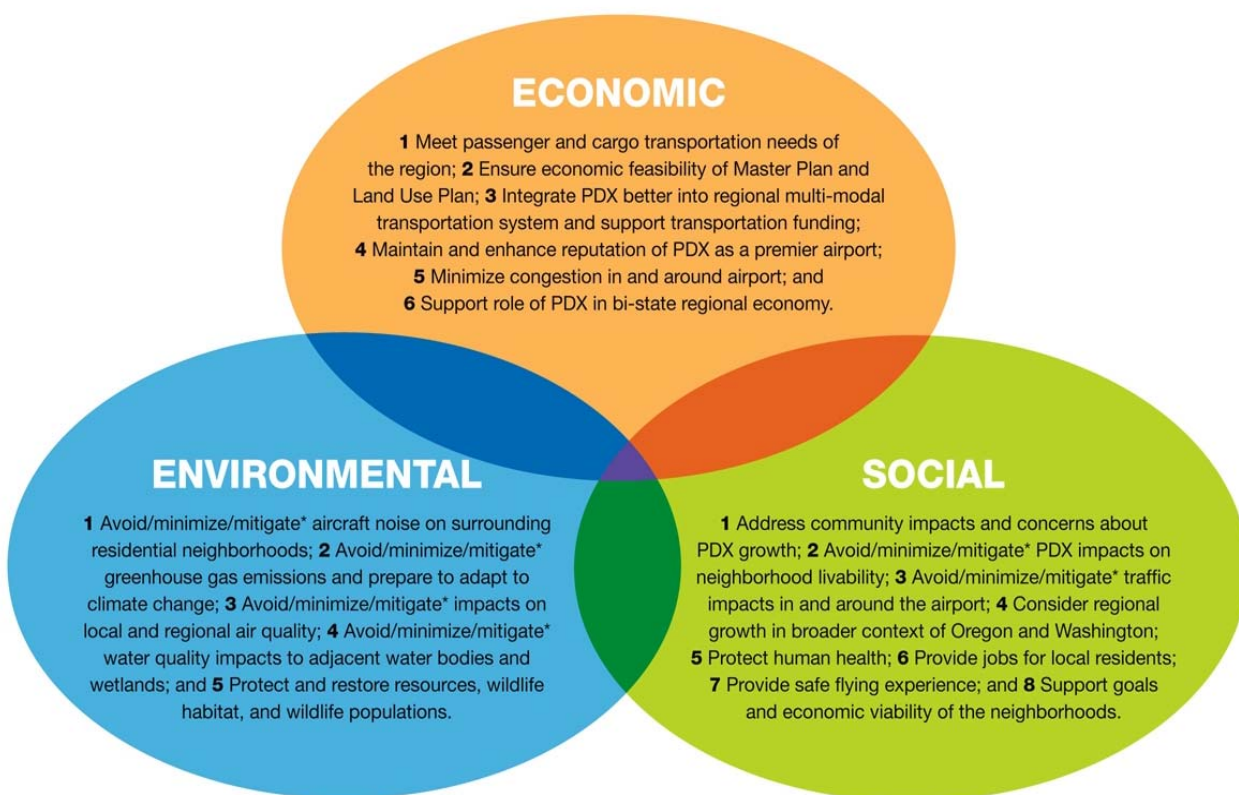
# Airport Futures Planning Advisory Group

## Vision and Values

Our **vision** is a PDX Master Plan and a City of Portland Land Use Plan that:

- 1 Allows the **City** to address the complex issues associated with PDX and their potential impacts,
- 2 Provides the **Community** with a greater opportunity to influence airport planning and development, and
- 3 Provides the **Port** with flexibility to respond to changing circumstances in airport development.

Sustainability is an overarching goal of this project. Sustainability means meeting the Region's air transportation needs without compromising the livability and quality of life for future generations. In this planning process, we will transparently explore and make recommendations that **fairly, realistically and optimally balance** the following **values and goals**:

