

# Metro | Agenda

Meeting: Transportation Policy Alternatives Committee (TPAC)  
Date: Friday, August 28, 2009  
Time: 9:30 a.m. to noon  
Place: Council Chambers

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|----------|-----|--|---|
| 9:30 AM  | 1.  | <b>Call to Order and Declaration of a Quorum</b>   | <b>Robin McArthur, Chair</b>  |
| 9:30 AM  | 2.  | <b>Comments from the Chair and Committee Members</b>   | <b>Robin McArthur, Chair</b>  |
| 9:35 AM  | 3.  | <b>Citizen Communications to TPAC on Non-Agenda Items</b>  |   |
| 9:40 AM  | 4.  | <b>Future Agenda Items</b>   | <b>Robin McArthur, Chair</b>  |
|          |     | <ul style="list-style-type: none"><li>• MOVES Update</li><li>• On-street Bus Rapid Transit</li><li>• The State of Travel Models and How to Use Them</li><li>• DLCDC Climate Change</li><li>• Sunrise Corridor Locally Preferred Alternative (September 25<sup>th</sup>)</li><li>• ODOT Electric Fleet</li><li>• Active Transportation Presentation</li></ul>   |   |
| 9:45 AM  | 5.  | * Approval of TPAC Minutes for July 31, 2009   | <b>Robin McArthur, Chair</b>  |
|          | 6.  | <b><u>INFORMATION / DISCUSSION ITEMS</u></b>   |   |
| 9:50 AM  | 6.1 | Making the Greatest Place and Chief Operating Officer Recommendation – <b><u>INFORMATION</u></b>   | <b>Robin McArthur, Chair</b>  |
|          |     | * <ul style="list-style-type: none"><li>○ Investing in the Greatest Place Matrix</li><li>• <i>Purpose</i>: Review the investments identified by planners as needed to support local aspirations particularly transportation investments.</li><li>• <i>Outcome</i>: Recognize the link between aspirations and regional and local investment actions and the use of the matrix as a communication tool to frame policy choices.</li></ul> | <b>Christina Deffebach</b>  |
| 10:10 AM | 6.2 | Regional Transportation Plan (RTP) – <b><u>INFORMATION / DISCUSSION</u></b>  |   |
|          |     | * <ul style="list-style-type: none"><li>○ Overview of State Requirements</li><li>*<ul style="list-style-type: none"><li>○ RTP Outcomes-Based Planning and Implementation</li><li>• <i>Purpose</i>: Briefing and gather input.</li><li>• <i>Outcome</i>: Feedback on RTP performance measurement system and planning for mobility corridors.</li></ul></li></ul>  | <b>Lainie Smith, ODOT</b><br><b>Josh Naramore</b><br><b>Deena Platman</b>   |
| 11:20 AM | 6.3 | # Health Impact Assessment on Policies Reducing Vehicle Miles Traveled (VMT) in Oregon – <b><u>INFORMATION</u></b>   | <b>Mel Rader,</b><br><b>Upstream Public Health</b><br><b>Leslie Perdue,</b><br><b>OHSU / Kaiser</b><br><b>Permanente Center for</b><br><b>Health Research</b> |
|          |     | <ul style="list-style-type: none"><li>• <i>Purpose</i>: Inform TPAC about the major impacts of transportation and land use policies on health, and present on key findings of a health impact assessment on policies to reduce vehicle miles traveled.</li><li>• <i>Outcome</i>: Increase understanding and consideration of the health impacts of transportation and land use policies.</li></ul>                                       |   |

**11:45 AM**    **6.4**    \*    2010-13 State Transportation Improvement Program (STIP) Update  
– INFORMATION

**Rian Windsheimer**  
**Ted Leybold**

- Purpose: Provide information on the changes and updates in the regards to the development of the 2010-13 STIP.
- Outcome: Provide information as what will be occurring in the near future.

**12 PM**            **7.**        **ADJOURN**

**Robin McArthur, Chair**

- \*        Material available electronically.
  - #        Material will be distributed at the meeting.
- All material will be available at the meeting.

*For agenda and schedule information, call Kelsey Newell at 503-797-1916, e-mail: [kelsey.newell@oregonmetro.gov](mailto:kelsey.newell@oregonmetro.gov). To check on closure or cancellations during inclement weather please call 503-797-1700.*



TRANSPORTATION POLICY ALTERNATIVES COMMITTEE  
July 31, 2009  
Metro Regional Center, Council Chambers

MEMBERS PRESENT

Sorin Garber  
Mara Gross  
Nancy Kraushaar  
Mike McKillip  
Dave Nordberg  
Ron Papsdorf  
John Reinhold  
Karen Schilling  
April Siebenaler

AFFILIATION

Citizen  
Citizen  
City of Oregon City, Representing Cities of Clackamas Co.  
City of Tualatin, Representing Cities of Washington Co.  
Department of Environmental Quality  
City of Gresham, Representing Cities of Multnomah Co.  
Citizen  
Multnomah County  
Citizen

MEMBERS ABSENT

Brent Curtis  
Elissa Gertler  
John Hoefs  
Susie Lahsene  
Alan Lehto  
Keith Liden  
Dean Lookingbill  
Louis A. Ornelas  
Satvinder Sandhu  
Paul Smith  
Rian Windsheimer  
Sharon Zimmerman

AFFILIATION

Washington County  
Clackamas County  
C-TRAN  
Port of Portland  
TriMet  
Citizen  
SW Washington RTC  
Citizen  
FHWA  
City of Portland  
Oregon Department of Transportation  
Washington Department of Transportation

ALTERNATES PRESENT

Andy Back  
Lynda David  
John Gilliam  
Scott King  
Lidwien Rahman  
Jessica Tump

AFFILIATION

Washington County  
SW Washington RTC  
City of Portland  
Port of Portland  
ODOT  
TriMet

STAFF: John Mermin, Caleb Winter, Amy Rose, Ted Leybold, Robin McArthur, Deena Platman, Pam Peck, Pat Emmerson, Dan Kaempff, Kayla Mullis.

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

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

**2. COMMENTS FROM THE CHAIR AND COMMITTEE MEMBERS**

Committee members and audience members introduced themselves.

Chair McArthur announced that the August TPAC meeting will be Hawaiian themed and committee members are welcome to dress accordingly.

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

There were none.

**4. FUTURE AGENDA ITEMS**

Chair McArthur briefly overviewed future agenda items.

**5. CONSENT AGENDA**

**Approval of TPAC Minutes from June 26, 2009**

MOTION: Mr. Dave Nordberg moved, and Mr. Mike McKillip seconded, to approve the minutes from June 26, 2009.

Mr. Scott King requested that the language be amended to include his question concerning whether comments made during the MTIP allocation process are included in the MTIP retrospective report.

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

**7. INFORMATION/ DISCUSSION ITEMS**

**7.1 Making the Greatest Place (MGP) Performance Targets Framework**

Mr. John Williams of Metro briefed the committee on the Making the Greatest Place (MGP) framework for measuring performance targets. The framework provides direction on how to consider, approve and adopt performance targets. In 2008 the Metro Council adopted an outcomes-based approach to land use and transportation decisions with six desired outcomes for measuring success. The outcomes based framework will be broadly integrated into the MGP process through the following actions:

- Adopt outcomes into the Regional Framework plan;
- Work with other agencies to develop performance measures; and
- Commit to achieving the measures over time.

The committee then discussed the following topics:

- Use of “delay” instead of “reliability” when measuring business efficiency;
- Documentation of areas which have zoning that supports transportation options;
- Use of wealth creation and/or job creation as a target;
- MGP performance goals as “umbrella goals” for individual projects;
- Uncertainty in knowing whether targets are reached until far into the future;
- Ambiguity of targets;
- Use of quantitative targets;
- Goals as an opportunity for jurisdictions to measure their success in a work-in-progress nature;
- How to monitor targets;
- Indicators used to measure poverty and equity;
- Clarity in system, cost and rate payers of water systems;
- Including regional mobility and accessibility;
- Allowing time to change projects in order to meet needs;
- Public sector’s role in ensuring business efficiency;
- Addressing racial disparity in the equity target; and
- Indicators for measuring the health of ecosystems.

## **7.2 Regional Transportation Plan**

Mr. Tom Kloster of Metro briefed the committee on the Regional Transportation Plan (RTP) adoption package and public comment period. The draft RTP has five proposed chapters: the Case for Change, Vision, Investment Strategy, Performance Assessment and Monitoring and Implementation. A 30-day public comment period will be held from September 15<sup>th</sup> to October 15<sup>th</sup>, 2009 and will provide an opportunity to comment on the following RTP elements:

- 2035 RTP
- TSMO Action Plan
- Regional Freight Plan
- High Capacity Transit Plan
- Regional Transportation Functional Plan

MGP open houses and public hearings will be held during the comment period and will provide an opportunity to comment on the RTP as well as the Urban Growth Report and Urban and Rural Reserves.

The committee then discussed the following topics:

- Include types of comments that can be communicated in the Open House and Public Hearing schedule; and
- Clarification on when ODOT, TriMet and DLCD should review the plan.

Mr. Andy Back of Washington County commented that because administrative rules direct jurisdictions to identify the needs of their transportation system, the RTP project list for Washington County includes all needed projects regardless of budget constraints. The committee then made the following comments in regards to this topic:

- Issue in modeling a system over the projected funding amount;

- At their retreat, JPACT confirmed direction on the financially constrained system based on projected revenue sources;
- ODOT will be submitting an illustrative project list as well based on the funding target developed by JPACT;
- Question of when right-of-way approval can be pursued;
- Issue in different jurisdictions adopting project lists under different structures;
- The public need for a realistic list, not an illustrative list;
- Ensuring the capacity to deal with development activities that come along and finding a way to get beyond limited funds;
- Issue in publishing two different land use evaluations;
- Submitting the illustrative list without modeling the illustrative portion;
- Including in the language understanding of how jurisdictions make improvements that are not under the funding plan;
- Helpful to model illustrative list for the purpose of greenhouse gas reduction;
- How the regional RTP lines up with the state and local Transportation Planning Rules.

Ms. Deborah Redman briefed the committee on the Regional Freight Plan, which is part of the Regional Transportation Plan. The Freight Task Force formed in 2006 by direction of the Metro Council and since then has developed a draft regional freight system plan identifying goals, priorities and key issues. In addition to supporting longer-term freight-relevant projects on the RTP project list, the plan targets actions that can be undertaken as a region over the next four years to address the needs of the regional economy as they relate to the system plan, system management, public understanding, sustainability, land use and strategic investments. Next steps include narrowing down a list of actions to achievable actions and determining how to monitor and measure their success.

### **7.3 American Recovery and Reinvestment Act (ARRA) Reporting Update**

Mr. Ted Leybold of Metro briefed the committee on the American Recovery and Reinvestment Act (ARRA) federally required reporting update. A chart was provided that shows how the region and state are doing in terms of distributing ARRA funds.

### **7.4 Transit Element of 2010-2013 Metropolitan Transportation Improvement Program (MTIP), and 2010-2015 TriMet Transit Investment Plan (TIP) Review and Comment**

Mr. Leybold briefed the committee on the transit element of the 2010-2013 Metropolitan Transportation Improvement Program (MTIP). He reviewed the six step MTIP process and outlined the following six categories of federal transit funds:

- Congressional earmarks;
- Small Starts;
- Maintenance support;
- Special Needs transit;
- Regional Flexible Funds;
- ARRA funds.

Ms. Jessica Tump of TriMet briefed the committee on the TriMet Transportation Improvement Program (TIP). The TIP aims to focus investment, inform local planning and grow partnerships around the region. The TIP has adopted the following four priorities:

- Build the Total Transit System
- Expand High Capacity Transit
- Expand Frequent Service
- Improve Local Service

The first priority includes removing barriers from taking transit by acknowledging that every transit rider is a pedestrian. In addition, support service and customer information are now also being informed by private applications that provide real-time transit information.

TriMet's operation revenue is mostly funded by the payroll tax, which changes with the unemployment rate. The FY 2010 budget has an 11.5% shortfall which is being compensated for through service cuts, non-service related cuts, minor frequency reductions and federal stimulus money. TriMet will relieve budget pressures from the high-cost, federally mandated LIFT service for riders with disabilities by building pedestrian friendly environments, creating an eligibility screening center and informing riders through RideWise.

In comparison to the rest of the country, TriMet is doing very well in ridership trends with 2/3 of all riders taking MAX and Frequent Bus Services.

## **8. ADJOURN**

Chair McArthur adjourned the meeting at 12:05 p.m.

Respectfully submitted,



Kayla Mullis  
Recording Secretary

ATTACHMENTS TO THE PUBLIC RECORD FOR JULY 31, 2009

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

| <b>ITEM</b> | <b>DOCUMENT TYPE</b> | <b>Doc DATE</b> | <b>DOCUMENT DESCRIPTION</b>  | <b>DOCUMENT No.</b> |
|-------------|----------------------|-----------------|--|---------------------|
| <b>7.1</b>  | Handout              | N/A             | Washington County Handout- excerpts from the Transportation Planning Rule  | 073109t-01          |
| <b>7.2</b>  | Memo                 | 02/27/09        | To: JPACT<br>From Rod Park, Metro Councilor & Regional Freight and Goods Movement Task Force Chair<br>Re: Integrating Regional Freight and Goods Movement Action Plan into 2035 RTP Update | 073109t-02          |
| <b>7.3</b>  | Chart                | 06/30/09        | Updated ARRA Transportation Reporting Summary  | 073109t-03          |
| <b>7.4</b>  | Power Point          | N/A             | TriMet TIP power point presentation  | 073109t-04          |



 Metro | Memo

To: TPAC

From: Chris Deffebach

Subject: Investment Matrix for Local Aspirations

Date: August 19, 2009

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Over the past year, the Making the Greatest Place effort has emphasized local communities' aspirations for growth as a fundamental part of framing the upcoming decisions related to public investment priorities and the capacity of the existing Urban Growth Boundary to meet the demands of the next 20 years' worth of population and employment growth. The aspirations were identified with the input of staff and elected officials across the region and submitted to Metro. They have been used to evaluate high capacity transit priorities, consider projects for the Regional Transportation plan, assess potential for meeting the 20-year and longer-term growth needs and help identify financial or technical gaps that we can attempt to address at the regional level to support the implementation of these aspirations.

The State of the Centers report presented information about the size and characteristics of the region's regional and town centers. The activity spectrum, included in the report, highlighted the link between the kind of places and level of activity that communities desire and the level of development, measured as people, jobs or dwelling units per acre and the number and type of businesses, necessary to support a successful center. In response to questions about the kind of investments that have been used to develop these centers and those that are needed to support local aspirations, we asked staff from local governments that submitted aspirations to identify the existing and proposed investment actions for their aspirations.

The result of this effort is an Investment Matrix that provides a snapshot of the region's centers, corridors and employment areas and a picture of the recent investments that have been made or are being considered to support these aspirations. The Investment Matrix will be available at TPAC. The descriptions of the local aspirations are on Metro's website at [www.oregonmetro.gov/localaspirations](http://www.oregonmetro.gov/localaspirations).

At upcoming policy and technical committee meetings, we intend to distribute the Investment Matrix in order to review the aspirations and the investments needed to support them. The Matrix is intended to inform discussions about the barriers and progress to achieving the fulfillment of the various local aspirations. The intended results are better understandings of the potential capacity of the region to accommodate growth and the opportunities that exist to leverage investments and define investment priorities in our centers, corridors and employment areas. These will assist the Metro Council in

assessing the capacity of the UGB to accommodate the next 20 years' worth of growth, as required by state law and inform other investment decisions.

At the TPAC meeting on August 28, we request your participation in a discussion to:

- Review the state of the investments in the region and the opportunities to leverage regional, shared, local and private actions.
- Describe the most important regional and shared investments that you have identified. For example, what type of transportation investment or infrastructure investments do you need and how close are you to meeting these needs?
- Identify examples of where you need help with local investments and the type of assistance you need.

The results of this discussion will inform our approach to framing the issues for consideration at MPAC and JPACT.

Our schedule calls for:

- Review the Investment Matrix with MTAC on August 19<sup>th</sup>, TPAC on August 28<sup>th</sup>, MPAC on September 9 and JPACT on September 10 and release as part of the recommendations for Making the Greatest Place in mid-September, 2009.

As with the local aspiration submissions, this Investment Matrix reflects a snapshot in time. It is not our intent to continually update this information, but rather to use it to focus assistance to local governments to implement their aspirations and to demonstrate the importance of leveraging both regional and local and private sector engagements. We will make corrections to this draft that may be needed.



# Oregon

Theodore R. Kulongoski, Governor

## Department of Transportation

Region 1 Headquarters  
123 NE Flanders Street  
Portland, Oregon 97209  
(503) 731.8200  
FAX (503) 731.8259

Date: August 20, 2009

To: TPAC

From: Lidwien Rahman, ODOT  
Bob Cortright, DLCD

Subject: State policies and standards relevant to the RTP

### *Transportation Planning Rule (TPR), OAR 660-0012*

The TPR is an Administrative Rule adopted by the Land Conservation and Development Commission (LCDC). LCDC has agreed to review the 2035 RTP “in the manner of periodic review” (as opposed to the review process for Post-Acknowledgment Plan Amendments).

The TPR prescribes an integrated approach to transportation and land use planning. The Rule outlines what elements the RTP as well as local TSPs must include, how to determine transportation needs, how to evaluate system alternatives, what to include in the transportation financing program, and how to implement the TSP through project development and local land use regulations. Section -060 of the TPR deals with plan and land use regulation amendments subsequent to adoption of a TSP or RTP. **General updates to the RTP and local TSPs, i.e. those that change the plan horizon year, are not subject to section -060 of the TPR.** They are subject to all the other provisions of the TPR.

The TPR requires that the RTP establish a system of transportation facilities and services adequate to meet identified transportation needs, which include state, regional and local transportation needs; needs of the transportation disadvantaged, and needs for the movement of goods and services to support industrial and commercial development. Transportation needs are defined as “typically based on demand projections as modified by policy objectives”. That includes the policy objectives of the TPR itself, i.e. to avoid principal reliance on any one mode of transportation, as well as other state and regional policy objectives.

The RTP must be consistent with adopted elements of the state TSP. In determining state needs, the RTP analysis must be consistent with state standards of facility performance. The Oregon Highway Plan (OHP) is an example of an adopted element of the state TSP. The TPR establishes a clear hierarchy of transportation system plans, with local plans having to be consistent with regional plans, and regional plans having to be consistent with state plans.

The Oregon Transportation Commission (OTC) does not approve the RTP, but the Oregon Department of Transportation (ODOT) is a transportation facility provider participating in the development and review of the RTP. LCDC is likely to defer to the OTC and ODOT in assessing the RTP's consistency with adopted elements of the state TSP.

While the RTP must identify all *needs*, it is possible that the RTP does not include *solutions* for all identified needs. The TPR does not require that a financing program must be in place to pay for all planned transportation facilities and major improvements, but rather requires a "discussion of facility providers' existing funding mechanisms and the ability of these and possible new mechanisms to fund the development of each transportation facility and major improvement." The Oregon Highway Plan, OHP Action 1F5, applies to the situation where there are severe environmental, land use, or financial constraints to making improvements to bring state transportation facilities up to the OHP mobility standards.

In evaluating and selecting system alternatives, the RTP must include a measurable standard to increase availability and convenience of alternative modes of transportation. The 2001 RTP adopted mode split targets for 2040 land use designations and was approved by LCDC. The approved standard is to be implemented by local governments through local TSPs. A change to the mode share targets or adoption of a new standard for alternative modes and/or reduced auto reliance would require LCDC approval.

The RTP and TSPs must include a system of planned transportation facilities, services, and major improvements, including a description of the type or functional classification of planned facilities and their services and their planned capacities or levels of service, the general location of planned facilities and improvements, and a description of facility parameters such as minimum and maximum road right-of-way and the number and size of lanes.