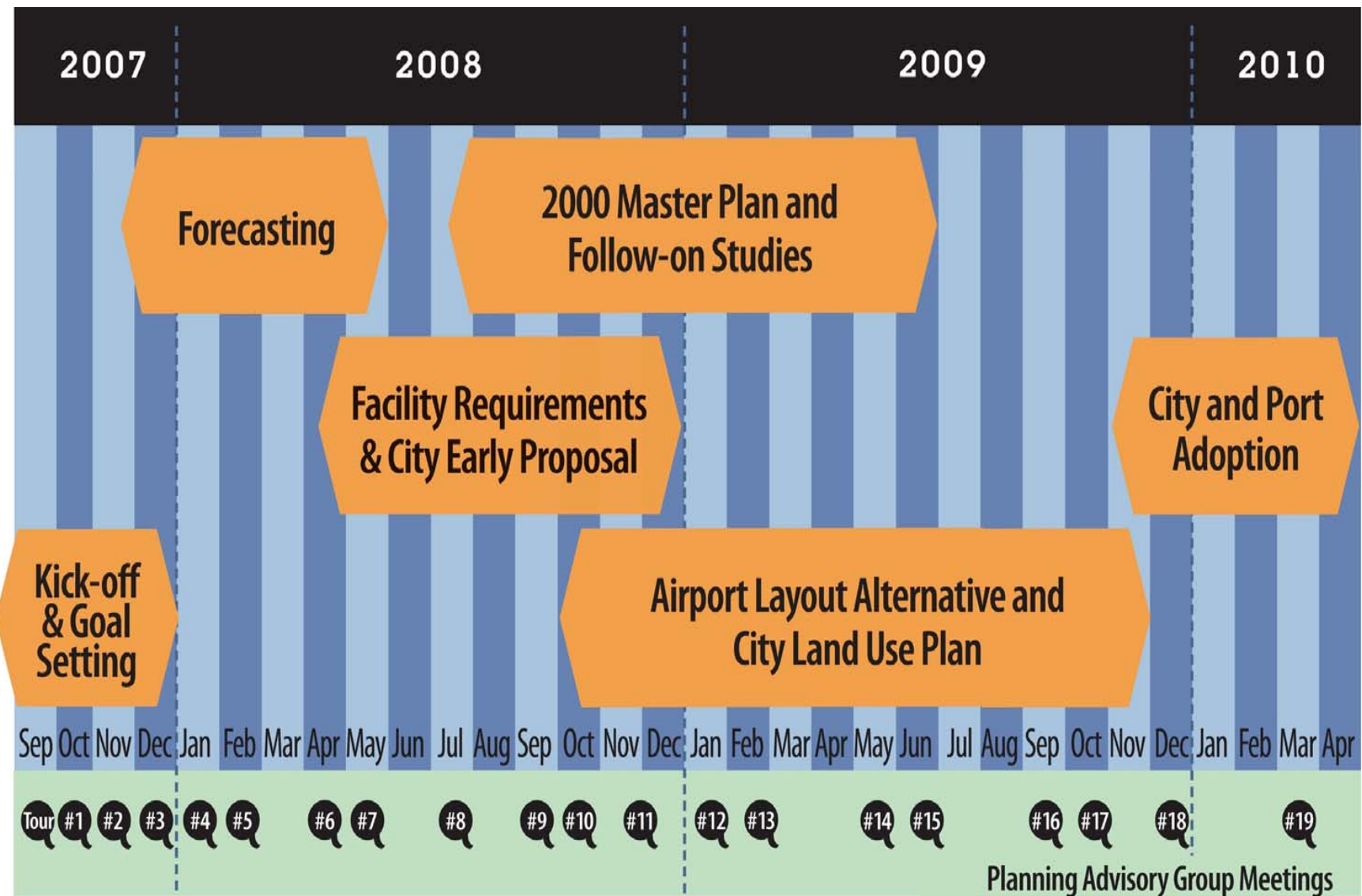


In doing so, **our recommendations** will:

- 1 Balance and sustain economic, environmental, and social interests;
- 2 Integrate other local and regional planning efforts into Airport Futures planning and vice versa;
- 3 Provide long-term public involvement process with opportunities for meaningful public engagement and a voice in aviation development; and
- 4 Provide system to measure and track success and share results with public.

\*Avoid/minimize/mitigate means: first, avoid; if not, minimize and mitigate where adverse impacts cannot be avoided.







Materials following this page were distributed at the meeting.

### Benzene's grip on greater Portland

Cars are the major source of benzene, which collects along and near freeways that run through and around the city. Shaded areas show, by U.S. Census tract, rates that benzene concentration exceeds federal benchmarks for cancer risk.