In cases where the need, function, mode, and general location of transportation facilities and improvements cannot be determined as part of the system plan, the TPR allows deferring such decisions to a "refinement plan". In other words, refinement plans resolve system level questions about need, function, mode, and/or general location. In contrast, "project development" implements the system plan by determining the precise location, alignment, and preliminary design of projects in the plan based on site-specific engineering and environmental studies. During project development of a project in an acknowledged TSP the project is not subject to further justification with regard to the need, mode, function and general location.

### ***Oregon Transportation Plan***

The Oregon Transportation Plan (OTP), adopted in 2006, is the state's adopted long-range multi-modal transportation plan. The OTP establishes goals, policies, strategies, and initiatives for the state transportation system. It is the overarching policy document, guiding the development of a set of modal and topic plans that together comprise the State's transportation system plan (TSP). Given the lack of adequate financial resources to develop the preferred transportation system, the OTP emphasizes maintaining existing assets, optimizing existing system performance through technology and better system integration, creating sustainable funding, and investing in strategic capacity improvements. The OTP

does not identify specific projects, but provides a framework for prioritizing transportation investments. The following key initiatives reflect the state's priorities:

- Preserve and maintain the existing multi-modal and multi-jurisdictional system;
- Manage the system for optimal system capacity and safety;
- Integrate transportation, land use, economic development, and the environment;
- Integrate the transportation system across jurisdictions, ownerships, and modes;
- Create a sustainable funding plan;
- Invest strategically in the most efficient capacity enhancements, considering:
  - return on investment,
  - balance maintenance and preservation with critical capacity enhancements and operations;
  - safety;
  - bottlenecks and congestion on key segments of the system;
  - enhancement of intermodal facilities;
  - advancement of modal choice;
  - promotion of job development and retention in industrial areas and employment centers
  - optimal use of technology
  - further the long-term functioning of the system as a whole
  - promote appropriate allocation and coordination of jurisdictional responsibility;
  - support regional and local land use plans.

### ***Oregon Highway Plan (OHP)***

#### ***Goal 1, System Definition***

##### ***Policy 1A, State Highway Classification System***

##### ***Policy 1B Land Use and Transportation***

##### ***Policy 1C State Highway Freight System***

Each of these policies establishes classifications of the State Highway system which define performance standards and management objectives for different highways and highway segments. Action 1A1 is the basic Highway functional classification system, differentiating between Interstate, Statewide, Regional, and District Highways. Interstate and Statewide Highways are part of the National Highway System (NHS). Action 1A2 classifies certain Statewide, Regional and District Highways as Expressways. Policy 1B establishes Special Transportation Areas (STAs) and Urban Business Areas (UBAs), including several in the Portland Metro area. Policy 1C designates State Freight Routes. The RTP must be consistent with each of these Highway classifications and designations. Mobility standards, access spacing standards, and design standards for State Highways vary according to these Highway classifications.

##### ***Policy 1F, Highway Mobility Standards***

The Oregon Department of Transportation has developed the OHP Mobility Standards Guidelines for applying the Oregon Highway Plan Mobility standards and for how to

request OTC approval of Alternative Mobility Standards. The Guidelines will be available shortly on the ODOT website. The following is a brief summary of the provisions of Policy 1F of the OHP and of ODOT's direction for ways to comply with these provisions in the RTP.

Policy 1F of the OHP states that it is the policy of the State of Oregon to use highway mobility standards to maintain acceptable and reliable levels of mobility on the state highway system. The Policy sets forth specific mobility standards to be applied to planning for the state highway system in the Metro area (Action 1F1 and accompanying Table 7). Policy 1F requires these standards to be used to identify state highway mobility expectations for planning and plan implementation purposes, to evaluate impacts to state highway facilities resulting from amendments to transportation plans, comprehensive plans, and land use regulations, and to guide operations decisions.

Action 1F1 sets forth specific standards for freeway interchanges and signalized and unsignalized intersections, whereas table 7 identifies maximum Volume to Capacity Ratios for the mainline of State highways in the Metro area. When a highway segment falls below the mobility standards in Action 1F1 and Table 7, a deficiency or need exists. Once a need has been identified, the Major Improvements Policy (Action 1G1, below) and NEPA requirements apply to the range of alternatives or solutions to be considered for meeting the identified need.

Action 1F2 states that planned solutions to meet identified deficiencies must meet the V/C standards of the Oregon Highway Plan for a 20 year planning horizon, or the planning horizon of the TSP, which in the case of the RTP is the year 2035.

Action 1F5 states that for preparing and updating corridor plans and TSPs, in situations where the volume to capacity ratio for a highway segment is currently or is forecast to be above the standards in the OHP, and improvements to bring facilities up to the standards are not planned due to severe environmental, land use, or financial constraints, the performance standard shall be to improve performance as much as feasible and to avoid further degradation. Under Action 1F5, Metro would provide findings to help the OTC answer the question whether the entire RTP package of policies, measures, investments, implementation requirements, and other actions are sufficient to "improve performance of state highways as much as feasible".

Action 1F5 goes on to say that "Local governments may also request that the Transportation Commission adopt alternate standards in accordance with Action 1F3." In other words, Metro may request a standard other than "improve performance as much as feasible and avoid further degradation". ODOT has recommended that Metro make use of this opportunity; see below under Action 1F3.

Action 1F5 recognizes that it is possible that not all deficiencies or needs can be met due to severe environmental, land use, or financial constraints. In other words, the needs may be greater than the list of planned improvements. The inventory of needs or deficiencies should be included in the RTP, and Metro must document the specific severe environmental, land use, and financial constraints that prevent the RTP from bringing the performance of state facilities up to the standards. ODOT has indicated the identification of

needs can be done by identifying specific locations that do not meet OHP Mobility Standards. Where potential solutions have been identified that are feasible from an engineering, environmental and land use perspective, but that are not financially feasible given expected funding over the planning period, they should be included in an “Illustrative” list of improvements.

Under Action 1F5, the RTP must quantitatively document the performance of the planned system as defined by the “state RTP” set of improvements (except for the ODOT “state RTP” investments that are not in the Financially Constrained RTP, because ODOT does not consider the state RTP funding target to be “reasonably likely” for purposes of subsequent plan amendments), including the land use assumptions that were used to evaluate the system performance. This performance would become the baseline against which future land use and Comprehensive Plan amendments are measured, unless the OTC has approved alternative mobility standards under Action 1F3 below.

Action 1F3 allows the OTC to consider adopting alternate mobility standards for Metropolitan areas to support an integrated land use and transportation plan for promoting compact development, reducing the use of autos and increasing the use of other modes of transportation, or for areas where severe environmental or land use constraints make transportation improvements infeasible. In developing the 2001 RTP, Metro requested and the OTC approved alternative mobility standards for the Portland Metro area. The approved standards are set forth in table 7 of Action 1F1 the OHP.

ODOT has recommended that Metro make a request to the OTC to consider adopting alternative mobility standards as part of the 2035 RTP as well (i.e. alternative to the adopted standards of OHP Table 7 applicable to the Metro area). Primary reasons for this recommendation are the extent of Highway segments that are anticipated to exceed the mobility standards of table 7, which is essentially system-wide, and Metro’s desire to have the RTP provide an “umbrella” for subsequent local plan amendments. Having a dialogue with the OTC about alternative mobility standards under Action 1F3 provides an opportunity to create some room for future plan amendments, whether they are to implement the current Metro 2040 Concept Plan, to meet local aspirations, to implement the System Expansion Policy of the High Capacity Transit Plan, or to implement the Concept Plans resulting from previous or future UGB and Urban Reserves decisions.

Action 1F3 establishes that the alternate standards must be related to v/c, and the standards must be adopted as part of the RTP. The plan must demonstrate the infeasibility of meeting the OHP mobility standards, and must include all feasible actions for

- providing a network of arterials, collectors, and local streets to relieve traffic demand on state highways and to provide convenient pedestrian and bicycle ways,
- managing access and traffic operations to minimize traffic accidents, avoid traffic backups on freeway ramps, and make the most efficient use of highway capacity,
- managing traffic demand to reduce peak hour traffic on state highways,
- providing alternative modes of transportation, and
- managing land use to limit vehicular demand on state highways.

In addition to the specific actions listed in 1F3, Metro should consider additional actions that have been demonstrated to be effective for meeting Metro's non-sov modal targets, including parking management. The suggested actions in both OHP Action 1F3 and 1F5 are very similar to and consistent with the Federal requirements under the Congestion Management Program (CMP), emphasizing system management, demand reduction, alternative modes (transit, bike, pedestrian), local and arterial street connectivity, local circulation to avoid reliance on state highways for local trips, access management, parking management, street design, and land use strategies, including transit- and pedestrian supportive densities and mix of land uses as well as development regulations and prohibition of auto-dependent uses in centers.

Some of these actions are already provided for in the Federal 2035 RTP, while others are more appropriately provided for in the Regional Transportation Functional Plan, local TSPs, local Comprehensive Plans and land use ordinances, corridor refinement plans, or project development.. ODOT has provided Metro with suggestions about how the RTP and/or local TSPs or land use plans may address or have already addressed many of the potential actions under OHP Action 1F3 and 1F5.

To meet the requirements of Action 1F3, the RTP must include a financially feasible implementation program and demonstrate strong public and private commitment to carry out the identified improvements and actions. The state RTP investment strategy funding targets agreed upon by JPACT and MPAC may be considered a financially feasible implementation program for local and regional actions and projects for purposes of meeting OHP Action 1F3 and 1F5. However, ODOT does not consider the ODOT "state RTP" funding target "reasonably likely" for purposes of plan amendments subject to OHP Action 1F6 and the TPR, section -060.

Finally, Action 1F6 states that when evaluating *amendments* to TSPs, comprehensive plans or land use regulations that are subject to the TPR section 0060 (i.e. which do not change the plan horizon year and do not cover the jurisdiction's entire area), when the v/c ratio is above the standards in the OHP and transportation improvements to bring performance to standard are not planned within the planning horizon, the mobility standard is to avoid further degradation. The "no further degradation" standard is part of the OHP, and therefore does not constitute an alternate standard. The RTP and local TSP updates are not subject to OHP Action 1F6, but comprehensive plan and zoning amendments that have a significant effect on planned transportation facilities are subject to Action 1F6. The baseline against which "no further degradation" is measured in the Portland Metro area is either the 2035 performance of the local and regional "state RTP system" and ODOT's financially constrained RTP system under Action 1F5, or the alternative standards approved by the OTC under Action 1F3. More about the TPR section -060 below.

#### Policy 1G Major Improvements

Action 1G1, the "Major Improvements Policy" states that transportation system plans and corridor plans, must address highway needs in the following order of priority:

- Protect the system – E.g. access management, land use planning, TDM, improve operations, and provide for alternative modes



- Improve efficiency and capacity of existing highway facilities with minor improvements– e.g. widen shoulders, add auxiliary lanes, improve local street connectivity, and other off-system improvements
- Add capacity to the existing system – e.g. adding General Purpose lanes
- Add facilities to the existing system – e.g. new highway or bypass.

#### Goal 2 System Management

Sets forth State policy regarding System Management including Partnerships with regional and local agencies, Off-system Improvements, Interjurisdictional Transfers, Public Involvement, ITS, Traffic Safety, and Rail and Highway Compatibility.

#### Goal 3 Access Management

Goal 3 establishes State policy to manage the location, spacing, and type of street intersections and driveways on state highways to assure the safe and efficient operation of state highways consistent with their classification and urban or rural location. The Policy includes specific standards for traffic signals and median openings as well as for Interchange Access Management Areas. OHP Goal 3 is implemented through OAR 734, Division 051.

#### Goal 4 Travel Alternatives

Establishes policy with regard to Freight, Public Transportation, HOV facilities, TDM, and Park and Ride facilities as they affect State Highways.

#### Goal 5 Environmental and Scenic Resources

Goal 5 states that it is State policy to maintain or improve the natural and built environment in the design, construction, operation, and maintenance of the state highway system. Recent policy direction from FHWA embraced by ODOT encourages integration of the environmental perspective into long-range planning as well. This means considering the impact on natural and manmade resources when considering alternative alignments and locations for improvements, identifying potential locations for environmental mitigation, providing opportunities for state and federal resource agencies to engage in the RTP (through CETAS), and documenting alternatives considered but rejected during the RTP in a manner that avoids revisiting those alternatives during the environmental process. This also means formulating solutions to identified needs that must go through and EIS or EA in such a way that the project description allows for an appropriate range of alternatives to be evaluated through the environmental process.

#### **Plan Amendments Subject to section -0060 of the TPR**

Section 660-012-0060 of the TPR outlines how to treat land use and plan amendments. As stated earlier, **updates of the RTP and of local TSPs are not considered plan amendments subject to section -0060.** The purpose of section -060 is to assure that after the RTP is adopted, subsequent land use amendments are consistent with the *planned function, capacity, and levels of service* of transportation facilities.

The first step is to determine whether the plan amendment significantly affects a transportation facility. A significant affect to a State Highway occurs when additional development authorized by a plan or land use regulation amendment results in a volume of traffic on a state highway that in 2035 exceeds the maximum V/C Ratio in Action 1F1 and Table 7 of the OHP, *or* alternative standards approved by the OTC per OHP Action 1F3, *or* the planned performance of the “state RTP” and the Financially Constrained ODOT improvements under OHP Action 1F5. Under OHP Action 1F6, either the planned performance under Action 1F5 or alternative OTC–approved mobility standards under Action 1F3 becomes the baseline against which “no further degradation of performance” is measured.

When a significant affect occurs, a local government must either:

- Adopt measures that show allowed uses resulting in acceptable performance;
- Amend the RTP to provide facilities or improvements to bring performance within standards;
- Reduce demand for auto travel through changing designations, densities or design requirements;
- Amend the RTP to modify the planned function, capacity or performance standards of the transportation facility;
- Mitigate the significantly affected facility. Mitigation can be in the form of constructing or contributing towards construction of roadway improvements.

The determination of whether a proposed plan or land use regulation amendment has a significant effect on planned transportation facilities is based on an estimate of additional trips that would result from uses allowed by the zone change. This analysis considers the range of uses that are allowed by the plan or zone change, rather than a specific proposed use. This is sometimes referred to a “reasonable worst case” analysis. A significant effect occurs if the reasonable worst case use allowed by the plan or zone change would exceed the applicable performance standards.

The TPR specifies that for purposes of the -0060 transportation impact analysis, only planned improvements that are in the Financially Constrained RTP or in the STIP can be assumed to be in place at the end of the planning period. If the affected facility is a State Highway, ODOT (and only ODOT) can make a determination that additional necessary improvements are ‘reasonably likely’ to be provided by the end of the planning period.

It is possible that as part of the OTC consideration of alternative mobility standards, ODOT could agree that an additional set of improvements to state highways, such as those that local jurisdictions submitted under their respective “state RTP funding targets” are “reasonably likely” for purposes of 0060(4), based on a demonstration of local and regional commitment. ODOT does not consider the assumed additional \$ 2 /year increase in vehicle registration fees that was the basis for ODOT’s state RTP investment funding target to be “reasonably likely” for purposes of plan amendments subject to the TPR section -0060.

Section -0060(6) allows credit for potential reduction in vehicles trips for uses located in 2040 Regional and Town Centers and Main Streets and other mixed-use pedestrian-friendly, transit-oriented centers, by reducing trip generation by 10% outright or more based on specific information:

(6) In determining whether proposed land uses would affect or be consistent with planned transportation facilities as provided in 0060(1) and (2), local governments shall give full credit for potential reduction in vehicle trips for uses located in mixed-use, pedestrian-friendly centers, and neighborhoods as provided in (a)-(d) below;

(a) Absent adopted local standards or detailed information about the vehicle trip reduction benefits of mixed-use, pedestrian-friendly development, local governments shall assume that uses located within a mixed-use, pedestrian-friendly center, or neighborhood, will generate 10% fewer daily and peak hour trips than are specified in available published estimates, such as those provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual that do not specifically account for the effects of mixed-use, pedestrian-friendly development. The 10% reduction allowed for by this section shall be **available only if uses which rely solely on auto trips, such as gas stations, car washes, storage facilities, and motels are prohibited;**

(b) Local governments shall use detailed or local information about the trip reduction benefits of mixed-use, pedestrian-friendly development where such information is available and presented to the local government. Local governments may, based on such information, allow reductions greater than the 10% reduction required in (a);

(c) Where a local government assumes or estimates lower vehicle trip generation as provided in (a) or (b) above, it shall assure through conditions of approval, site plans, or approval standards that subsequent development approvals support the development of a mixed-use, pedestrian-friendly center or neighborhood and provide for on-site bike and pedestrian connectivity and access to transit as provided for in 0045(3) and (4). The provision of on-site bike and pedestrian connectivity and access to transit may be accomplished through application of acknowledged ordinance provisions which comply with 0045(3) and (4) or through conditions of approval or findings adopted with the plan amendment that assure compliance with these rule requirements at the time of development approval; and

(d) The purpose of this section is to provide an incentive for the designation and implementation of pedestrian-friendly, mixed-use centers and neighborhoods by lowering the regulatory barriers to plan amendments which accomplish this type of development. The actual trip reduction benefits of mixed-use, pedestrian-friendly development will vary from case to case and may be somewhat higher or lower than presumed pursuant to (a) above. The Commission concludes that this assumption is warranted given general information about the expected effects of mixed-use, pedestrian-friendly development and its intent to encourage changes to plans and development patterns. Nothing in this section is intended to affect the application of provisions in local plans or ordinances which

provide for the calculation or assessment of systems development charges or in preparing conformity determinations required under the federal Clean Air Act.

(8) A "mixed-use, pedestrian-friendly center or neighborhood" for the purposes of this rule, means:

(a) Any one of the following:

(A) An existing central business district or downtown;

(B) An area designated as a central city, regional center, town center or main street in the Portland Metro 2040 Regional Growth Concept

(C) An area designated in an acknowledged comprehensive plan as a transit oriented development or a pedestrian district; or

(D) An area designated as a special transportation area as provided for in the Oregon Highway Plan.

(b) An area other than those listed in (a) which includes or is planned to include the following characteristics:

(A) A concentration of a variety of land uses in a well-defined area, including the following:

(i) Medium to high density residential development (12 or more units per acre);

(ii) Offices or office buildings;

(iii) Retail stores and services;

(iv) Restaurants; and

(v) Public open space or private open space which is available for public use, such as a park or plaza.

(B) Generally include civic or cultural uses;

(C) A core commercial area where multi-story buildings are permitted;

(D) Buildings and building entrances oriented to streets;

(E) Street connections and crossings that make the center safe and conveniently accessible from adjacent areas;

(F) A network of streets and, where appropriate, accessways and major driveways that make it attractive and highly convenient for people to walk between uses within the center

or neighborhood, including streets and major driveways within the center with wide sidewalks and other features, including pedestrian-oriented street crossings, street trees, pedestrian-scale lighting and on-street parking;

(G) One or more transit stops (in urban areas with fixed route transit service); and

(H) Limit or do not allow low-intensity or land extensive uses, such as most industrial uses, automobile sales and services, and drive-through services.

ODOT's Guidelines for implementation of section -0060 when the affected facility is a state Highway can be found at

<http://www.oregon.gov/ODOT/TD/TP/docs/TPR/tprGuidelines.pdf>.

### **Air Quality**

Climate change is a major topic of concern throughout this region and the world. Air quality and greenhouse gas emissions are central to the climate change problem and transportation contributes approximately one-third of Oregon's GHG emissions.<sup>1</sup> The state has taken action in this area by passing House Bill 3543 in 2007, which calls for reductions in GHG emissions and provides three benchmarks:

- by 2010, stop increases in GHG emissions;
- by 2020, reduce GHG emissions to 10% below 1990 levels;
- by 2050, reduce GHG emissions to 75% below 1990 levels.

The state has enacted other legislation related emissions as well. In 2006, the Oregon Environmental Quality Commission (EQC) adopted the California tailpipe standards to address greenhouse gas (GHG) emissions. In June 2007, Governor Kulongoski signed HB 2272, which states that in order to register a vehicle in Oregon, it must comply with the California vehicle emissions standards adopted by the EQC in 2006. This begins with the model year 2009.<sup>2</sup>

Oregon also joined the Western Climate Initiative (WCI), which formed in February 2007 and includes six western U.S. states, two Canadian provinces, and one Mexican state. WCI's goals include establishing goals for regional GHG reduction, designing a cap and trade or other market-based program, and joining "The Climate Registry", which tracks and manages GHG emissions.<sup>3</sup>

In October 2008, the Oregon Environmental Quality Commission (EQC) approved GHG reporting rules, which will explain the process for the state's collection of GHG emissions data. The purpose of these rules is to track Oregon's progress with regard to its emission reduction goals.<sup>4</sup>

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<sup>1</sup> According to the 2007 *Governor's Climate Change Integration Group: Final Report*, the transportation sector contributed 34% of the state's greenhouse gas emissions in 2004.

<sup>2</sup> State of Oregon. Governor Ted Kulongoski Press Release: June 14, 2007.

<sup>3</sup> Oregon Department of Environmental Quality. Oregon Greenhouse Gas Mandatory Reporting Advisory Committee Final Report. December 17, 2007 discussion draft. Pg. 7-8.

<sup>4</sup> Oregon Department of Environmental Quality. *Air Quality: Climate Change Proposed Rule*. Accessed January 8, 2009 from <http://www.deq.state.or.us/aq/climate/rulemaking.htm>



Date: August 20, 2009

To: Transportation Policy Alternatives Committee & Interested Parties

From: Deena Platman, Principal Transportation Planner

Subject: Implementing 2035 Regional Transportation Plan (RTP) outcomes-based planning

### **Purpose**

On August 28, 2009, Metro staff will brief TPAC on the recommended RTP performance measurement system and corridor refinement planning process. This memorandum provides background information on both of these RTP elements in anticipation of the TPAC presentation and discussion.

### **Background**

The 2035 RTP implements the 2040 Growth Concept vision for land use, transportation, the economy and the environment. To that end, the 2035 RTP embraces an outcomes-based approach, which establishes goals and a strategic investment package to achieve the region's vision. Critical to outcomes-based planning is the ability to measure system performance over time to track progress and guide decisions.

Currently, success of the RTP relies on a single measure, volume-to-capacity ratio, to narrowly measure success or failure of the plan's investment package. As a result, many sections of the region's transportation system are unable to meet the standard for addressing need and are identified for corridor refinement study. The refinement plans are costly and time consuming, and often lead to larger-scale solutions that are expensive, hard to implement and do not adequately address near and mid-term needs in a comprehensive manner.

The outcomes-based planning called for in the RTP broadens measures of success and creates a framework for addressing system needs in a more integrated and comprehensive manner.

### **RTP Performance Measurement System**

Attachment 1 provides a draft of RTP Chapter 4 – Performance Evaluation and Monitoring. The chapter lays out the performance measurement system developed with guidance from the RTP Performance Measure work group, comprised of both TPAC and MTAC members. TPAC members will have an opportunity to comment on the recommended performance evaluation and monitoring measures on August 28.

### **Planning for Mobility Corridors**

Attachment 2 is the 2035 RTP Corridor Refinement Planning memorandum. It lays out a revised approach to meeting Transportation Planning Rule (TPR) requirements for corridor refinement planning that will be included in Chapter 5 of the RTP. The memo provides background on corridor refinement plans as defined by the TPR and introduces the idea of a “Mobility Corridor Concept Plan” as an early scoping tool to document land use and transportation needs, function and potential solutions for each mobility corridor. Concept plans for each of the 24 mobility corridors will be documented in the 2035 RTP when possible. TPAC members will be asked to provide feedback on the proposed approach on August 28.

### **Next Steps**

Metro will incorporate TPAC’s input into the 2035 RTP public comment document. The public comment period runs from September 15 to October 15 2009. TPAC members will have an opportunity to provide additional input during this period, in advance of making a recommendation to the Joint Policy Advisory Committee on Transportation (JPACT) in November.

## CHAPTER 4

### PERFORMANCE EVALUATION AND MONITORING:

### HOW FAR DO WE GO TOWARD ACHIEVING OUR VISION?

#### 4.1 INTRODUCTION

The 2035 RTP purposefully lays out a set of projects, programs and policies intended to achieve the region's vision for an integrated land use and transportation system. Performance evaluation of the planned system and monitoring of implementation between plan updates provide valuable information for establishing transportation policy and planning objectives, and for informing transportation investment actions and priorities. While evaluation and monitoring of system performance has long been a part of the RTP development and implementation, outcomes-based evaluation of transportation policy and planning objectives is a more recent trend in transportation planning, occurring since the last major update to the RTP in 2000.<sup>1</sup>

Outcomes-based planning requires performance evaluation of desired outcomes and careful monitoring to ensure that incremental land use decisions and transportation project development are consistent with the plan vision. Monitoring the effectiveness of transportation investments is challenging. System performance results from multiple factors, including land use, land supply, cost, availability of capacity, level of transportation options, and demand for travel. Despite the challenges, benefits of this approach to outcomes-based performance evaluation and monitoring include:

- Measurement of and feedback on the RTP policies and investment priorities submitted by ODOT, TriMet and local agencies;
- Improved communication of needs and priorities, which is especially important given the limited resources available for funding;
- Informed decision-making;
- Increased transparency of the transportation analysis and decision-making process; and
- Increased accountability through periodic reporting.

#### 4.2 RTP PERFORMANCE MEASUREMENT SYSTEM

The performance management system initiated with the 2035 RTP establishes an on-going evaluation and monitoring cycle. The performance measures will serve as the dynamic link between RTP goals and plan implementation by formalizing the process of evaluation and monitoring to ensure the RTP advances toward achievement of the region's transportation, land use, economic, and environmental goals. The RTP refers to the process of plan development,

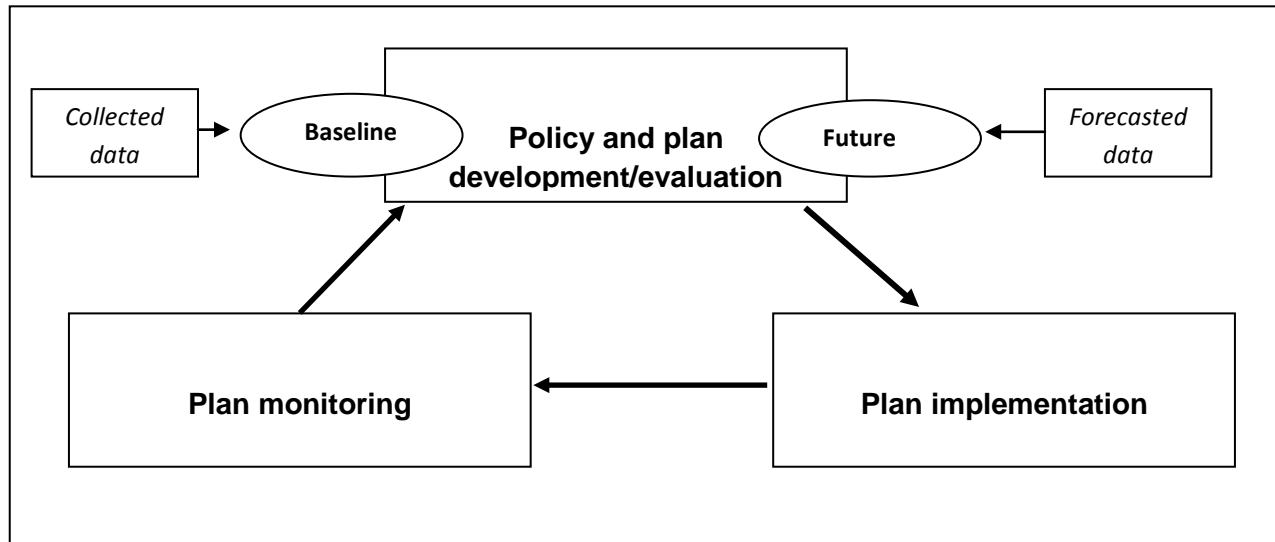
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<sup>1</sup> This trend is documented in Transportation Research Board Conference Proceedings 36: Performance Measures to Improve Transportation Systems, August 22-24, 2004.



evaluation and monitoring over time as the performance management system, as shown in **Figure 4.1**.

**Figure 4.1 RTP Performance Management System**



Through evaluation and monitoring, the region can better understand the extent to which investments in the transportation system achieve desired outcomes and provide the best return on public investments. Development of a performance management system also satisfies benchmarks mandated by the Oregon Transportation Planning Rule (TPR) and federal requirements to establish a performance monitoring system as part of the region’s Congestion Management Program (CMP).

**4.2.1 RTP Plan Evaluation**

The evaluation element of the RTP performance management system applies during periodic plan updates, which occur approximately every four years. During these updates, the region revisits its goals and objectives for the transportation system and develops an investment strategy comprised of infrastructure projects and programs submitted by ODOT, TriMet and the local agencies that together help achieve the plan goals. In previous RTPs, success of the investment strategy was measured narrowly, considering whether the plan met vehicle level of service standards and mode share targets for walking, bicycling, transit use and shared ride. The performance management system introduced with the 2035 RTP update adopts an outcomes-based performance evaluation and substantially broadens the performance measures applied to track how well the investment strategy addresses the full set of goals described in Chapter 2.

Table 4.1 lists the RTP performance measures used for plan evaluation, matching them to the RTP goals they support. The investment strategy performance is evaluated at the system-wide level, and for some measures at the mobility corridor level. The performance measures use data generated by the regional travel demand forecast model and Metroscope, the regional land use model, to generate current and future year findings.

**Table 4.1 RTP System Evaluation Performance Measures**

| Recommended Performance Measures for RTP System Evaluation |   | Adopted RTP Goals                                 |   |                               |   |   |                                   |                      |               |                           |  |
|--|---|---|---|-------------------------------|---|---|-----------------------------------|----------------------|---------------|---------------------------|--|
|  |   | Foster Vibrant Communities and Compact Urban Form | Sustain Economic Competitiveness and Prosperity | Expand Transportation Choices | Effective and Efficient Management of Transportation System | Enhance Safety and Security   | Promote Environmental Stewardship | Enhance Human Health | Ensure Equity | Ensure Fiscal Stewardship | Deliver Accountability   |
| 1.   | Vehicle miles traveled (total and per capita)   | ●   |   |                               |   | Unable to predict/forecast system safety. To be addressed in plan monitoring. | ●                                 | ●                    |               |                           | Unable to predict/forecast accountability. To be addressed in plan monitoring. |
| 2.   | Total delay and cost of delay on the regional freight network in mid-day and PM peak  |   | ●   |                               | ●   |   |                                   |                      |               |                           |  |
| 3.   | Motor vehicle and transit travel time between key origin-destinations for mid-day and PM peak   | ●   | ●   | ●                             | ●   |   |                                   |                      |               |                           |  |
| 4.   | Location of throughways, arterials, and regional freight network facilities that exceed RTP motor vehicle-based level of service thresholds in mid-day and PM peak  |   | ●   |                               | ●   |   |                                   |                      |               |                           |  |
| 5.   | Non-drive alone trips and mode share system-wide, by mobility corridor and for central city and individual regional centers (Number of daily walking, bicycling, shared ride and transit trips and % by mode) | ●   |   | ●                             | ●   |   |                                   | ●                    | ●             |                           |  |
| 6.   | Transit level of service (transit boarding rides per revenue hour) for High Capacity Transit (HCT) and bus  | ●   |   |                               |   |   |                                   |                      |               | ●                         |  |
| 7.   | Number and percent of homes within ½-mile of regional multi-use trail system  |   |   | ●                             |   |   |                                   | ●                    | ●             | ●                         |  |

| Recommended Performance Measures for RTP System Evaluation |   | Adopted RTP Goals                                 |   |                               |   |                             |                                   |                      |               |                           |
|--|---|---|---|-------------------------------|---|-----------------------------|-----------------------------------|----------------------|---------------|---------------------------|
|  |   | Foster Vibrant Communities and Compact Urban Form | Sustain Economic Competitiveness and Prosperity | Expand Transportation Choices | Effective and Efficient Management of Transportation System | Enhance Safety and Security | Promote Environmental Stewardship | Enhance Human Health | Ensure Equity | Ensure Fiscal Stewardship |
| 8.   | Number and percent of homes and <b>environmental justice communities (census data) within ½-mile of HCT or ¼-mile frequent bus service</b>                        |   |   | ●                             |   |                             |                                   |                      | ●             |                           |
| 9.   | Tons of transportation-related <b>air pollutants</b> (e.g. CO, ozone, and PM-10)  |   |   | ●                             |   |                             | ●                                 | ●                    |               |                           |
| 10.  | Tons of transportation-related <b>greenhouse gas emissions</b> (e.g. CO <sub>2</sub> )  |   |   | ●                             |   |                             | ●                                 |                      |               |                           |
| 11.  | <b>Acres of regionally significant Goal 5 resources potentially affected</b> by new transportation infrastructure   | ●   |   |                               |   |                             | ●                                 |                      |               |                           |
| 12.  | Total <b>acres consumed</b> by household & jobs   | ●   |   |                               |   |                             |                                   | ●                    |               |                           |
| 13.  | <b>Households per acre</b> by housing type and 2040 design type   | ●   |   |                               |   |                             |                                   |                      |               | ●                         |
| 14.  | <b>Capture rate</b> (total number and percent of jobs and households attracted to UGB, neighbor cities, 2040 centers, corridors, and industrial/employment areas) | ●   |   |                               |   |                             | ●                                 | ●                    |               | ●                         |

#### 4.2.2 RTP System Monitoring

Between plan updates, the 2035 RTP establishes a system monitoring program to periodically assess how well the region’s transportation system is functioning in order to inform implementation decisions. Funding decisions made for state, regional, and local improvement programs can benefit from current and readily available data about the performance of the transportation system.

The RTP system monitoring also serves as a key element of the region’s Congestion Management Process (CMP). The CMP emphasizes monitoring and evaluating regional system performance as a way to better diagnose and address congestion. It requires a “coordinated program for data

collection and system performance monitoring to assess the extent of congestion, to contribute in determining causes of congestion and evaluate the efficiency and effectiveness of implemented actions.”

The great challenge for establishing and maintaining a performance monitoring program has been the availability of data. Historically, collecting and managing data has been expensive and difficult. With advancements in intelligent transportation systems in the region, more and better data is available today and will continue to grow with implementation of data collection projects identified in the Regional Transportation System Management and Operations (TSMO) plan.

The RTP system monitoring program will report out current conditions using observed data for each of the 24 mobility corridors. A system performance report will be prepared every two years in advance of the allocation process for regional flexible funds. Table 4.2 lists recommended performance monitoring measures.

**Table 4.2 – RTP System Monitoring Performance Measures**

|     |   |
|-----|---|
| 1.  | Vehicle miles traveled (total and per capita)   |
| 2.  | Average trip length by mobility corridor  |
| 3.  | Motor vehicle and transit travel time between key origin-destinations for mid-day and PM peak   |
| 4.  | Location of throughways, arterials, and regional freight network facilities that exceed RTP motor vehicle-based level of service thresholds in mid-day and PM peak                      |
| 5.  | Travel time reliability on throughways (buffer index – additional time added to ensure on time arrival 95% of the time)   |
| 6.  | Average incident duration on throughway system  |
| 7.  | Number and share of average daily shared ride, walking, bicycling and transit trips region wide, by mobility corridor and for the Portland central city and individual regional centers |
| 8.  | Transit Level of Service (transit boarding rides per revenue hour) for High Capacity Transit and bus  |
| 9.  | Percent of regional pedestrian system completed region-wide and by 2040 centers and RTP transit-mixed-use corridor  |
| 10. | Percent of regional bicycle system completed region-wide and by mobility corridor   |
| 11. | Number and percent of households and jobs within 30 minutes of central city, regional centers, and key employment/industrial areas for mid-day and PM peak                              |
| 12. | Number of fatalities, serious injuries and crashes per capita for all modes of travel region-wide   |
| 13. | Average household combined cost of housing and transportation   |
| 14. | Tons of transportation-related air pollutants (e.g. CO, ozone, and PM-10)   |

### 4.3 2035 RTP PERFORMANCE EVALUATION FINDINGS

*(This section is under development. It will include findings for the base year of 2005 and the 2035 no build baseline as available for the public release document on 9/15. Findings for the 2035 federal priorities and investment strategy will be added upon completion of system modeling in fall 2009. This section will provide a general description of the process used to develop the finding.)*

#### 1. Vehicle miles traveled

*Data source: Metro travel forecast model*

*Description: System wide evaluation of total and per capita vehicle miles traveled*

*Target direction: Reduce*

| Year/System | 2005 base year |  | 2035 no build system |  | 2035 federal priority system |  | 2035 RTP investment strategy |  |
|-------------|----------------|--|----------------------|--|------------------------------|--|------------------------------|--|
|             |                |  |                      |  |                              |  |                              |  |
|             |                |  |                      |  |                              |  |                              |  |

#### 2. Total delay and cost of delay on the regional freight network

*Data source: Metro travel forecast model*

*Description: Evaluates delay and associate cost of delay for freight movement.*

*Target direction: Reduce*

| Year/System    | 2005 base year |               | 2035 no build system |               | 2035 federal priority system |               | 2035 RTP investment strategy |               |
|----------------|----------------|---------------|----------------------|---------------|------------------------------|---------------|------------------------------|---------------|
|                | Hrs of delay   | Cost of delay | Hrs of delay         | Cost of delay | Hrs of delay                 | Cost of delay | Hrs of delay                 | Cost of delay |
| 1-hour mid-day |                |               |                      |               |                              |               |                              |               |
| 2-hour pm peak |                |               |                      |               |                              |               |                              |               |

#### 3. Motor vehicle and transit travel time between key origin-destinations

*Data source: Metro travel forecast model*

*Description: Evaluates mid-day and pm peak travel time between 20 regional origin-destination pairs*

*Target direction: Reduce*

Attachment 1  
 TPAC & Interested Parties  
 August 20, 2009

| Origin-destination pairs (in minutes)  | 2005 base year | 2035 no build system | 2035 federal priority system | 2035 RTP investment strategy |
|--|----------------|----------------------|------------------------------|------------------------------|
| Central City to Beaverton (Pioneer Square to Beaverton central via Sunset/217)                           |                |                      |                              |                              |
| Central City to Hillsboro (Pioneer Square to First Main via Sunset/Shute)                                |                |                      |                              |                              |
| Central City to Tigard (Pioneer Square to Main via Sunset/217)   |                |                      |                              |                              |
| Central City to Vancouver SOV* (Pioneer Square to Vancouver transit center via I-5)                      |                |                      |                              |                              |
| Central City to Vancouver HOV* (Pioneer Square to Vancouver transit center via I-5)                      |                |                      |                              |                              |
| Central City to Gateway (Pioneer Square to Gateway transit center via Banfield)                          |                |                      |                              |                              |
| Central City to Gresham (Pioneer Square to City Hall via Banfield/207 <sup>th</sup> /223 <sup>rd</sup> ) |                |                      |                              |                              |
| Gateway to Gresham (Gateway transit center to City Hall via 102 <sup>nd</sup> /Division)                 |                |                      |                              |                              |
| Central City to Milwaukie (Pioneer Square to Milwaukie transit center via McLoughlin)                    |                |                      |                              |                              |
| Milwaukie to Clackamas regional center (Milwaukie transit center to CTC via 224/82 <sup>nd</sup> )       |                |                      |                              |                              |
| Washington Square to Oregon City (WS to Main in OC via 217/I-5/I-205)                                    |                |                      |                              |                              |
| Gateway to Oregon City (Gateway transit center to Main in OC via I-205)                                  |                |                      |                              |                              |
| Beaverton to Hillsboro (Beaverton Central to First/Main via TV Hwy)                                      |                |                      |                              |                              |
| Beaverton to Washington Square (Beaverton Central to WS via 217)   |                |                      |                              |                              |
| Terminal 6 to I-205 (via Marine/Portland Rd/Columbia/US 30 to I-205/Sandy interchange)                   |                |                      |                              |                              |
| Terminal 6 to St. Helens Rd (via Lombard/St. Johns Bridge to US 30)                                      |                |                      |                              |                              |
| PDX to Gateway (Airport Way/I-205 to Gateway transit center)   |                |                      |                              |                              |
| Milwaukie to Oregon City (via McLoughlin)  |                |                      |                              |                              |
| Sunset Industrial Area to PDX (US 26/Shute to I-405/I-84/I-205 to Airport Way)                           |                |                      |                              |                              |
| Clackamas Industrial Area to Rivergate (via I-205 to Columbia/Marine Dr)                                 |                |                      |                              |                              |

4. Location of throughways, arterials, and regional freight network facilities that exceed threshold for the RTP alternative mobility standard<sup>2</sup>

*Data source: Metro travel forecast model*

*Description: Identifies locations that exceed the alternative mobility standard for mid-day and pm peak*

*Target direction: TBD*

| Location | 2005 base year | 2035 no build system | 2035 federal priority system | 2035 RTP investment strategy |
|----------|----------------|----------------------|------------------------------|------------------------------|
|          |                |                      |                              |                              |
|          |                |                      |                              |                              |

5. Non-drive alone trips and mode share

*Data source: Metro travel forecast model*

*Description: Evaluates number and percent of non-drive alone trips (daily walking, bicycling, shared ride and transit trips )at multiple levels - system-wide, by mobility corridor, central city and individual regional centers.*

*Target direction: Increase*

| Location | 2005 base year | 2035 no build system | 2035 federal priority system | 2035 RTP investment strategy |
|----------|----------------|----------------------|------------------------------|------------------------------|
|          |                |                      |                              |                              |
|          |                |                      |                              |                              |

6. Transit level of service

*Data source: TriMet and Metro Travel Forecast Model*

*Description: Evaluates transit boarding rides per revenue hour for high capacity transit and bus*

*Target direction: Increase*

| Service type          | 2005 base year | 2035 no build system | 2035 federal priority system | 2035 RTP investment strategy |
|-----------------------|----------------|----------------------|------------------------------|------------------------------|
| High capacity transit |                |                      |                              |                              |
| Bus                   |                |                      |                              |                              |

<sup>2</sup> Metro is developing an alternative mobility standard at the request of the Oregon Transportation Commission.