**FIGURE 8**  
All Metro Areas with the Largest Per Capita Footprints Were Located in the East-Central and Eastern United States in 2005, While Most of the Metro Areas with the Smallest Per Capita Footprints Were Located in the West



Brookings Institute – May 2008

## Portland/Vancouver - Third Lowest Carbon/person

Highest and Lowest Emitting Metro Areas Based on Per Capita Carbon Emissions

Year 2000	Carbon/ person	Year 2005	Carbon/ person
<b>Lowest Emitters:</b>		<b>Lowest Emitters:</b>	
Honolulu, HI	1.230	Honolulu, HI	1.356
New York-Northern New Jersey-Long Island, NY-NJ-PA	1.388	Los Angeles-Long Beach-Santa Ana, CA	1.413
Los Angeles-Long Beach-Santa Ana, CA	1.408	Portland-Vancouver-Beaverton, OR-WA	1.446
Portland-Vancouver-Beaverton, OR-WA	1.519	New York-Northern New Jersey-Long Island, NY-NJ-PA	1.495
San Diego-Carlsbad-San Marcos, CA	1.573	Boise City-Nampa, ID	1.507
Seattle-Tacoma-Bellevue, WA	1.627	Seattle-Tacoma-Bellevue, WA	1.556
Boise City-Nampa, ID	1.635	San Jose-Sunnyvale-Santa Clara, CA	1.573
San Francisco-Oakland-Fremont, CA	1.636	San Francisco-Oakland-Fremont, CA	1.585
Greenville, SC	1.694	El Paso, TX	1.613
San Jose-Sunnyvale-Santa Clara, CA	1.699	San Diego-Carlsbad-San Marcos, CA	1.630
<b>Highest Emitters:</b>		<b>Highest Emitters:</b>	
Nashville-Davidson--Murfreesboro, TN	3.135	Knoxville, TN	3.134
Kansas City, MO-KS	3.162	Harrisburg-Carlisle, PA	3.190
Louisville, KY-IN	3.187	Oklahoma City, OK	3.204
Youngstown-Warren-Boardman, OH-PA	3.205	St. Louis, MO-IL	3.217
Knoxville, TN	3.210	Nashville-Davidson--Murfreesboro, TN	3.222
Harrisburg-Carlisle, PA	3.252	Louisville, KY-IN	3.233
Oklahoma City, OK	3.282	Toledo, OH	3.240
Toledo, OH	3.344	Cincinnati-Middletown, OH-KY-IN	3.281
Lexington-Fayette, KY	3.480	Indianapolis, IN	3.364
Indianapolis, IN	3.552	Lexington-Fayette, KY	3.455

Source: Authors' calculations

Brookings Institute – May 2008

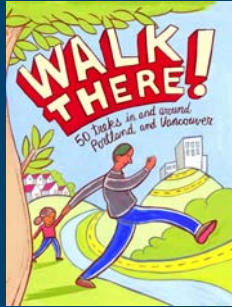
**Projected Ozone, Air Toxics and Greenhouse Gas Emissions from On-Road Sources for the Metro  
Region (assumes 2035 Regional Transportation Plan) (Pounds per day)**

<u>Pollutant</u>	<u>Summer/ Winter</u>	<u>2007</u>	<u>2010</u>	<u>2017</u>	<u>2025</u>	<u>2035 (Financially Constrained System)</u>	<u>Change 2007-2035</u>
<b>Ozone</b>							
Oxides of Nitrogen (NOx)	Summer	108,177	88,553	42,764	44,917	31,034	-71%
Former Maximum Allowance			104,000		118,000		
Volatile Organic Compounds	Summer	61,912	53,781	34,810	38,834	32,697	-47%
Former Maximum Allowance			80,000		80,000		
<b>Air Toxics</b>							
Acetaldehyde	Winter	399	334	182	249	266	-33%
Acrolein	Winter	33	28	15	19	18	-45%
Benzene	Winter	2,134	1,799	1,016	1,276	1,093	-49%
1,3 butadiene	Winter	205	171	93	122	116	-43%
Formaldehyde	Winter	624	523	288	349	342	-45%
PM 10 carbon	Winter	852	663	222	166	96	-89%
PM 10 exhaust	Winter	1,369	1,089	435	307	148	-89%
PM 2.5 carbon	Winter	784	603	179	121	48	-94%
PM 2.5 exhaust	Winter	1,266	998	371	241	78	-94%
<b>Greenhouse Gas</b>							
CO2	Summer	33,846,638	35,835,561	40,476,381	43,041,918	49,028,172	45%
CO2 with new CAFE standards	Summer	33,846,638	35,835,561	37,580,296	38,006,014	40,105,045	18%
CO2 with OR LEV standards	Summer	33,846,638	35,835,561	35,012,070	35,294,373	35,300,284	4%
VMT/Capita		16.95	16.73	16.29	16.34	16.37	-3%