7. Homes within ½ mile of a regional multi-use trail system

*Data source: Metro RLIS*

*Description: Evaluates household access to regional multi-use trail system by number and percent of homes*

*Target direction: Increase*

| 2005 base year |         | 2035 no build system |         | 2035 federal priority system |         | 2035 RTP investment strategy |         |
|----------------|---------|----------------------|---------|------------------------------|---------|------------------------------|---------|
| Number of HH   | % of HH | Number of HH         | % of HH | Number of HH                 | % of HH | Number of HH                 | % of HH |
|                |         |                      |         |                              |         |                              |         |
|                |         |                      |         |                              |         |                              |         |

8. Environmental justice communities within ½ mile of high capacity transit or ¼ mile of frequent bus service

*Data source: Metro RLIS and US Census*

*Description: Evaluates access to good quality transit service by number and percent of EJ households.*

*Target direction: Increase*

9. Tons of transportation-related air pollutants

*Data source: DEQ and Metro*

*Description: Evaluates CO, ozone and PM-10 emissions*

*Target direction: Decrease*

10. Tons of transportation-related greenhouse gas emissions (e.g. CO<sub>2</sub>)

*Data source: DEQ and Metro*

*Description: Evaluates CO<sub>2</sub>*

*Target direction: Decrease*

11. Acres of regionally significant Goal 5 resources potentially affected by new transportation infrastructure

*Data source: RLIS*

*Description: TBD*



*Target direction: Decrease*

12. Total acres consumed by household & jobs

*Data source: Metroscope*

*Description: TBD*

*Target direction: TBD*

13. Households per acre by housing type and 2040 design type

*Data source: Metroscope*

*Description: TBD*

*Target direction: Increase*

14. Capture rate

*Data source: Metroscope*

*Description: Evaluate total number and percent of jobs and households attracted to UGB, neighbor cities, 2040 centers, corridors, and industrial/employment areas*

*Target direction: Increase*

DRAFT



Date: August 20, 2009

To: TPAC and interested parties

From: Kim Ellis, Principal Transportation Planner  
Josh Naramore, Associate Transportation Planner  
Deborah Redman, Principal Transportation Planer

Re: Corridor Refinement Planning in the 2035 Regional Transportation Plan (RTP)

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### **Purpose**

The purpose of this memo is to:

- Provide background on corridor refinement plans as defined by the Oregon Transportation Planning Rule (TPR) and how this was applied in the 2000 and 2004 Regional Transportation Plans (RTPs).
- Introduce the idea of a “Mobility Corridor Concept Plan” as an early scoping tool to document land use and transportation needs, function and potential solutions for each mobility corridor. This step would be documented in the RTP when possible and occur prior to corridor refinement planning and project development activities.
- Recommend mobility corridors for corridor refinement planning and project development.
- Propose next steps to screen and prioritize mobility corridors recommended for corridor refinement planning.

### **Corridor Refinement Planning Process: Oregon Transportation Planning Rule and past RTPs *Background and History***

The State of Oregon Transportation Planning Rule (TPR) section 660-012-0020 requires that transportation system plans (TSPs) establish a coordinated network of planned transportation facilities adequate to serve regional transportation needs. The RTP is the region’s TSP. Section 660-012-0025 of the TPR allows a Metropolitan Planning Organization (MPO) to defer decisions regarding function, general location and mode as long as it can be demonstrated that the refinement effort will be completed in the near future. Under the TPR, corridor refinement plans are intended to be multi-modal evaluations of possible transportation solutions, including land use alternatives to address identified needs.

To address consistency with applicable statewide planning goals, Chapter 7 of the 2004 RTP, section 7.7.4 – 7.7.6, identified two types of refinement planning required before specific projects and actions could be adopted into the RTP. In Type I major corridor refinement plans, a transportation need existed, but the mode, function and general location of a transportation improvement had not been determined. Therefore, prior to identifying project(s), a range of actions needed to be considered. In Type II minor corridor refinement plans, both the need and mode for a transportation corridor were identified in the RTP, but a specific project(s) had not been identified. These corridors required a minor corridor refinement plan.

The 2000 and 2004 RTP listed 17 corridors for refinement planning, ten Type I major and seven Type II minor refinements, as summarized in Table 1. Each of the corridors failed to meet level-of-service based regional motor vehicle performance measures established in Table 1.2 of the 2000 and 2004 RTP.

**Table 1 – Corridors Identified for Refinement Planning in the 2004 RTP**

| <b>Major Corridor Refinements (Type 1)</b>             | <b>Minor Corridor Refinements (Type 2)</b> |
|--|--|
| • I-5 North (I-84 to Clark County)                     | • I-84 Corridor                            |
| • I-5 South (OR 217 to Willamette River/Boones Bridge) | • Northeast Portland Highway               |
| • I-205  | • Sunrise Corridor                         |
| • I-84 to US 26 Connector                              | • I-5 to OR 99W Connector                  |
| • McLoughlin – OR 224                                  | • Sunset Highway                           |
| • Powell Boulevard/Foster Road Phase 2                 | • OR 213                                   |
| • OR 217   | • Macadam/OR 43                            |
| • Tualatin Valley Highway                              |  |
| • North Willamette Crossing                            |  |
| • I-5 / Barbur Boulevard                               |  |
| • I-405 Loop   |  |

Because of the large number of corridors requiring additional planning work and the resources required to undertake these studies, Metro initiated a regional effort in 2001 to develop a strategy for their completion as part of the Corridor Initiatives Project. A technical advisory committee (TAC) and a project management group comprised of representatives from Multnomah, Clackamas, Washington and Clark counties, and the cities of Multnomah, Clackamas and Washington counties, Oregon Department of Transportation (ODOT), the City of Portland, Port of Portland and TriMet was established.

Metro staff and the TAC developed and implemented a technical evaluation process. The Project Management Group (PMG) reviewed and approved the criteria and results of the technical evaluation. The evaluation assessed and compared the corridors with respect to five major criteria:

- Support of key 2040 land uses
- Congestion
- Support of 2040 transit plans
- Support of 2040 freight goals
- Safety and reliability

Since 2001, many of the corridor plans identified in the original work program have been completed. In the fall of 2004, Metro convened a work group of the Transportation Policy Alternatives Committee (TPAC) to update the 2001 work program for the period from 2006 – 2010. The work group reviewed completed work, revisited previous technical work regarding corridor priorities and considered changes that might affect priorities going forward. The work group determined that since 2001, the importance of some of the corridors had changed. Recent urban growth boundary (UGB) expansions put additional pressures on certain corridors, which the group considered to be of higher importance. The 2005 work program for corridor refinement planning highlighted five potential corridors for refinement planning:

- I-84 to US 26 Connector
- I-205 (South) Corridor
- Outer Southwest Area – I-5 from OR 99W to Wilsonville

- I-405 Loop
- LRT and Streetcar System Plan & Corridor Priorities (2006 – 2010)

Recommendations from the 2005 work group are summarized in Attachment A.

## Regional Mobility Corridors

### *Background and History*

Since 2004, new RTP policies have been developed that call for a more comprehensive evaluation of potential solutions to address identified needs. The 2035 RTP introduced the concept of regional mobility corridors to expand the region's focus on mobility from individual facilities to an area of multiple facilities and adjacent land uses the network of facilities serve. The concept focuses on the region's network of freeways and highways, including parallel networks of arterial streets, regional trails, high capacity transit, and frequent bus service. These corridors have a significant influence on the development and function of land uses they serve.

During the 2035 RTP update, regional partners identified 24 mobility corridors across the region and agreed that better information was needed. Information about the individual mobility corridor's components and performance was collected to compare performance across multiple mobility corridors, identify the most cost-effective strategies and prioritize investments to address identified needs. All 24 mobility corridors are listed in Table 2 for reference.

**Table 2– Regional Mobility Corridors**

|  |  |
|--|--|
| <i>Portland Central City to Vancouver – Corridor #1</i>        | <i>Rock Creek Junction (OR 224) to US 26– Corridor #13</i>               |
| <i>Portland Central City to Tigard– Corridor #2</i>            | <i>Oregon City to Willamette Valley– Corridor #14</i>                    |
| <i>Tigard to Wilsonville– Corridor #3</i>                      | <i>Troutdale/Wood Village/Fairview/Gresham to Damascus– Corridor #15</i> |
| <i>Portland Central City Loop– Corridor #4</i>                 | <i>Rivergate to I-5– Corridor #16</i>                                    |
| <i>Portland Central City to Gateway– Corridor #5</i>           | <i>I-5 to Columbia South Shore– Corridor #17</i>                         |
| <i>Gateway to Troutdale/Wood Village/Fairview– Corridor #6</i> | <i>Portland Central City to Columbia County– Corridor #18</i>            |
| <i>Tualatin to Oregon City– Corridor #7</i>                    | <i>Beaverton to Tigard– Corridor #19</i>                                 |
| <i>Oregon City to Gateway– Corridor #8</i>                     | <i>Tigard to Sherwood– Corridor #20</i>                                  |
| <i>Gateway to Clark County– Corridor #9</i>                    | <i>Portland Central City to OR 217– Corridor #21</i>                     |
| <i>Portland Central City to Milwaukie– Corridor #10</i>        | <i>OR 217 to North Plains– Corridor #22</i>                              |
| <i>Milwaukie to Clackamas– Corridor #11</i>                    | <i>Forest Grove to US 26– Corridor #23</i>                               |
| <i>Clackamas to Rock Creek Junction (OR 224)– Corridor #12</i> | <i>Beaverton to Forest Grove – Corridor #24</i>                          |

Metro staff, in partnership with ODOT and TriMet, implemented a mobility corridor work program to inform making system-level decisions about needs, modes, function, and general location of facilities and potential solutions within the region's mobility corridors. Published in April 2009, the regional mobility corridor atlas provides a general overview of existing conditions in each corridor. The atlas includes maps that illustrate the mobility corridor's location in the region, transportation facilities and network gaps, land use patterns and operational attributes.

In January 2009, Metro and ODOT staff conducted agency coordination interviews (ACIs) with city, county and regional agency staff to present the mobility corridor concept and to examine needs and issues within each of the identified regional mobility corridors in greater detail. Draft versions of

the mobility corridor atlas were presented and a methodology for identifying regional transportation needs based on gaps and deficiencies for each mobility corridor was discussed.

In spring 2009, Metro and ODOT convened seven mobility corridor workshops with TriMet and city and county staff. Workshop participants assessed each of the regional mobility corridors to identify: (1) needs (gaps and deficiencies as defined by 2035 RTP policies, including immediacy), (2) function, (3) general location, and, where possible, (4) a pool of multi-modal projects and integrated corridor management programs/strategies to address mobility corridor transportation needs. The results of the ACIs and workshops were summarized in a needs assessment that was prepared for each mobility corridor. This work served as a foundation for identifying mobility corridors that need a refinement plan.

## **Mobility Corridors and Refinement Planning: Where We Are Today**

### ***Background and History***

The policy changes included in the 2035 RTP provide the impetus to reexamine how future corridor refinement plans are conducted. Some of the refinement plans identified in the 2001 and 2005 work programs have been completed. This includes I-5 North, Powell-Foster Phase 1, I-5/99W connector, the High Capacity Transit (HCT Plan) and OR 217. Some corridors no longer need refinement plans as defined in the TPR because decisions on the mode, function, and general location have been made. Those decisions will be documented in the draft RTP to be released for public comment in fall 2009. Future study of specific improvement or management strategies, such as a TSMO plan, Design Options Analysis (DOA) or HCT Alternatives Analysis would be considered Project Development activities under the TPR, implementing the need, mode, function and general location decisions made at the system level. An example of this may be I-84 (Central City to Gateway).

### ***New Recommendations for the 2035 RTP***

This section summarizes recommendations for mobility corridors that need refinement plans and project development based on the information collected during the mobility corridor work program. As shown in Table 3, six mobility corridors do not have sufficient information to determine function, mode and general location to address identified needs and are recommended for corridor refinement plans. The remaining corridors need project development to begin implementing land use and transportation investment strategies.

### **Mobility Corridors Requiring Corridor Refinement Plans**

The TPR defines a refinement plan as, “ an amendment to the transportation systems plan (TSP), which resolves, as at a systems level, determinations on function, mode and general location which were deferred during transportation systems planning because detailed information needed to make those determinations could not reasonably be obtained during that process,” [660-012-005 (25)].

Using this definition and the results of the mobility corridor work program, Metro staff reevaluated the 2004 RTP list of identified corridor refinements. Metro staff reviewed the mobility corridor needs assessments that were prepared and reviewed in coordination with local jurisdictions as part of the mobility corridor workshops and ACIs. Corridor refinement planning and project development work conducted since the 2004 RTP was identified. Using this information, a list of corridors needing refinement planning was developed. These identified mobility corridors do not satisfy the TPR, leaving unanswered questions of modes, function and general location of potential transportation improvements. Table 3 lists the corridors recommended for refinement planning in the 2035 RTP.

**Table 3 –Mobility Corridors Recommended for Corridor Refinement Planning**

|   |
|---|
| <ul style="list-style-type: none"> <li>• <u>Portland Central City to Wilsonville</u> - Mobility Corridors #2 &amp; #3 – I-5 South</li> <li>• <u>Clark County to I-5 via Gateway, Oregon City and Tualatin</u>– Mobility Corridors #7, #8 &amp; #9 – I-205</li> <li>• <u>Gresham/Fairview/Wood Village/Troutdale to Damascus</u> – Mobility Corridor #15</li> <li>• <u>Beaverton to Forest Grove</u> – Mobility Corridor #24 – Tualatin Valley Highway</li> <li>• <u>Portland Central City Loop</u> – Mobility Corridor #4 – I-5/I-405 Loop</li> <li>• <u>Clackamas River &amp; S. Willamette River Crossings</u></li> </ul> |
|---|

Depending on the outcome of the RTP performance measures work and subsequent system evaluation, additional mobility corridors may be identified to undergo refinement planning.

#### Mobility Corridors Needing Project Development

The region must also determine what planning activities are needed in the mobility corridors where refinement plans have already been completed, or are not needed. Once mobility corridors have established mode, function, general location, and identified potential solutions, project development clearly defines a specific set of projects. The TPR defines project development as, “implementing the transportation system plan by determining the precise location, alignment and preliminary design of improvements included in the TSP based on site-specific engineering and environmental studies,” (660-012-005 (36)). Using the TPR definition the following activities would be considered project development related activities:

- Designs Option Analysis (DOA)
- Management plans
- Transit Alternatives Analysis (AA)
- Environmental Impact Statement/Environmental Assessment (EIS/EA)

Table 4 lists the mobility corridors recommended for project development in the 2035 RTP.

**Table 4 –Mobility Corridors Recommended for Further Project Development**

|  |
|--|
| <ul style="list-style-type: none"> <li>• <u>Portland Central City to Vancouver</u> – Mobility Corridor #1 – I-5 North</li> <li>• <u>Milwaukie to Clackamas</u> – Mobility Corridor #11 – 99E/OR 224</li> <li>• <u>Portland Central City to Gresham</u> – Mobility Corridor #5 – Powell Blvd./Foster Rd.</li> <li>• <u>Beaverton to Tigard</u> – Mobility Corridor #19 – OR 217</li> <li>• <u>N. Willamette Crossing</u></li> <li>• <u>Portland Central City to Troutdale</u> – Mobility Corridors #5 &amp; #6 - I-84 Corridor</li> <li>• <u>I-5 to Columbia South Shore</u> – Mobility Corridor #17 – NE Portland Highway</li> <li>• <u>Clackamas to Damascus</u> – Mobility Corridors #12 &amp; #13 – Sunrise Highway</li> <li>• <u>Tigard to Tualatin and Sherwood</u> – Mobility Corridor #20 – I-5/99W Connector</li> <li>• <u>Portland Central City to North Plains</u> – Mobility Corridors #21 &amp; #22 – US 26</li> <li>• <u>Oregon City to Willamette Valley</u> – Mobility Corridor #14 – OR 213</li> <li>• <u>Macadam/OR 43</u></li> <li>• <u>Urban/Rural Arterial Management</u></li> </ul> |
|--|

## **Mobility Corridor Concept Plan Framework**

### ***New Recommendations for the 2035 RTP***

This section recommends altering the process by which mobility corridors are planned for and analyzed to more comprehensively consider land use, management, walking and biking solutions in addition to traditional transit and highway-focused analyses.

By definition, mobility corridors represent subareas of the region, are multi-jurisdictional and include land use and transportation facilities. The mobility corridor concept better fulfills the intent of the TPR by integrating land use and transportation considerations to determine regional system needs, functions, solutions to address identified needs.

To more clearly demonstrate compliance with state TPR requirements, Metro staff developed the idea of a mobility corridor concept plan (MCCP). A “Mobility Corridor Concept Plan” is recommended as an early scoping tool to document land use and transportation needs, function and potential solutions for each mobility corridor. Figure 1 shows the proposed framework and process for developing and incorporating MCCPs into the RTP.