**Notes:**

1. Emissions for years 2007, 2010 and 2017 assume DEQ Inspection and Maintenance Program, years 2025 and 2035 assume no Inspection and Maintenance Program.
2. Source, unless otherwise noted is Metro, Transportation Research and Modeling Services Division, January 2008, for the Metro 2035 Regional Transportation Plan. Year 2007 is model estimated, not actual measurement.
3. Former Maximum Allowance refers to DEQ determined motor vehicle emission budgets for ozone precursors. Reporting these no longer required.
4. Ozone determined using the former air quality model (MOBILE5) based budgets. In addition, the region is no longer required by EPA and USDOT to assess ozone, but does so under an agreement with DEQ.
5. CAFÉ Stds estimated based on Table 15, page 13 of *Comparison of Greenhouse Gas Reductions Under CAFE Standards and ARB Regulations Adopted Pursuant to AB 1493*, January 2, 2008 see [http://www.arb.ca.gov/cc/ccms/ab1493\\_v\\_cafe\\_study.pdf](http://www.arb.ca.gov/cc/ccms/ab1493_v_cafe_study.pdf).
6. OR LEV Stds estimated based on Figure 1, page 25 of *Governor's Vehicle Emissions Workgroup Report*, November 2005, State of Oregon see: <http://www.deq.state.or.us/aq/orlev/docs/05Nov02WorkgroupRpt.pdf>.

[www.oregonmetro.gov](http://www.oregonmetro.gov)



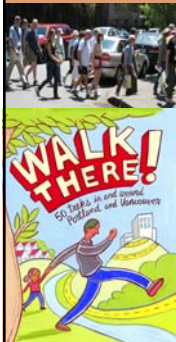
## Program Update

### Regional Travel Options

August 1, 2008

## Regional Travel Options Program

### Walk There!



### BY THE NUMBERS

**35,500**

Books printed

**28,554**

Books distributed

**60 organizations**

Businesses, cities and nonprofits distributing book

**119,716 dollars**

Value of earned media publicity






## Regional Travel Options Program

# Drive Less. Save More.

### Maneje menos.

### Ahorre más.



Discover your options.

[DriveLessSaveMore.com](http://DriveLessSaveMore.com)


#### BY THE NUMBERS

**4,100 people**  
Visited booth in 2008

**4,782 people**  
Using online trip diary  
launched June 1, 2008

**590,087 miles**  
Reduced by trip diary  
participants

**1,353,363 dollars**  
Total earned media value




## Regional Travel Options Program

# CarpoolMatchNW.org



#### BY THE NUMBERS

**11,000 people**  
Now registered

**32 percent**  
Increase in  
registrations since  
January 2008

**387,377 dollars**  
Value of Sunday  
Oregonian story





## Regional Travel Options Program

# MetroVanpool





### BY THE NUMBERS

**31 vans**  
Now operating

**11 vans**  
Added to fleet since July 2007

**1,677,589 miles**  
Reduced in fiscal year 07-08

**126 miles**  
Longest roundtrip vanpool commute



## Regional Travel Options Program

# RTO Grants



March 2008

### 2008-2013 Strategic Plan

REGIONAL TRAVEL OPTIONS

Metro | People places. Open spaces.