Each of the 24 corridors would address the following in the RTP or through a subsequent Mobility Corridor Concept Plan when that is not possible:

- Scoping that considers land use, local aspirations, pedestrian, bike, management and operations, freight, highway, road and transit strategies
- Integrated statement of mobility function and purpose defined at a corridor-area level where a concept was not included in RTP
- Land use and transportation strategies identified
- MOU or IGA and contingent commitments on agreed upon land use and transportation strategies;
- HCT system expansion policy MOU, if applicable.

This step would be documented in the RTP when possible and occur prior to initiating corridor refinement planning and project development activities.

For the majority of the mobility corridors, the work done to date through the Mobility Corridor Atlas, interviews, and workshops has collected sufficient information to document findings that support TPR requirements based on 2035 RTP policies. If the MCCP is able to successfully document regional system needs, functions, and solutions to address identified needs per the TPR, then individual project elements of the mobility corridor could move forward to project development at the state, regional or local level.

If the corridor does not meet the TPR requirements and a TPR determination cannot be made, the mobility corridor would need a corridor refinement plan as defined by the TPR. The mobility corridor would undergo the following activities as a Corridor Refinement Plan:

- MOU or IGA to initiate refinement planning
- Analysis that considers land use, local aspirations, pedestrian, bike, management and operations, freight, highway, road and transit strategies
- Evaluate performance
- Determine mix and phasing of projects and/or land use changes needed to address function and needs
- MOU or IGA to implement refinement plan recommendations at state, regional and local levels
- HCT system expansion policy MOU if applicable.

The refinement plan would result in a wide range of strategies and projects to progress through project development and implementation at the local, regional and/or state levels.

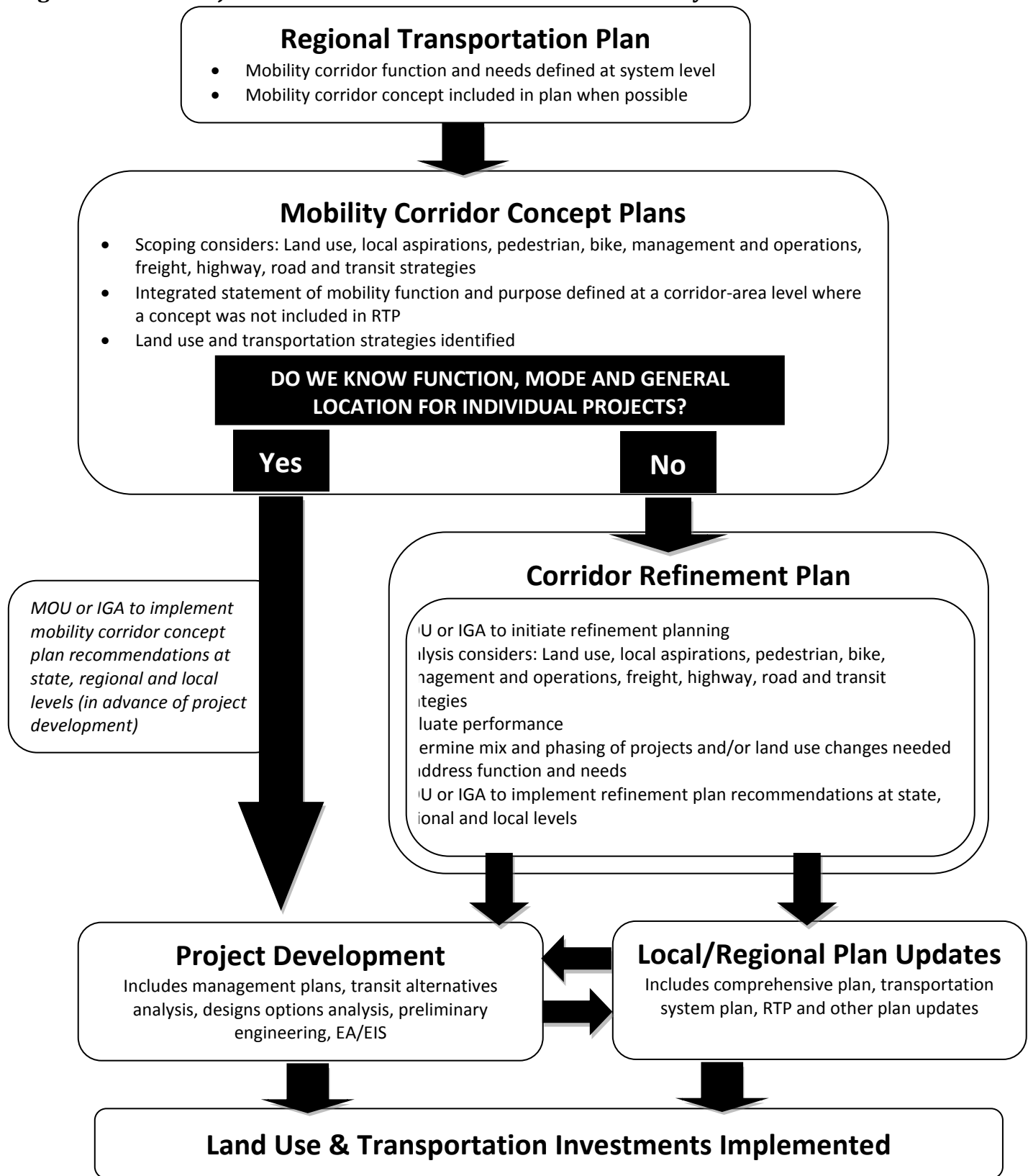
The MCCP process for conducting refinement plans would not begin until adoption of the 2035 RTP by ordinance in June 2010. Additionally, it will influence, but not affect the timeline for planning processes set to begin before the RTP adoption. Two planning projects fall into this category:

- Tualatin Valley Highway Corridor Refinement Plan – The City of Hillsboro received ODOT TGM grant funds to conduct this study, but it only covers a portion of the mobility corridor from Beaverton to Hillsboro recommended for refinement.
- Barbur Blvd. Transit Alternatives Analysis – A federal earmark has been requested to begin this analysis. If the earmark is awarded, this project development work could begin in 2010.

The framework illustrated in Figure 1 would guide refinement planning and project development efforts that will begin after RTP adoption in 2010.



**Figure 1 – How Projects Are Identified in the RTP Within Mobility Corridors**



**Next Steps**

This fall, Metro staff will document MCCPs in Chapter 5 of the 2035 RTP when possible. In addition, Metro staff will work with stakeholders to develop and implement a screening process to determine future mobility corridor refinement plan priorities.

The results of both efforts will be considered as part of the final adoption of the 2035 RTP by ordinance in 2010. In the interim, all corridor refinement plans identified in the RTP project list will be carried forward underneath the Metro RTP Project #11103, "Regional Planning."

*Develop and Conduct a Corridor Refinement Plan Screening Process.*

Because there are more mobility corridors requiring refinement plans than there are resources to accomplish studies, Metro will establish a credible and transparent corridor refinement plan prioritization process and conduct a screening process to rate and rank the six mobility corridors that need refinement plans under consideration. Building from lessons learned in previous corridor refinement planning prioritization processes, and consistent with revised RTP goals and policies, Metro will implement the following screening process:

- Engage the public, agencies and other stakeholders
- Review purpose and content of corridor plans (to aid in public understanding)
- Assemble relevant corridor-level data (e.g., comprehensive information from the Mobility Corridor Atlas, Mobility corridor Workshops and RTP System Evaluation)
- Define criteria for evaluating the corridor refinement plans
- Develop scoring procedure and guidance
- Screening evaluation (apply criteria; interpret results)
- Select the next corridor(s) for refinement planning)
- Metro Council Adoption (as part of the RTP)
- Develop appropriate work program
- Initiate planning process for selected corridor(s) through the Unified Planning Work Program (UPWP)

*Public, Agency and Stakeholder Engagement*

It is important for stakeholders and the public to be able to raise issues and concerns, and to offer suggestions to guide selection of the next corridor refinement plan. In concert with ongoing RTP public review and engagement activities, Metro will solicit feedback from the public as well as partner agencies and other stakeholders on the evaluation criteria and factors relating to individual corridors. As part of the selection process, staff will consider balanced approaches to including qualitative factors such as jurisdictional interest, public opinion and support, project momentum and synergistic benefits within a multimodal corridor.

Agency and stakeholder coordination would be accomplished primarily through Metro's standing committees. It is also possible that a short-term working group drawn from various committees (TPAC, JPACT, MTAC and MPAC) could also provide a forum for the more detailed work of developing and refining the screening process, and vetting the results.

# Appendix 3.1 - Work Program for Corridor Refinement Planning Through 2020

| Corridor and Key Facilities   | First Planning Period<br>(2001 - 2005)   | Second Planning Period<br>(2006 - 2010)   | Third Planning Period<br>(2011 - 2020)  |
|---|--|---|---|
| <b>Corridor Planning On-Going</b>   |  |   |   |
| <b>I-5 (North) Corridor</b> - I-5 from I-84 to Vancouver  | I - 5 Trade Corridor Study   | Financial Plan/EIS/Preliminary Engineering  |   |
| <b>NE Portland Highway Corridor</b> - Columbia Blvd. from Burgard to Killingsworth, Lombard from I - 5 to Killingsworth, and Killingsworth from Lombard to I - 205. | East End Connector Environmental Assessment; Begin Refinement Planning through I-5 Trade Corridor; Adopt St Johns Truck Access Study | Implement St Johns Truck Access Study Recommendations; Environmental Assessment and Engineering on I-5 Trade Corridor Recommendations |   |
| <b>I-205 (North) Corridor</b> - I - 205 from Hwy. 224 to Vancouver.   | South Transit Corridor Study and I-5 Trade Corridor Study (transit only)   | Corridor Planning for Interchange Improvements  | Corridor Planning for Roadway Widening  |
| <b>Banfield (I-84) Corridor</b> - I - 84 from I - 5 to Troutdale.   | Light Rail Capacity Analysis   | Transit, Transportation System Management Corridor Plan   | Transit Improvements and/or Transportation System Management Projects           |
| <b>McLoughlin and Hwy. 224 Corridor</b> - Hwy. 99E from Hawthorne Blvd to Oregon City. Hwy. 224 from McLoughlin Blvd. To I - 205.                                   | South Transit Corridor EIS and Preliminary Engineering   |   | Corridor Planning for Highway Improvements                                      |
| <b>I-5 to Highway 99W Connector</b> - Tualatin-Sherwood Road from I-5 to Hwy. 99W. Hwy. 99W from Tualatin-Sherwood Road to Bell Road.                               | Southern Alignment Study; Complete Exceptions; Right-of-Way Preservation Analysis  |   | Complete Corridor Planning  |
| <b>New Major Corridor Refinements Recommended in the First Period</b>   |  |   |   |
| <b>Powell/Foster Corridor</b> - Powell Blvd. from the west end of Ross Island Bridge to Gresham. Foster Road from Powell to Hwy. 212 Damascus.                      | <b>Corridor Planning</b>   | Environmental Impact Study and Preliminary Engineering  |   |
| <b>Highway 217 Corridor</b> - Hwy. 217 from Sunset Hwy. to I - 5.   | <b>Corridor Planning</b>   | Environmental Impact Study and Preliminary Engineering  |   |
| <b>Other Corridors</b>  |  |   |   |
| <b>North Willamette Crossing Corridor</b> - Study new crossing near St. Johns Bridge (Hwy. 30 from NW Newberry Road to BN Railroad Bridge).                         | Adopt Signage and Truck Control Recommendations of St Johns Study; St Johns Town Center Study  | Implement Signage and Truck Control Recommendations of St Johns Studies   | Corridor Planning   |
| <b>I-84 to US 26 Connector Corridor</b> - 238th/242nd from I - 84 to Burnside, and US 26/Burnside from Hogan Road to 282nd.   | National Highway System Truck Study  | Corridor Planning for Preservation of Right-of-Way and Arterial Improvements  | Complete Corridor Planning  |
| <b>Sunrise Corridor</b> - Hwy. 212/224 from I-205 to US 26.   | Complete Refinement Planning and EIS for Unit 1 and Engineering for Phase One; Complete Exceptions                                   |   | Begin Unit Two Environmental Assessment or Environment Impact Statement Process |
| <b>Highway 213 Corridor</b> - Hwy. 213 from I-205 to Leland Road.   | Construct Southbound Turning lane on Highway 213   | Implement Funded Recommendations of Highway 213 Design Study  | Corridor Planning   |
| <b>I-205 (South) Corridor</b> I 205 from I-5 to Hwy. 224.   | Interchange Ramp Access Study  | Corridor Planning for Freeway Improvements  |   |
| <b>Macadam/Highway 43 Corridor</b> - Hwy. 43 from Ross Island Bridge to West Linn.  | Transit/Pedestrian/Bike Transportation Demand Management Study   | Environmental Assessment/ DEIS/and Preliminary Engineering  |   |
| <b>I-5 (South) Corridor</b> - I-5 from Hwy. 99W in Tigard to Wilsonville.   | Boeckman Road Interchange Study  |   | Corridor Planning   |
| <b>Barbur Blvd./I-5 Corridor</b> - Hwy. 99W and I-5 from I - 405 to Tigard.   | Implement Transit Service Improvements and Elements of the Barbur Streetscape Plan   | Initiate Corridor Planning  | Begin Environmental Assessment/ Environmental Impact Statement Process          |
| <b>TV Highway Corridor</b> - Tualatin Valley Hwy. from Hwy. 217 to downtown Hillsboro.  | System Planning for Access Management and Right-of-Way   |   | Corridor Planning (if required)   |
| <b>Sunset Highway Corridor</b> - US 26 from I-405 to Jackson School Road.   | Refinement and Environmental Assessment of US Hwy. 26 Widening. Barnes Road Design and Construction                                  | Engineering of US 26 Widening west of Murray Boulevard  |   |



# Oregon

Theodore R. Kulongoski, Governor

## Department of Transportation

Region 1 Headquarters  
123 NW Flanders Street  
Portland, Oregon 97209  
(503) 731.8200  
FAX (503) 731.8531

**To:** Region 1 STIP Stakeholders

**From:** Jeff Flowers *J.F. Flowers*  
Region 1, Program and Funding Manager

**Subject:** Development of the 10-13 STIP

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Based on financial projects from early 2007 ODOT developed funding allocations for the 10-13 STIP. The Department then began the STIP development process based on those fiscal assumptions. During the following year gas tax revenues began to decline which led ODOT staff to reassess the fiscal assumptions on which the 10-13 STIP were based.

In November the Oregon Transportation Commission (OTC) made the decision to place development of the 10-13 STIP on hold while they considered how best to move the process forward. The OTC recently approved moving forward with the 10-13 STIP development process based on legislative action and new financial projections. Attached is a summary of what has transpired so far.

After review of the funding forecasts and the passage of the Jobs Transportation Act (JTA) in August 2009, the development of the 10-13 STIP is re-started.

Region 1 received new targets for the 10-13 STIP as follows:

| <b>Program</b>         | <b>Original Target</b> | <b>New Target</b>  | <b>Increase or (Decrease)</b> |
|------------------------|------------------------|--------------------|-------------------------------|
| Modernization          | 24,977,000             | 51,347,000         | 26,370,000                    |
| Preservation           | 76,143,000             | 52,743,000         | (23,400,000)                  |
| Safety                 | 52,674,000             | 36,834,000         | (15,840,000)                  |
| Operations             | 23,608,000             | 16,265,000         | (7,343,000)                   |
| <hr/>                  |                        |                    |                               |
| <b>Region 1 Totals</b> | <b>177,402,000</b>     | <b>157,189,000</b> | <b>(20,213,000)</b>           |

These new funding targets are \$176 Million less statewide than were originally envisioned for the 10-13 STIP and it should be noted that these allocations include funding for projects already approved during the 08-11 STIP that are now being carried forward.

While several program targets are being reduced for this STIP update period, the JTA does provide additional funding designated specifically for Modernization.

ODOT staff is currently reviewing all projects to determine best solutions for addressing the target reductions and is beginning conversations with stakeholders to form a new Modernization program recommendation.

The following is an estimated timeline moving forward:

- Now through September – Region 1 will discuss changes to the STIP with stakeholders, including: TPAC on August 28, JPACT on September 10, NW ACT on September 3 and representatives of Hood River County.
- Now through October – ODOT is currently working to re-balance the projects to match the new targets.
- October – a new Draft STIP will be printed, mailed, and provided to OTC, Region and the public.
- November to December – Public review process will begin.
- December – OTC will determine if changes to programs and/or funding are needed.
- January 2010 to April 2010 – Air quality conformity determinations and modeling.
- May 2010 – Final MTIP and STIP data entered into ODOT system for review.
- June 2010 – Region reviews Final STIP with ACT's, MPO's and other stakeholders.
- July to August 2010 – OTC and FHWA review and approve Final STIP and are provided to the Governor for approval.

ODOT will be contacting you in the near future and providing information regarding funding allocations, project reductions, and seeking input on additional projects for the 10-13 STIP.

Thank you

Copies to:

Jason Tell  
Rian Windsheimer  
David Kim  
Richard Watanabe  
Ted Leybold

JPACT Members & Alternates  
TPAC Members & Alternates  
NW ACT Members  
Hood River Commission

2010-2013 STIP DEVELOPMENT TIMELINE, with DELAY

|  |   |                          |          |   |                     |
|--|---|--------------------------|----------|---|---------------------|
| Final Approved 2006-2009 STIP in place   | Begin 10-13 STIP update, begin data collection, draft performance goals   | 2007 LEGISLATIVE SESSION | Jan 2007 | Ongoing State and Local Planning Activities | CALENDAR YEAR       |
|  | Data collection continues   |                          | Feb      |   | FEDERAL FISCAL YEAR |
|  | Data collection complete, compile and review information  |                          | Mar      |   | STATE FISCAL YEAR   |
|  | Develop funding allocation scenarios, update Highway Division Funding Allocations for 08-13 timeframe           |                          | Apr      |   |                     |
|  | Develop funding allocation recommendation, OTC approves project eligibility criteria and prioritization factors |                          | May      |   |                     |
|  | Assemble funding allocation materials for stakeholder input and OTC   |                          | June     |   | 2007                |
|  | Funding allocation recommendation distributed to OTC, stakeholders, ACTs, and MPOs                              |                          | July     |   | 2008                |
|  | Stakeholder review of funding allocations   |                          | Aug      |   |                     |
|  |   |                          | Sept     |   | 2007                |
|  |   |                          | Oct      |   | 2008                |
| OTC/ODOT Management discuss funding allocation and program goals for 10-13 STIP                              |   |                          | 2007     |   |                     |
| <b>OTC approves program goals and funding allocations for 10-13 STIP</b>                                     |   |                          | 2008     |   |                     |
| <b>Project selection/scoping begins, region funding targets distributed</b>                                  |   |                          | 2008     |   |                     |
| <b>Project selection/scoping continues, STIP development manual ready</b>                                    |   |                          | 2008     |   |                     |
| <b>Project selection/scoping continues</b>   | 2008  |                          | Feb      |   |                     |
| Project selection/scoping continues  |   |                          | Mar      |   |                     |
| Project selection/scoping complete, PCSX open for input of projects  |   |                          | Apr      |   |                     |
| Regions prepare draft program for review by stakeholders   |   |                          | May      |   |                     |
| Regions complete draft program for review by stakeholders  |   |                          | June     | 2008  |                     |
| Targets to actuals process begins  |   |                          | July     | 2009  |                     |
| Targets to actuals process continues, regions review Draft STIP database with ACTs, MPOs, other stakeholders |   |                          | Aug      |   |                     |
| Targets to actuals process continues, Draft STIP printed, mailed, provided to OTC, regions, the public       |   |                          | Sept     | 2008  |                     |
| Targets to actuals process continues, public review process begins   |   |                          | Oct      | 2009  |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | Nov      |   |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | Dec      | 2008  |                     |
| STIP development on hold, per OTC and Director's Office  |   | 2009 LEGISLATIVE SESSION | Jan 2009 | 2009  |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | Feb      |   |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | Mar      |   |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | Apr      |   |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | May      |   |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | June     |   |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | July     | 2009  |                     |
| STIP development on hold, per OTC and Director's Office  |   |                          | Aug      |   |                     |
| Targets to actuals process continues.  |   |                          |          |   | 2010                |

Materials following this page were distributed at the meeting.



Whether you live in a walkable urban neighborhood, a suburban community or a rural setting outside the urban growth boundary, the decisions that will be made this fall and throughout 2010 will have an impact on your life.

Building on past decisions and shared values, we set the stage today for who we will be and what we will stand for as a society in 50 years.

## A GUIDE TO

# Making the Greatest Place

“During the past several decades, the Portland metropolitan region has become a truly vibrant, diverse and livable collection of communities. The residents and leaders of the region have worked hard to create a place that reflects our common values – safe, walkable neighborhoods; housing, jobs and transportation choices; access to natural areas and local farms.

Although past planning has positioned us well for the future, our region still faces issues that present both serious challenges and opportunities for change – aging infrastructure and limited funding sources, climate change, soaring energy costs, population growth. We cannot afford to ignore the realities of our time or rest on the laurels of past decisions. Now is the time to dig deeper and work harder if we are to truly realize our regional vision.

Since 2005, the region’s leaders have been working to address the fact that we expect about 600,000 more people to live here within 25 years. We have studied, reported, analyzed, planned and asked for input – and now it is time to make decisions and put them into action. This fall local leaders will decide where we put our transportation dollars, how and where we will build taller buildings and keep neighborhoods of single-family homes, and which areas we will reserve for farmland, for jobs or for urban development. Together we will commit to a new future and make it happen.

Our region is a really good place to live – let’s make it the greatest place to live for present and future generations.”

– David Bragdon, Metro Council President



# Help make our region the greatest place

Public comment period, noon Sept. 15 to 5 p.m. Oct. 15, 2009

Metro Council seeks public comment on an integrated set of recommendations to sustain economic competitiveness, protect farms and natural areas, and enhance the quality of life in our communities. Read the Metro Chief Operating Officer's recommendation at [www.oregonmetro.gov/greatestplace](http://www.oregonmetro.gov/greatestplace) and tell us what you think.

## Transportation priorities for the next 25 years

Comment opportunity on policies, projects and funding strategies within the long-range blueprint for our transportation system, the 2035 Regional Transportation Plan. Approval of the final, complete 2035 RTP expected in June 2010.

## Criteria for selecting urban and rural reserves outside the Urban Growth Boundary

Early chance to weigh in on general criteria for selecting reserves for the next 50 years. Formal comment period expected to start in late October and the final decision in 2010.

## Regional employment and population forecast for the next 20 and 50 years

Final comment opportunity on the Urban Growth Report which contains population and employment forecasts that affect urban growth boundary decisions made in the next two years.

## Open houses and public hearings

### Monday, Sept. 21

Hillsboro Civic Center, room 113 A and B

Open house 2 to 4 p.m.

*Spanish interpreter*

### Tuesday, Sept. 22

Multnomah County Library,

North Portland branch

Open house 5 to 7:45 p.m.

*Spanish interpreter*

### Thursday, Sept. 24

Beaverton City Hall

Open house 4 p.m.; hearing 5:15 p.m.

### Thursday, Oct. 1

Gresham Conference Center,

Oregon Trail room

Open house 4 p.m.; hearing 5:15 p.m.

### Thursday, Oct. 8

Happy Valley City Hall

Open house 4 p.m.; hearing 5:15 p.m.

### Tuesday, Oct. 13

Clackamas County Public Service Bldg.

Open house 4 p.m.; hearing 5:15 p.m.

### Thursday, Oct. 15

Metro Regional Center, council chamber

Open house 4 p.m.; hearing 5:15 p.m.

*Oral testimony limited to two minutes. Come prepared to submit your remarks in writing.*

## Other ways to comment

E-mail: [greatestplace@oregonmetro.gov](mailto:greatestplace@oregonmetro.gov)

Mail: Greatest Place Comments,  
Planning and Development,  
600 NE Grand Ave.,  
Portland, OR 97232

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

Call: 503-797-1735

All Metro meetings are wheelchair accessible. Listening devices for people with a hearing impairment are available in the council chamber upon request. Interpreters for people with limited English or a hearing impairment are available with 48 hours advance notice. Call 503-797-1551 or TDD 503-797-1804 to request these services. For transit service and schedules, go to [www.trimet.org](http://www.trimet.org).


[CLICK HERE FOR REPORT](#)

**Making the Greatest Place**


## **Investing in Great Places matrix | August 2009**

Achieving local aspirations through strategic regional and local investments

**DRAFT**



Oregon Department of Transportation




# **RTP Update**


-----

## **Overview of State Requirements**

*Oregon Department of Transportation*





Oregon Department of Transportation





### ***Purpose***

- TPR and OHP requirements
- Metro, ODOT, and DLCD are working together
- Context for RTP performance measure and mobility corridor work
- Implications for local governments

 Oregon Department of Transportation 


### ***TPR Requirements***



- Facilities and services adequate to meet identified needs
- Demand projections modified by policy objectives
- Must be consistent with OTP and OHP
- 0060 does not apply to RTP update

 Oregon Department of Transportation 

### ***OHP Policy 1F***


- Mobility standards for state highways
- Metro area standards—lower than the rest of the state
- Appropriate:
  - urban area;
  - supports Metro 2040





 Oregon Department of Transportation 

### ***Problem***


- RTP will not be able to meet existing lower standards
- ODOT has recommended that Metro request alternate standards again




 Oregon Department of Transportation 

### ***Alternate Mobility Standards***

- Must be v/c based
- Can be more than one
- ODOT has recommended that Metro look at # of hours of congestion




Oregon Department of Transportation




### ***Do the Best You Can***

- Package: policies, measures, projects, implementation requirements
- Address both land use and transportation
- Some actions in place; additional needed




Oregon Department of Transportation




### ***State Review***

- LCDC—"in the manner of periodic review"
- OTC—for consistency with the OTP and OHP
- LCDC will likely defer to ODOT/OTC
- Primary focus for OTC:
  - Alternative mobility standards
  - Improving performance as much as feasible




Oregon Department of Transportation




***Reduce Volume/Increase Capacity***

- Local system improvements
- Alternate modes
- Safety and operations
- Demand management
- Land use



Oregon Department of Transportation

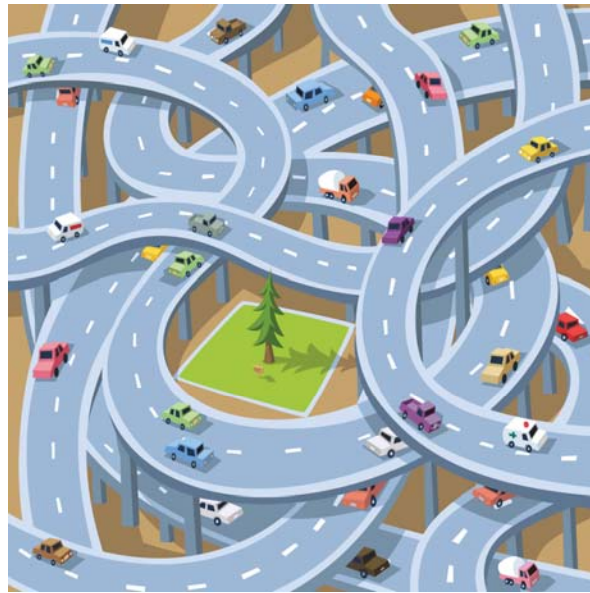


***Implementation***

- Actions and commitments must be documented
- Financially feasible—ID funding sources
- May include plan and code changes



Oregon Department of Transportation






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



## 2035 Regional Transportation Plan

### Measuring success: outcomes-based planning in the RTP

TPAC | August 28, 2009

 Metro | *People places. Open spaces.*

## What does a successful region look like?

- Sustained economic competitiveness and prosperity
- Safe and reliable transportation choices
- Vibrant, walkable communities
- Minimal contributions to global warming
- Clean air, clean water and healthy ecosystems
- Benefits and burdens of growth shared throughout the region



## RTP Goals and Outcomes



- Vibrant Communities and Efficient Urban Form
- Economic Competitiveness and Prosperity
- Transportation Choices
- Efficient Management of the System
- Safety and Security
- Environmental Stewardship
- Human Health
- Equity
- Fiscal Stewardship
- Accountability



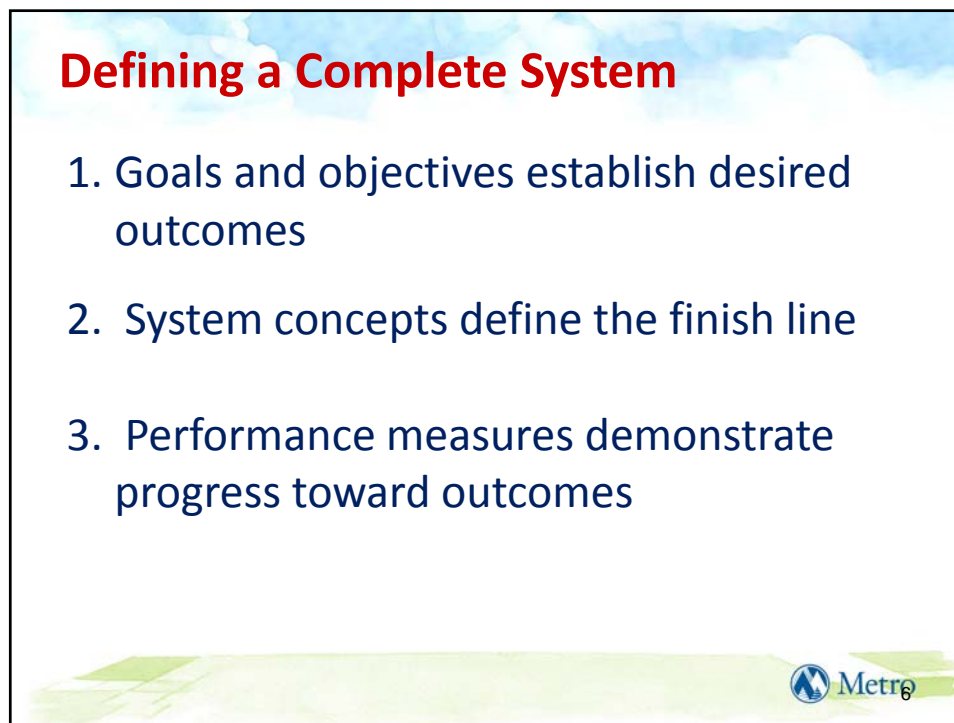
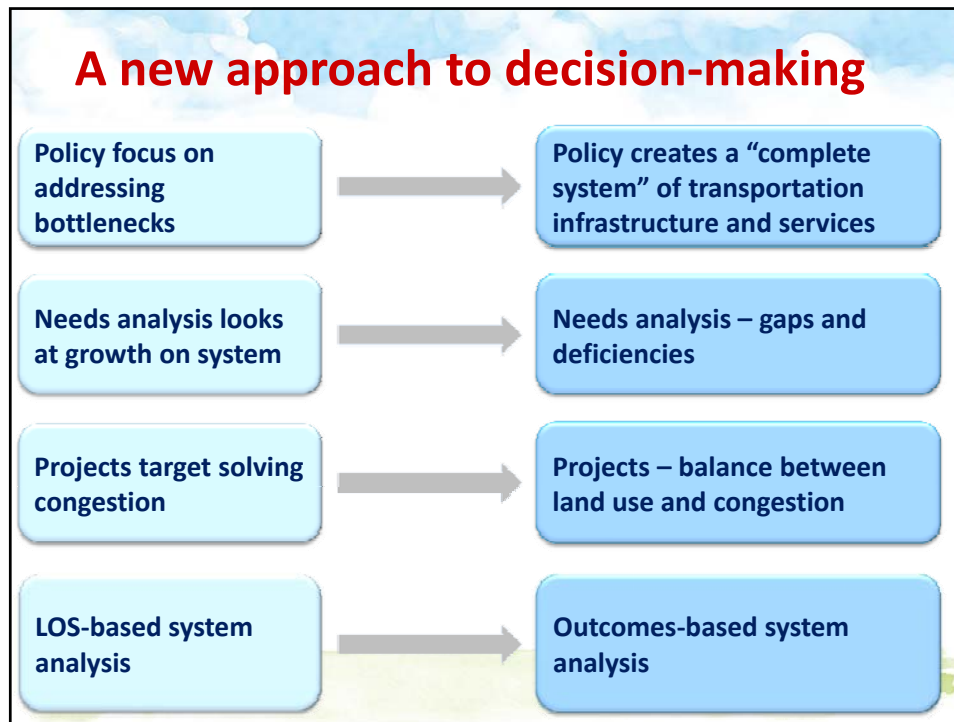
## Moving from standards to outcomes

No single measure can help us define success.

LOS as the only measure of success isn't working.

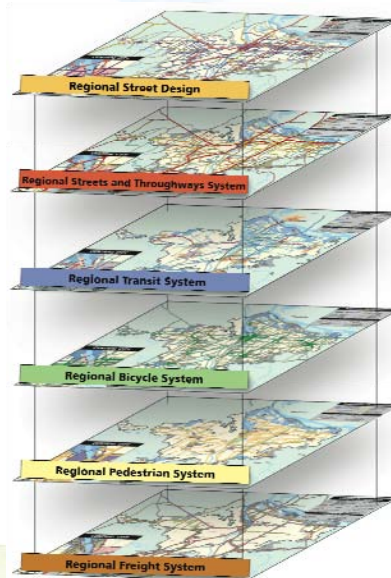
- Emphasizes costly capacity solutions first.
- Out of step with fiscal realities and community goals.
- Creates too much uncertainty in the planning process.
- Delivers a level of mobility that people aren't willing to pay for.





## Elements of a Complete System

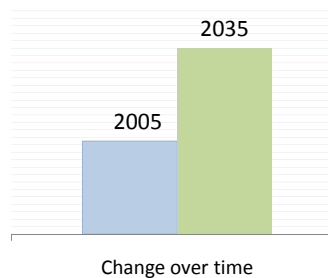
- Focus on well-connected street system
- All streets are multimodal
- Street designs reinforce land use outcomes
- Success defined by multiple measures



7

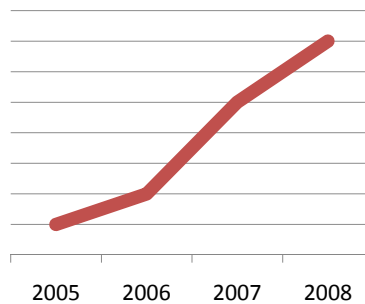
## Performance measurement system Evaluation

- Evaluate investment strategy against RTP goals
- Occurs every 4 years to guide RTP development
- Based on forecasted data
- Mostly system level reporting

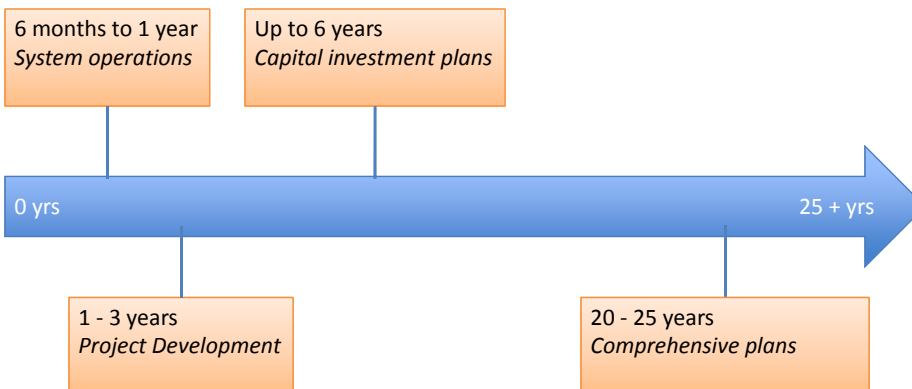


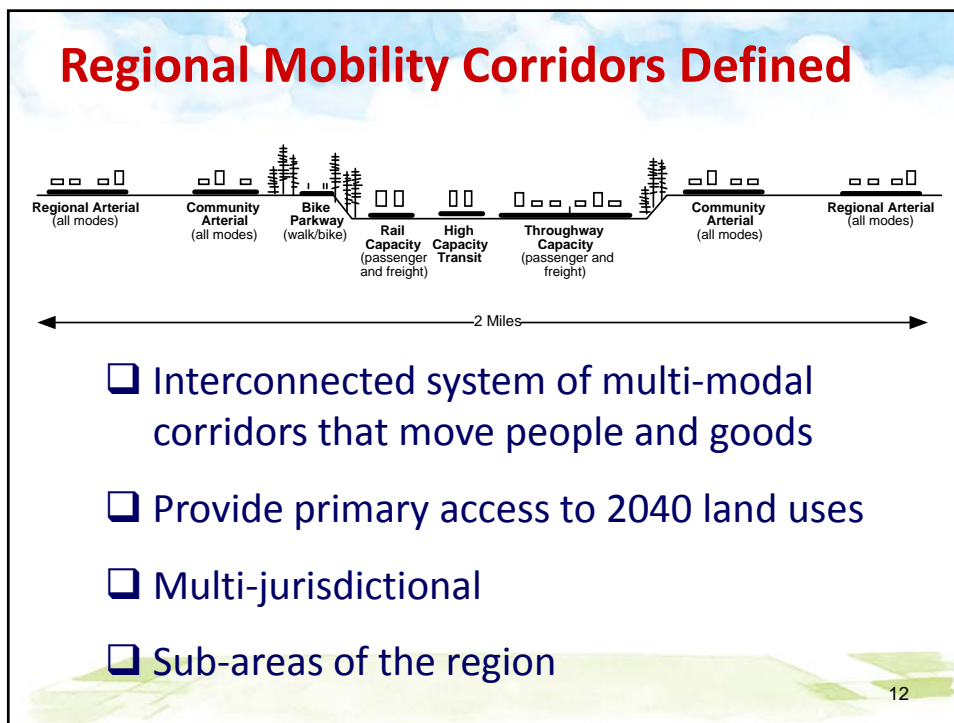
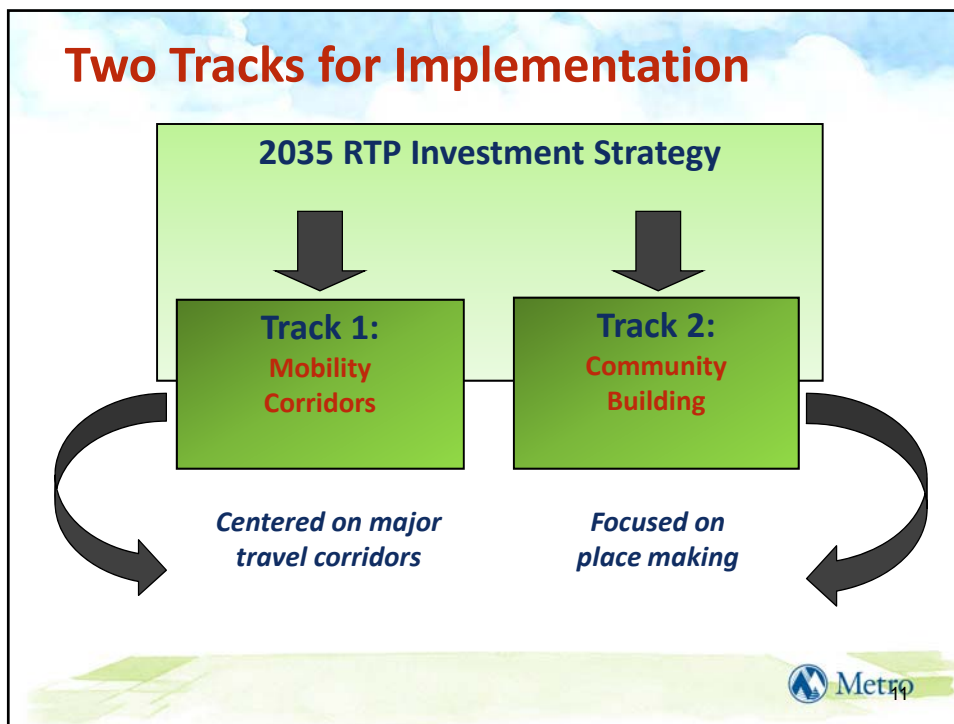
## Performance measurement system Monitoring