### BY THE NUMBERS

**525,000 dollars**  
Available for 2009 to 2011 projects

**Oct. 3, 2008**  
Deadline for proposals

Learn more about Metro  
[www.oregonmetro.gov](http://www.oregonmetro.gov)



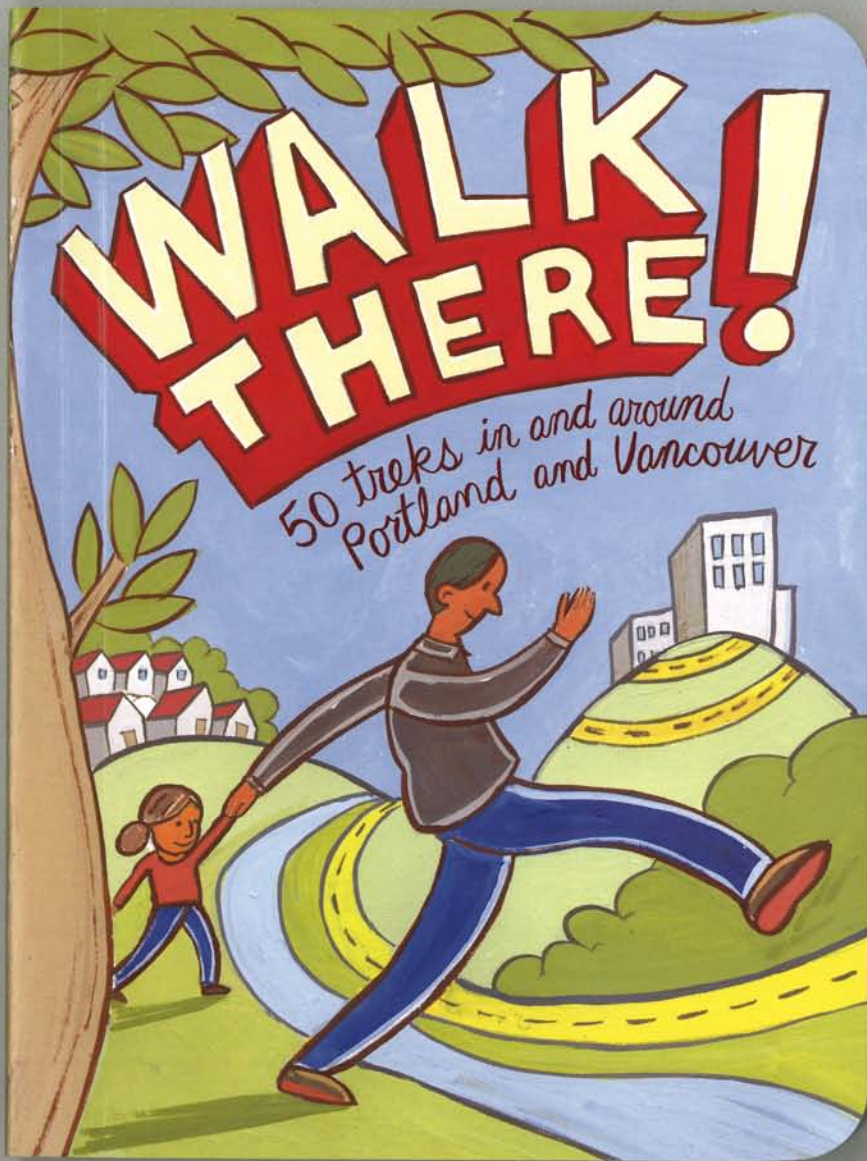
Pam Peck  
Regional Travel Options  
[Pam.Peck@oregonmetro.gov](mailto:Pam.Peck@oregonmetro.gov)





# WALK! THERE!

*50 treks in and around  
Portland and Vancouver*



# Aviation Demand Forecasts

Transportation Policy Alternatives Committee

August 1, 2008



## AIRPORT FUTURES

CHARTING A COURSE FOR PDX

### Integrated planning process with Port, City of Portland and metropolitan community

#### Goals:

- Plan for future cargo and passenger needs of the region
- Avoid, reduce, or mitigate potential impacts to the community
- Reinforce Portland's planning legacy and PDX's reputation as one of the premier airports in the country
- Incorporate principles of sustainability and livability



## Airport Futures

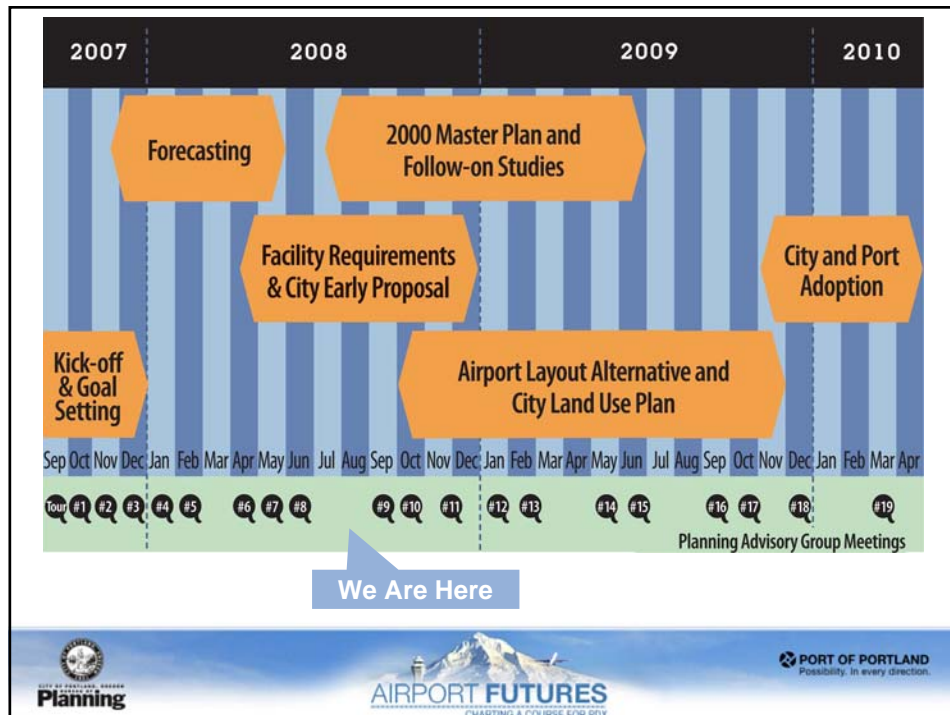
- 3 year planning process (2007 – 2010)
- Two products:
  - PDX Master Plan Update
  - City of Portland Land Use Plan
- Extensive public involvement program



## Public Involvement

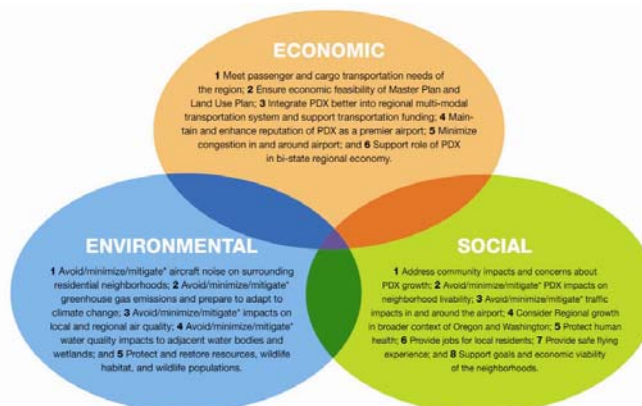
- 30 Member Planning Advisory Group
- 4 Subcommittees to PAG
  - open to the public
- 4 Open Houses
- Ongoing Stakeholder outreach
- Joint City/Port Website
  - [www.pdxairportfutures.com](http://www.pdxairportfutures.com)
- 4 Web surveys
- Technical Advisory Pool
- Interagency Squad



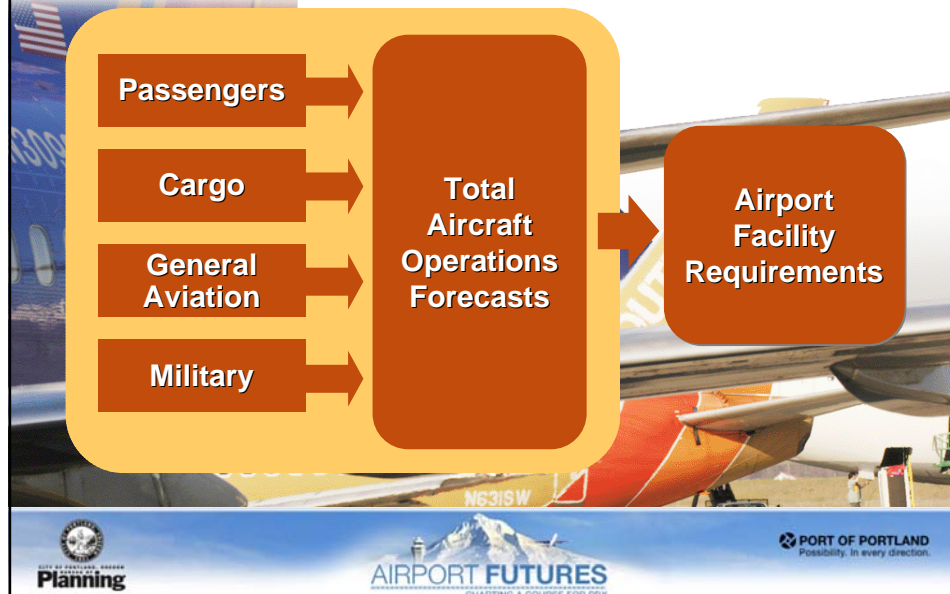


## Overarching Goal – Sustainability

Meeting the region's air transportation needs, without compromising the quality of life for future generations.