- Assess function of current system
- Occurs every 2 years to guide implementation decisions
- Based on observed data
- Mostly mobility corridor level reporting

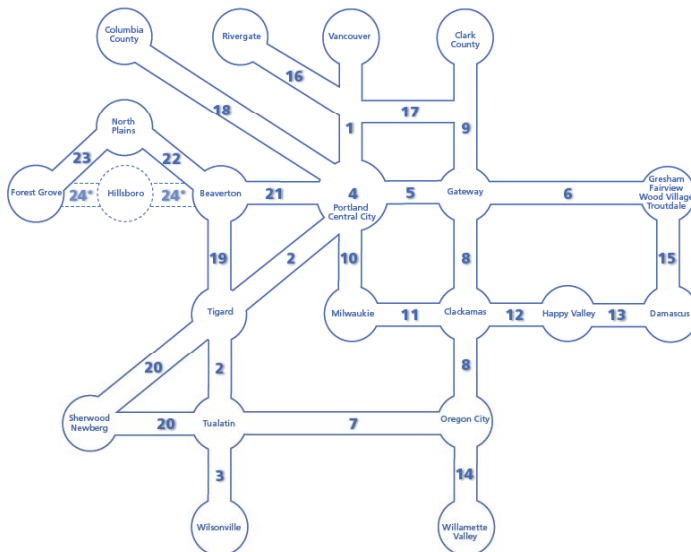


## Outcomes-based investment





## 24 mobility corridors identified



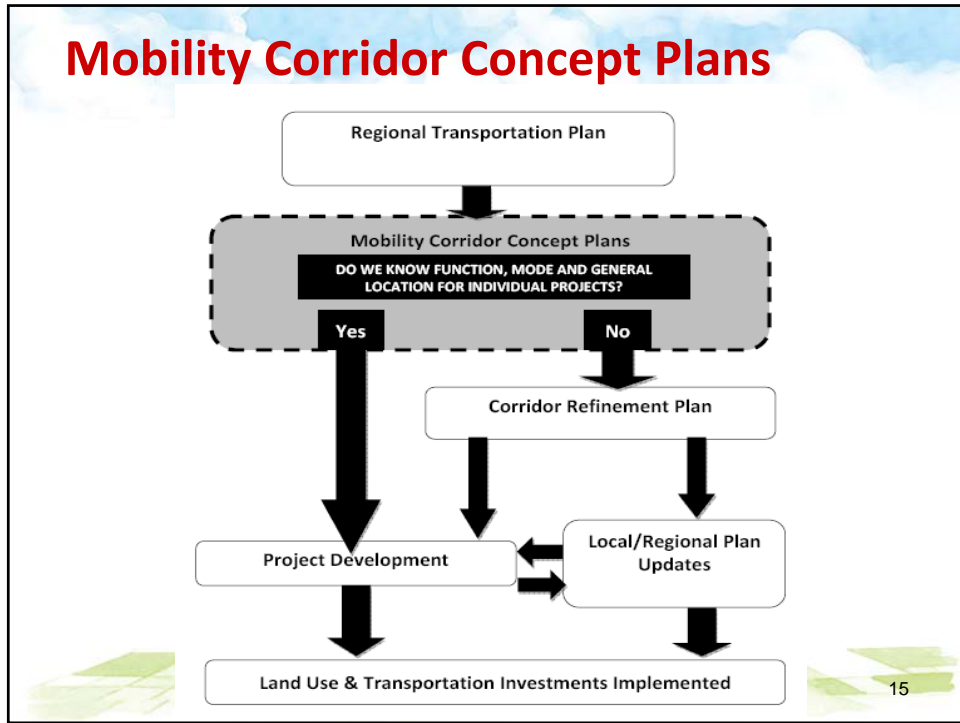
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## Mobility corridor atlas is a baseline

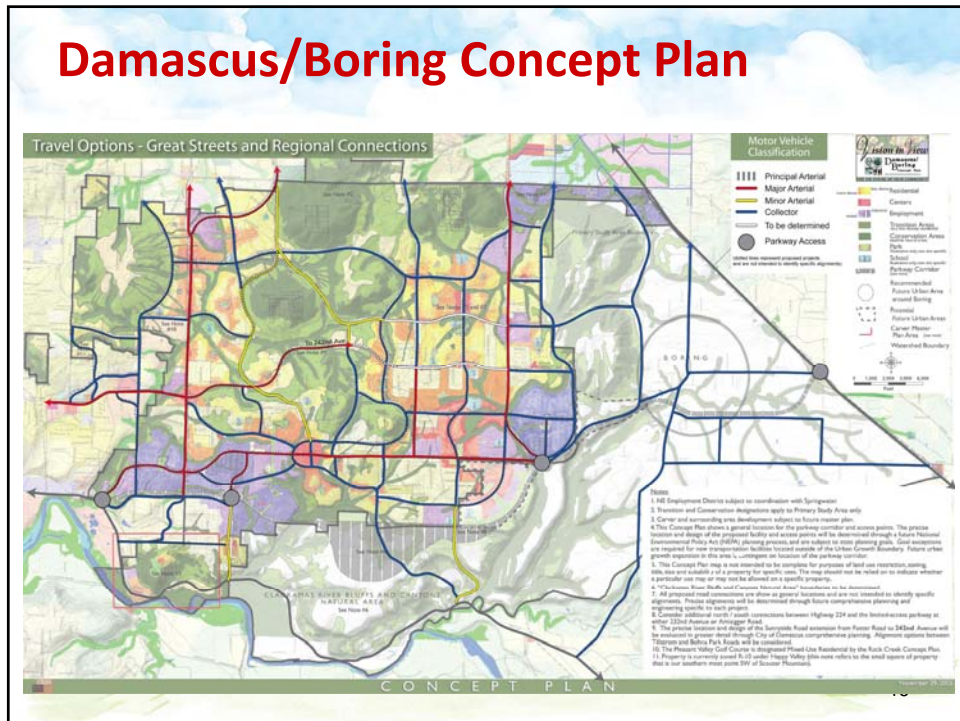
- Geographic location
- Transportation facilities
- Planned land uses
- Roadway level-of-service
- Transit coverage and level of service
- Travel shed
- Truck volumes
- Bikeway and sidewalk gaps
- Existing conditions



# Mobility Corridor Concept Plans



# Damascus/Boring Concept Plan





## Next steps

**Sept. to Dec. 2009** - RTP release will have a placeholder for the mobility corridor concept.

- Categorize type of planning work needed for each mobility corridor
- Metro will work with partners to prioritize the mobility corridors needing refinement plans

**Dec. 2009 to Spring 2010**

- Document Mobility Corridor concepts in 2035 RTP
- Establish Performance Measurement System

## Healthy Transportation Policy and VMT

Mel Rader, MS, MS  
Upstream Public Health  
503-284-6390

Leslie Perdue, MPH  
Kaiser Permanente Center for Health Research  
( formerly with Oregon Health and Science  
University )

## Major Health Impacts of Transportation Policy

- Air Pollution  
(20 – 50 K deaths / year)
- Collisions  
(40 K deaths / year)
- Changes in Physical Activity

## Magnitude of the Transportation - Health Link

- Public Transit versus driving – would save \$5,500 per person in healthcare costs due to obesity (or 3 years of added life)
- Patterns of sprawl in cities across the US - accounted for an average of 6 pounds of weight gain (or \$206 million / year for Oregon)

## Steps for Designing Health into Transportation and Planning

- 1) Pass policies that promote healthy design
- 2) Create agency plans that prioritize health
- 3) Identify benchmarks to track success
- 4) Track progress and reassess goals and plans

## Healthy Transportation Benckmarks

- 1) Percent of population taking each mode of transportation to work
- 2) Ratio of miles of bike lanes and paths to miles of road
- 3) Proportion of sidewalks in neighborhoods
- 4) Coverage of existing transit systems (train, tram, bus) and time (every 10/15/30 minutes, for example)

## Food Access Benchmarks

- 1) Proportion of population within 1/2 mile from retail food market (i.e., supermarket, grocery store, and produce store)
- 2) Retail Food Environment Index (# of fast food and convenience stores divided by full service stores and farmers markets) More info at [www.publichealthadvocacy.org](http://www.publichealthadvocacy.org)

## Schools Benchmark

- 1) Distance and safety of access to K-12 schools.

## Air Quality Benchmarks

- 1) Proportion of households within x (TBD) meters of busy roadways
- 2) Proportion of households living within 300 meters of major industrial stationary sources of air pollution

## Definition

**Health Impact Assessment (HIA)** is a combination of procedures, methods and tools by which a policy, program or project may be judged for its potential health effects on a population, and the distribution of those effects within the population.

- World Health Organization (WHO),  
1999

## Objectives of HIA on VMT Policies

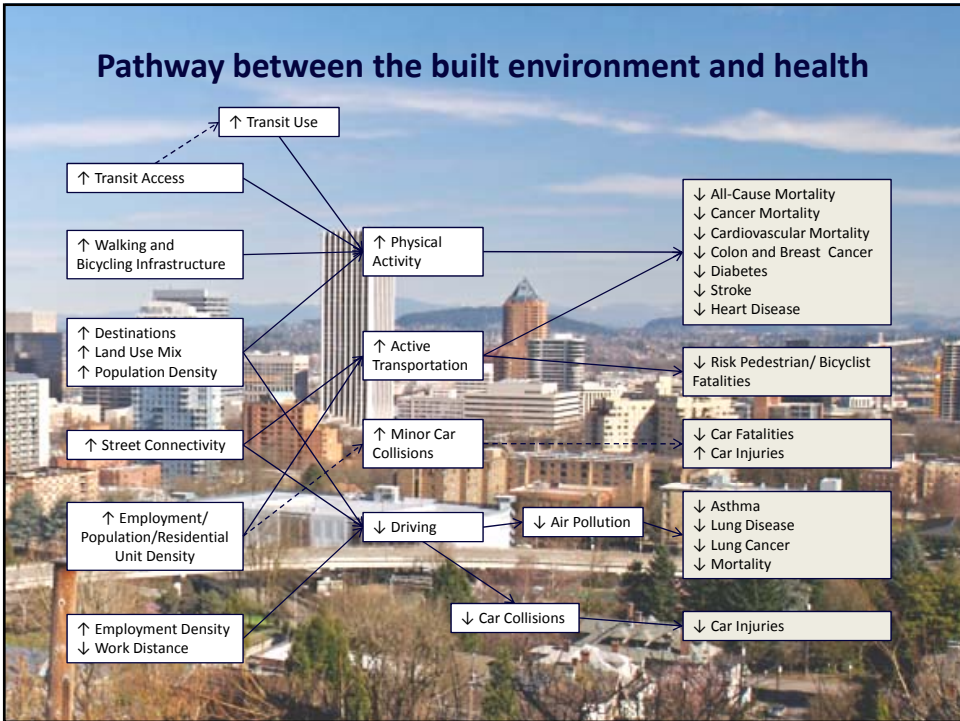
- Inform the policymaking process at the local and state levels
- Increase the use of health impact assessments
- Increase consideration of health outcomes in transportation and land-use planning

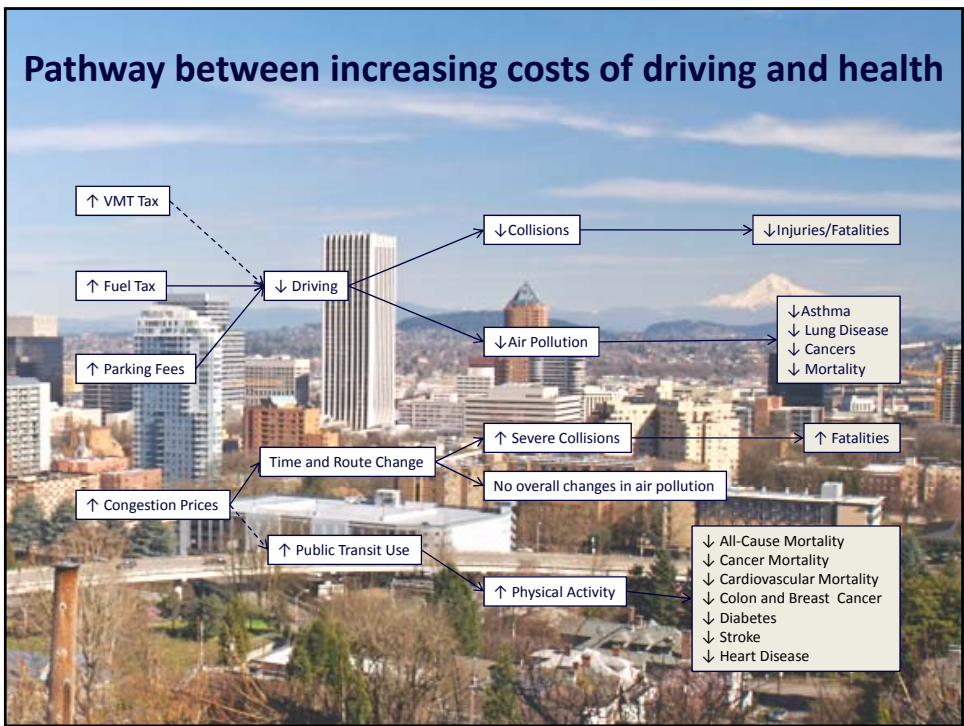
## Advisory Committee

- Bend and Corvallis MPOs
- City of Portland
- Community Health Partnership
- Oregon Department of Human Services
- 1000 Friends of Oregon
- Oregon Department of Transportation
- Bicycle Transportation Alliance

## Literature Search

- Literature reviews for original research
- Policies:
  - Positive changes to the built environment
  - Access to public transportation
  - Increasing Costs of Driving
- Health Impacts:
  - Physical Activity
  - Air Pollution
  - Collisions





### Selected Built Environment Data

- “Sprawl Index”
  - Clackamas County - 98.45
  - Multnomah County - 131.42
  - Washington County - 108.29
  - New York County - 352.07
- Associated with higher levels of physical activity, lower BMI, less traffic fatalities, less pedestrian fatalities



## Selected Increasing Costs Data

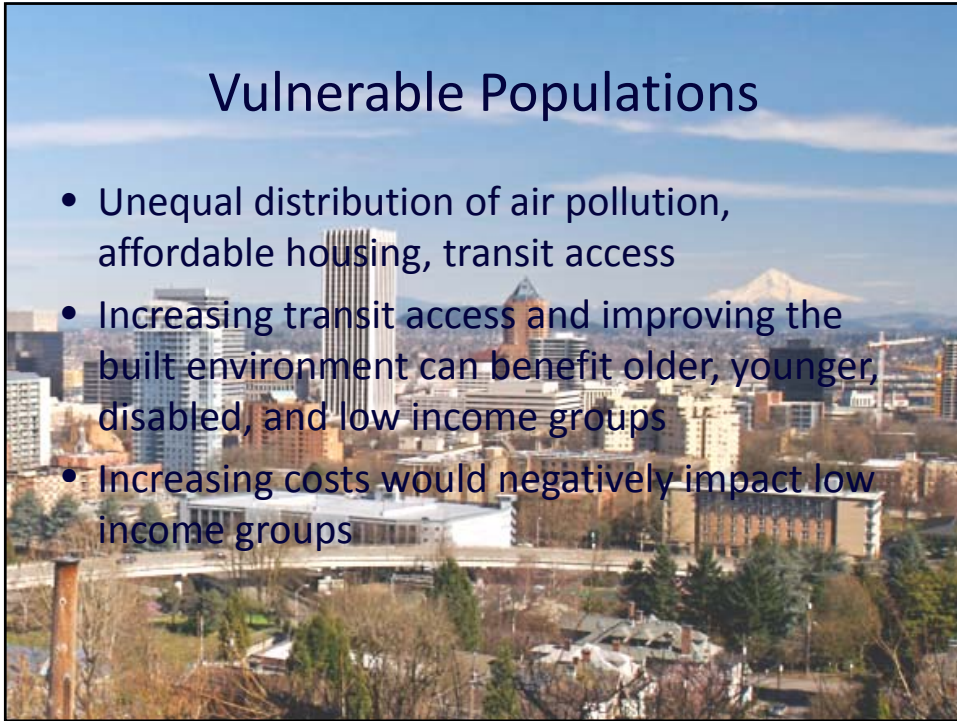
- With a \$6 employer parking fee, annual VMT would be reduced by 3900 miles per commuter in Portland
  - 523,230 commuters driving alone in 2000
  - 135,004 less commuters would drive alone
  - Increase of 71,058 public transit commuters

## Selected Transit Data

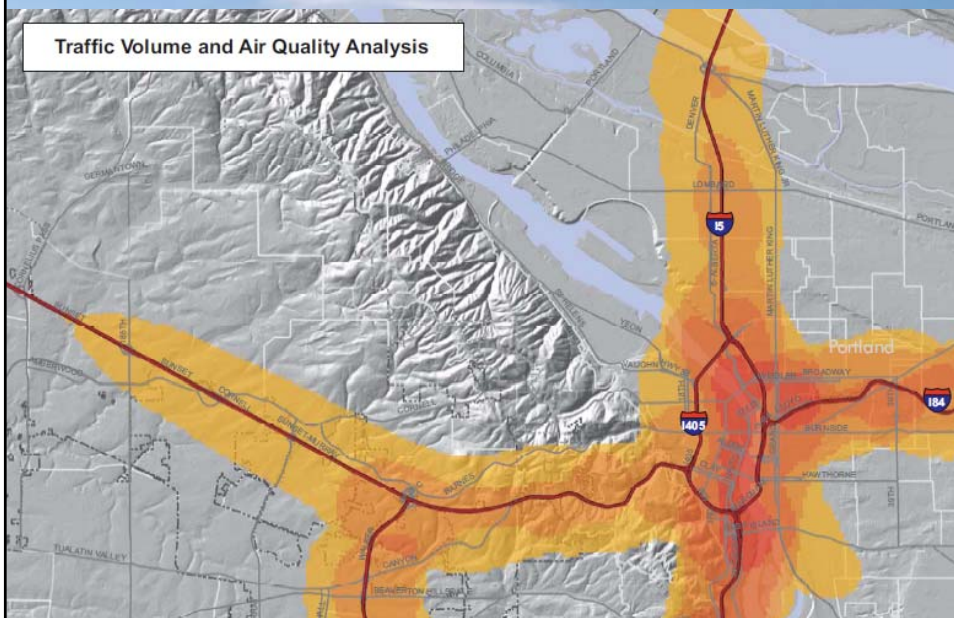
- In the Portland metropolitan region, 42% of the population does not live within  $\frac{1}{4}$  mile of a transit stop
- Adults meeting physical activity requirements:
  - Clackamas – 54.6%
  - Multnomah – 56.0%
  - Washington – 51.3%

## Vulnerable Populations

- Unequal distribution of air pollution, affordable housing, transit access
- Increasing transit access and improving the built environment can benefit older, younger, disabled, and low income groups
- Increasing costs would negatively impact low income groups



## Unequal Burden of Health Impacts



## Recommendations

- Concurrent policies would have the greatest impact:
  - Increase population density/develop within UGB
  - Create more mixed-use neighborhoods
  - Increase access to public transit
  - Increase costs of driving
- Mitigation for vulnerable populations

## Resources

- Healthy Development Planning Tool –  
San Francisco Department of Public Health
- Centers for Disease Control and Prevention
- Portland / Oregon Health Impact Assessment  
Network

## Next Steps and Questions





# CREATING A TRANSPORTATION POLICY FOR A HEALTHIER OREGON

*A Health Impact Assessment on How Investments in Public Transportation and Community Design Will Help Us Be More Active, Breathe Easier—and Improve Our Overall Health*

**Health Impact Assessments (HIAs)** examine how a policy or project helps and harms the well-being of people affected by it. HIAs are commonly used in Europe and Canada, and the Centers for Disease Control recommends their use in the United States.

Upstream Public Health commissioned this HIA after Governor Ted Kulongoski proposed to set specific targets for reducing the total number of miles driven in Oregon in order to meet Oregon’s legislature-approved greenhouse gas emission targets. It looks at the health impacts of three policy areas that reduce driving: land-use planning, public transit, and driving-related fees. This is the first-ever statewide HIA in Oregon. It offers critical analysis that decision-makers can use to implement healthier urban land-use and transportation policies at the local level. This was a collaboration between Upstream Public Health, Oregon Health & Sciences University, Human Impact Partners, and an expert advisory committee.

## The Transportation-Health Connection

Our dependence on cars doesn’t just hurt the environment—it harms our health every day. Autos emit toxic pollutants, like benzene and arsenic, into the air we breathe, causing asthma and lung cancer. They also promote a less active way of life, which contributes to an epidemic of overweight Oregonians. Experts are predicting that for the first time ever, children today may live shorter lives than their parents due to obesity-related epidemics like diabetes and heart disease.

## Here’s how it looks by the numbers...

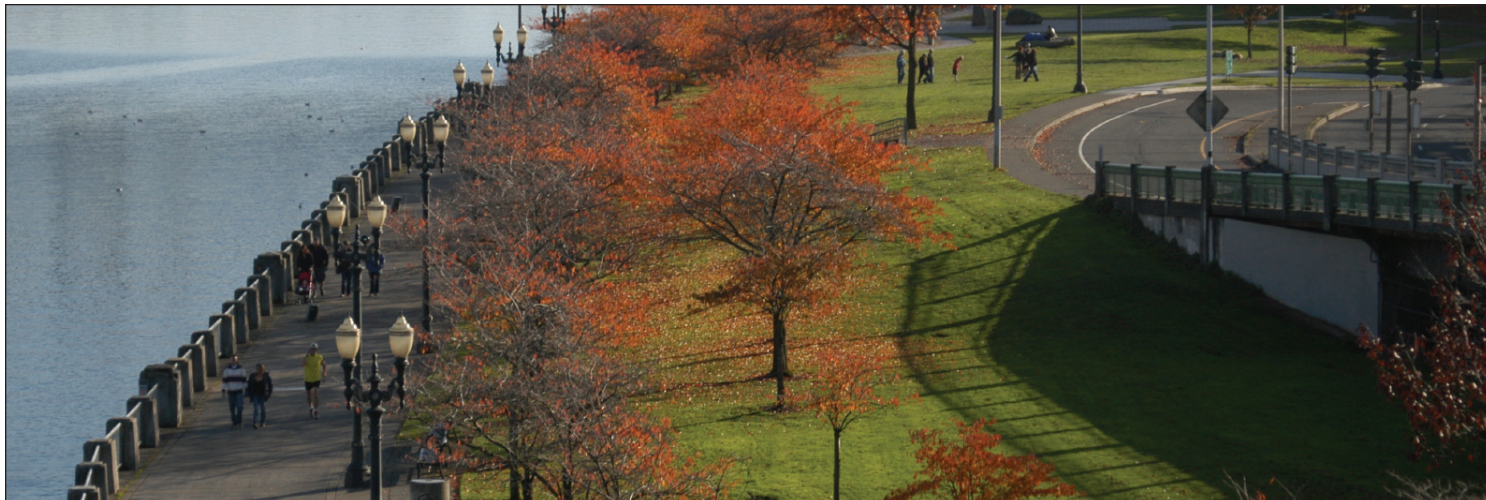
- Minutes of moderate physical activity each day recommended by experts: **30**
- Average minutes of commute-related walking among those who take public transit: **16**
- Average minutes of commute-related walking among those who don’t take public transit: **1<sup>1</sup>/<sub>2</sub>**
- Number of Oregonians who are overweight or obese: **1.8 million**
- Annual obesity-related healthcare costs in Oregon: **\$781 million**
- Minimum number of extra pounds per person experts attribute to urban sprawl: **6**
- Healthcare savings Oregon could realize annually if every person in the state lost those 6 pounds: **\$206 million**
- Estimated number of deaths annually due to outdoor air pollution in the U.S.: **42,100**
- Number of Oregonians with Asthma: **355,000**
- Rank of Oregon in Asthma rate among all states (1 is highest ): **2**

*For HIA findings turn over...*



Read the full report at:  
[www.upstreampublichealth.org/transportation.html](http://www.upstreampublichealth.org/transportation.html)

For more information contact:  
Mel Rader, Project Director  
Upstream Public Health  
240 N. Broadway St., Suite 201  
Portland, OR 97227  
503.284.6390  
[mel@upstreampublichealth.org](mailto:mel@upstreampublichealth.org)



## Health Impact Assessment of Policies to Promote Alternative Options to Driving in Oregon Metropolitan Areas

The study examined 11 specific policies to reduce driving in six metro areas in the state and how each would affect Oregonians' health.

### Study Findings:

- Implementing a combination of policies is the best way to promote the positive health benefits of alternative forms of transportation.
- Creating affordable neighborhoods that are high-density, mixed-use, and highly connected will make people more active, decrease air pollution, and reduce car crash fatalities.
- Employer parking fees would promote health more than a gas or a vehicle-miles-traveled tax because it would actually shift people away from driving to public transit.
- Driving-related taxes may disproportionately impact low-income, elderly or disabled individuals. If taxes are put into place significant revenues from them should be re-invested in low-income communities through strategies such as improving access to public transit and building affordable housing.

**Read the full report at [www.upstreampublichealth.org/transportation.html](http://www.upstreampublichealth.org/transportation.html)**

For more information, contact: Mel Rader, Project Director  
Upstream Public Health  
240 North Broadway Street, Suite 201  
Portland, Oregon, 97227

503-284-6390  
[mel@upstreampublichealth.org](mailto:mel@upstreampublichealth.org)

Sources for "By the Numbers:"

- Walking times for transit and non-transit users was obtained from a study by Lachapelle and Frank, "Transit and Health: Mode of Transport, Employer-Sponsored Public Transit Pass Programs, and Physical Activity." *Journal of Public Health Policy* 2009, 30, 573-794.
- Oregon obesity-related costs and rates were obtained from the report "SB 931: Task Force for a Comprehensive Obesity Prevention Initiative," prepared by the Oregon Department of Human Services, 2009.
- Sprawl-related weight gain was drawn from a report by Smart Growth America, "Measuring the Health Effects of Sprawl." 2003. <http://www.smartgrowthamerica.org/healthreport.html>
- Healthcare costs per pound came from an analysis done by Humana health insurance company: [http://www.businesswire.com/portal/site/humana/?ndmViewId=news\\_view&newsId=20081231005280&newsLang=en](http://www.businesswire.com/portal/site/humana/?ndmViewId=news_view&newsId=20081231005280&newsLang=en)
- Air Pollution mortality estimate obtained from the World Health Organization WHOIS Database, [http://www.who.int/entity/quantifying\\_ehimpacts/countryprofilesebd.xls](http://www.who.int/entity/quantifying_ehimpacts/countryprofilesebd.xls)
- Car collision data was obtained from the National Highway Traffic Safety Commission, Fatality Analysis Reporting System: <http://www.nhtsa.gov/portal/site/nhtsa/menuitem.0efe59a360fbaad24ec86e10dba046a0/>
- Asthma rate for Oregon is from "The Burden of Asthma in Oregon, 2008" by the Oregon Department of Human Services.
- Asthma Rankings came from Trust for America's Health: <http://healthyamericans.org/states/?stateid=OR>

## **EXECUTIVE SUMMARY**

### **Vehicle Miles Traveled and Oregon's Jobs and Transportation Act**

Oregon Governor Kulongoski proposed to the legislature as part of the 2009 Jobs and Transportation Act (JTA), to set specific targets for vehicle use, so-called vehicle miles traveled, in order to meet greenhouse gas emissions targets. Vehicle miles traveled (VMT) are the number of miles that residential vehicles are driven within a given time period and geographic area. VMT are influenced by factors such as population, the number of vehicles per household, the number of car trips per day, and distance traveled. The governor proposed to fund Oregon's six Metropolitan Planning Organizations (MPOs) to design and implement VMT reduction plans that used a variety of strategies to meet greenhouse gas emission targets.

Upstream Public Health identified the statewide VMT-reduction strategy as a policy that had significant impacts on health that had not yet been fully considered. In January 2009, Upstream Public Health received funding from the Northwest Health Foundation to assess how VMT reduction strategies in Oregon's six metropolitan regions would impact the public's health through changes in air quality, physical activity, and safety.

### **Methodology of the Study**

The research used the steps of Health Impact Assessment (HIA) as recommended by the US Centers for Disease Control and Prevention. HIAs are used to evaluate the impacts policies or projects have on health and to promote decisions that are the most beneficial for health.

The project also used elements from Community-based participatory research to utilize the expertise and perspective of a diverse group of stakeholders. An advisory committee included representatives from the public health and preventive medicine department in Oregon's medical school, the state public health division, metropolitan planning organizations, land use and planning community organizations, public health non-profits, and bicycle and pedestrian coalitions. The advisory committee identified the scope of the HIA including 11 specific policies to reduce VMT that were classified into three general policy areas: (1) Changes to land use and the built environment, (2) Investments in public transit, and (3) Increases to the cost of driving individual vehicles. The report focused on the impact of specific policies on three areas of health: physical activity, air pollution, and car collisions.

### **Recommended Policies for Health**

The study identified multiple different pathways that demonstrated that reductions in VMT have significant health benefits overall. The research examined 11 different policies that reduce VMT and recommended 5 of the policies that would have the most beneficial impacts on health.

Recommended policies for the built environment include maximizing the density of neighborhoods already within the urban growth boundary, requiring new developments be mixed-use and high-density with good connectivity, and improving the pedestrian infrastructure of neighborhoods. Changes to the built environment that make it more conducive to forms of transportation other than individual vehicles will have positive benefits for health through increased physical activity, decreased air pollution, and decreased car collision fatalities for car drivers, pedestrians, and bicyclists.

Requiring that businesses in metropolitan areas charge a fee for employee parking is another recommended policy, since employees are less willing to pay for parking and will instead choose active forms of transportation, such as biking or public transit. If a tax is necessary, then a VMT tax is recommended over a gas tax since the welfare benefits from a VMT tax are more substantial. However, even a gas tax has been found to have positive impacts on health through decreased fuel consumption, traffic volume, and the number of collisions and deaths.

And finally, transit coverage should be increased across all the metropolitan areas and the use of public transit should be promoted. Public transit users are likely to meet recommended levels of physical activity. All of these policies will work best together to decrease individual driving and lower VMT in Oregon.



# Resources on Healthy Transportation and Health Impact Assessments (HIAs)

## Resources on the Health and Transportation Link

1) At the Intersection of Health and Transportation: Promoting Healthy Transportation Policy. Prepared by the American Public Health Association.

<http://www.apha.org/NR/rdonlyres/43F10382-FB68-4112-8C75-49DCB10F8ECF/0/TransportationBrief.pdf>

2) Understanding the relationship between public health and the built environment.

Prepared by Reid Ewing and Richard Kreutzer.

<http://www.activeliving.org/node/622>

## Resources on Health Impact Assessments:

3) Centers for Disease Control and Prevention Resource Page:

<http://www.cdc.gov/healthyplaces/hia.htm>

4) UCLA Resource Page on HIA:

<http://www.ph.ucla.edu/hs/health-impact/>

## Oregon Health Impact Assessments:

5) Study on the Health Impacts of Reducing Vehicle Miles Traveled:

<http://www.upstreampublichealth.org/transportation.html>

6) Health Impact Assessment on the proposed Columbia River Crossing Project:

[http://www.clfuture.org/publications/HIA\\_CRC](http://www.clfuture.org/publications/HIA_CRC)

For more information, contact:

Mel Rader

Upstream Public Health

[mel@upstreampublichealth.org](mailto:mel@upstreampublichealth.org)

503-284-6390

CLICK HERE FOR REPORT

# HEALTH IMPACT ASSESSMENT ON POLICIES REDUCING VEHICLE MILES TRAVELED IN OREGON METROPOLITAN AREAS

*A collaboration between Upstream Public Health, Oregon Health & Science University, Human Impact Partners, and a health and transportation expert advisory committee.*

**May 2009**



Mel Rader, Project Director  
Upstream Public Health  
240 N. Broadway St., Suite 201  
Portland, OR 97227

503.284.6390  
mel@upstreampublichealth.org

## STIP UPDATE

### Region 1 Modernization

During our previous STIP update discussions Region 1 worked with JPACT to allocate \$15m of available funding to modernization projects in Region 1. At that time, JPACT recommended providing the full \$15m of available Modernization target be allocated to the US26: 185<sup>th</sup> to Cornell project. As part of the Jobs and Transportation Act, the legislature provided additional funding for modernization statewide. Region 1 received an additional \$26m, bringing the total amount of available funds to be allocated during this STIP update for Modernization in the Region to \$41m. Those funds are available for projects both inside and outside of the MPO.

The legislature also provided project specific funding for several projects in Region 1 that will be added to the STIP as listed below:

#### Jobs and Transportation Act (JTA) Projects

|     |   |    |             |
|-----|---|----|-------------|
| JTA | US26: at Glencoe Road Interchange             | \$ | 32,000,000  |
| JTA | I-84 at 257th Avenue Interchange              | \$ | 24,000,000  |
| JTA | Hwy 212: Sunrise Corridor, Phase 1 Unit 1     | \$ | 100,000,000 |
| JTA | US26: at Shute Road Interchange               | \$ | 45,000,000  |
| JTA | I5 at I-205 Interchange                       | \$ | 11,000,000  |
| JTA | US26: 185th Ave to Cornell Road               | \$ | 20,000,000  |
| JTA | I-205 and OR213 at Washington St. Interchange | \$ | 22,000,000  |
| JTA | I-84 at Hood River Interchange                | \$ | 10,000,000  |
| JTA | Hwy 43 at the Sellwood Bridge Interchange     | \$ | 30,000,000  |

## Region 1 Proposed Projects for '12 '13 Draft STIP

| PRG     | PROJECT NAME   | DESCRIPTION  | TOTAL        |
|---------|--|--|--------------|
| BRDG.   | OR99W: SW Newbury St. Viaduct                        | Deck overlay - Bridge #01983   | \$3,112,012  |
| BRDG.   | OR99W: SW Vermont St. Viaduct                        | Deck overlay - Bridge #01984   | \$3,972,012  |
| BRDG.   | I-405: Fremont Bridge                                | Deck overlay; repair joints - Bridge #02529  | \$10,949,000 |
| IM      | I-84: MLK Blvd. - I-205                              | Inlay  | \$10,642,000 |
| MOD.    | US26: 185th - Cornell Rd.                            | Widen US26 from 185th - Cornell Rd.  | \$14,989,012 |
| PRES.   | US26: Sylvan - I-405                                 | 2" Inlay (Full WD)   | \$7,998,000  |
| PRES.   | US26: Military Cr. Rd. - Wolf Cr.                    | Pavement repair & rehab-inlay  | \$11,325,000 |
| PRES.   | OR99E: MP 14.9 - Territorial Road                    | Grind and Inlay  | \$5,362,000  |
| PRES.   | OR99E: Roethe Rd. - Clackamas River Br.              | Inlay/Overlay  | \$7,055,000  |
| PRES.   | OR35: Cooper Spur Rd. - Neal Creek Rd.               | 2"grind & inlay; replace guardrail   | \$3,030,000  |
| PRES.   | US26: East Burnside - West City Limits               | 2" Inlay (TRVL LNS)  | \$12,220,000 |
| SAFE.   | OR99W: I-5 NB Off Ramp                               | Add additional lane off I-5 onto NB 99W from 60th Ave - Barbur                               | \$1,344,000  |
| SAFE.   | OR99W: I-5 SB Off Ramp to 99W                        | Add additional lane NB from 68th - 64th  | \$907,000    |
| SAFE.   | OR8: TV Hwy. @ 178th Ave                             | Pedestrian improvements & illumination   | \$1,230,000  |
| SAFE.   | OR99W @ Beef Bend Road                               | Build SB right turn lane   | \$1,316,000  |
| SAFE.   | US26 (Sunset Hwy) Cable Barrier                      | Install Cable Barrier  | \$725,000    |
| SAFE.   | OR213: Cascade Hwy. S. @ Division St.                | Intersection/signal upgrade; access management; install median curbs on Division & 82nd. Ave | \$1,174,800  |
| SAFE.   | OR213: Cascade Hwy S@Stark/Washington Sts            | Intersection/signal upgrade; access management; install median curbs on Stark & Washington   | \$2,513,000  |
| SAFE.   | US30: Lower Columbia River Hwy @ Cornelius Pass Road | Install ITS; right turn channelization on Cornelius Pass Rd & US 30                          | \$4,419,000  |
| SAFE.   | I-205: Cable Barrier Project                         | Install sections of cable barrier in median  | \$657,000    |
| SAFE.   | OR211: Eagle Cr-Sandy Hwy @ Dubarko Road             | Improve geometry, illumination, sight distance & channelization                              | \$5,143,000  |
| OPS     | Rockfall Repairs in 2013                             | US26: Jefferson St-Highland Int Rockfall Mitigation  | \$1,200,000  |
| OPS     | TMOC Software & Hardware Upgrades for 2012 & 2013    |  | \$500,000    |
| OPS     | Signal Upgrades for 2012 & 2013                      | Locations yet to be finalized  | \$200,000    |
| OPS     | Urban & Rural ITS Deployment for 2012 & 2013         | Locations yet to be finalized  | \$7,000,000  |
| OPS     | Signal LED Upgrades for 2012 & 2013                  | Locations yet to be finalized  | \$150,000    |
| OPS     | Button Upgrades for 2012 & 2013                      | Locations yet to be finalized  | \$300,000    |
| OPS     | LED Ped Head Upgrades for 2012 & 2013                | Locations yet to be finalized  | \$300,000    |
| PE ONLY | US26: E Cherryville Dr - Salmon River                | Preliminary Design Work  | \$657,000    |

THURSDAY, SEPT. 10, 2009 NOON TO 1 P.M.

# NAVEEN LAMBA

## Global experiences in congestion pricing

Learn about congestion management programs around the world at this installment of Metro's Transportation Speaker Series featuring Naveen Lamba from IBM's Global Business Services. Stockholm, London and Singapore are three cities with prominent congestion charging programs. IBM has a significant role in all three projects and a wealth of lessons learned from these successful implementations. Mr. Lamba will also discuss examples of cities that have unsuccessfully tried to implement congestion management programs. Finally, the presentation will also discuss innovative approaches to developing the next generation of congestion pricing solutions.

### About Naveen Lamba

Mr. Lamba is IBM's global industry leader for intelligent transportation and is based in the Washington D.C. area. He has spent the last 18 years working on intelligent transportation projects around the world for governments and private sector organizations. Mr. Lamba's work focuses on developing business and technical models suitable for varying economic and social environments.



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