## Forecasting Steps



## An Innovative Approach

- Probabilistic forecasts
  - Resulted in a range of forecasts with associated probabilities of occurrence (permits risk assessment)
- Significant research reflecting key issues and trends
- Sustainability issues explored and incorporated
- Peer reviewer

## Forecasts – Key Issues and Trends

### Aviation Industry Related

- cost of travel, fuel costs, security, fees, congestion

### Regional / Economic

- population, employment, personal income

### Technology Related

- new aircraft designs, alternative fuels, videoconferencing

### Global Trends

- climate change, currency exchange rates

### Unpredictable External Events

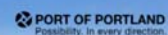
- epidemics, terrorist event, global or national economic crisis, oil embargoes, labor strikes



## Passenger Forecast Model

Population X Income X Ticket Price = # of Passengers

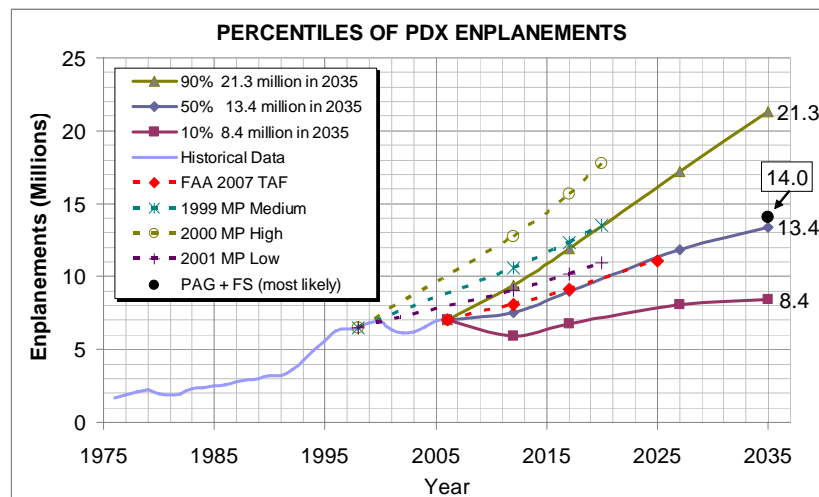
- Population and Income from Metro
- Ticket Price (Yield) developed by consultant team
- Monte Carlo simulation



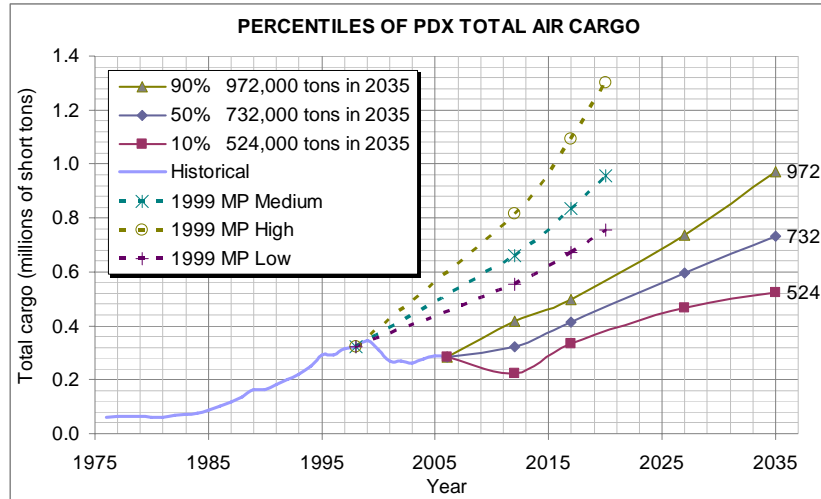
## Sensitivity Analysis

- **20% higher oil prices** = 1 million fewer passengers in 2035
- **Shift of passengers to other airports** = 2 million fewer passengers in 2035
- **Shift to high speed rail** = 180,000 fewer passengers in 2035
- **Video conferencing replaces travel** = 400,000 fewer passengers

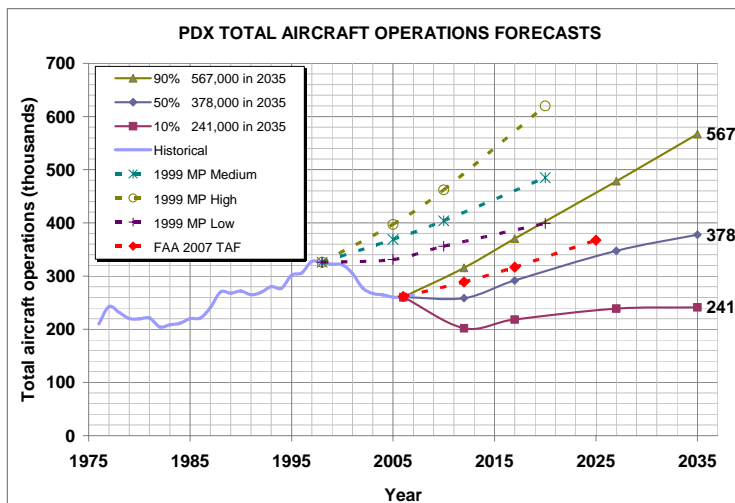
## Passenger Forecasts



## Cargo Forecasts



## Aircraft Operations Forecast





## Next Steps

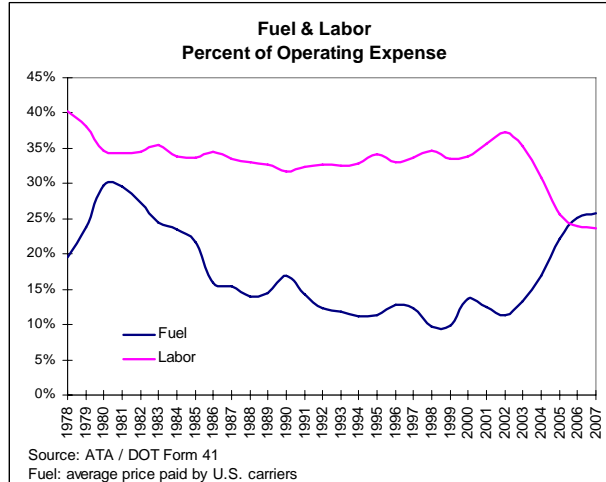
- Facility Requirements and City Early Proposal – Spring-Fall 2008
- 2000 Master Plan and Follow-on Studies – Fall 2008 – Summer 2009
- Airport Layout Alternative and City Land Use Plan - 2009
- City and Port Adoption – Winter/Spring 2010  
– Including Portland TSP and Metro RTP amendments








## Airline Industry Update



## Fuel Overtakes Labor as Percentage of Operating Expense



## Aircraft Types and Their Fuel Economy

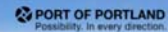
	Aircraft	Seats	Gallons/ Block Hour	Gallons/ Seat
	DHC8-400	75	321	4.3
	737-700	124	685	5.5
	MD80	140	923	6.6
	A320	152	774	5.1
	A330	243	1,817	7.5

Source: DOT Form 41



## Changes in Capacity at PDX

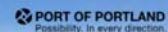
- Down 5% overall in September vs. one year ago
- Not all carriers and not all destinations down
- Some of capacity cut is empty seats (lower load factors)



## Changes in Capacity at PDX

6 types of capacity changes so far vs. year ago

- Discontinued service ([Orlando](#), [Mexico City](#), [Pendleton](#))
- Reduced frequencies ([Atlanta](#), [New York](#), [Ontario](#), [Reno](#))
- Smaller aircraft ([Washington](#), [Minneapolis](#))
- Larger aircraft ([Boston](#), [Vancouver](#), [Seattle](#))
- Increased frequencies ([Salt Lake City](#))
- New service ([Amsterdam](#), [Long Beach](#))



## For more information:

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jsugnet@ci.portland.or.us

Visit our website:

[www.pdxairportfutures.com](http://www.pdxairportfutures.com)



# Regional Choices Engagement Architecture (2008 – 2011)

