

**Members:**

Mary Smith, Chair  
Betty Mumm, V. Chair  
Jonathan David  
Ronald Haas  
Betty Schaafsma  
Don Slack  
Nancy Walters  
Terry Wright

**AGENDA**

**TUESDAY, APRIL 20, 2010**

6:00 pm

City of Oregon City

City Hall

**625 Center Street, Oregon City**

**Commission Chambers**

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES

**March 16, 2010** (*David and Schaafsma absent*)

IV. AGENDA ANALYSIS

V. BUSINESS

- A. Pearl Street Traffic Concerns (*Update*)
- B. Beaver Creek Road School Zone (*Update - Lewis*)
- C. Flashing Light at South End and Warner Parrott Roads (*Update - Lewis*)
- D. Warner Milne Road/Beaver Creek Road Pedestrian Movement (*Information*)
- E. West Linn Solar Highway Open House (*Update - Lewis*)
- F. Guidelines for Approving or Denying Stop Sign Requests (*Update - Lewis*)
- G. 2010 Proposed PMUF Projects
- H. Regional Transportation Plan (*Update*)
- I. Downtown Parking Committee (*Update - Slack*)
- J. Transportation Construction Projects (*Updates if Appropriate*)
  - 1. Warner Milne Rd., Molalla Avenue to Beaver Creek Road
  - 2. Holcomb Boulevard Pedestrian Improvements
  - 3. Downtown Sidewalk Replacement Project
  - 4. The Jughandle
- K. Future Agenda Items

VI. FUTURE AGENDA ITEMS

VII. ADJOURNMENT

**Next Meeting: May 18, 2010 (third Tuesday)**

**Attachments:**

- 1) Minutes for March 16, 2010
- 2) E-mail requesting Traffic Study on Pearl Street
- 3) E-mail regarding Traffic Signal Concern at Warner Milne/Beavercreek Road Pedestrian Movement
- 4) Metro RTP Update Reminder and Excerpts from Draft Plan

**City Staff:**

Nancy J.T. Kraushaar, City Engineer/Public Works Director

Aleta Froman-Goodrich, Senior Project Engineer

John Lewis, Operations Manager

Jim Burch, Operations Street Supervisor

Kathy Griffin, Administrative Support

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*Transportation Advisory Committee Web Site*

<http://www.orcity.org/cityrecorder/transportation-advisory-committee>

*Complete Agenda Packets and Minutes available*



## I. CALL TO ORDER

The Transportation Advisory Committee meeting of **Tuesday, March 16, 2010**, was called to order by Chair Smith at 6:07 PM in the Commission Chambers at Oregon City Hall, 625 Center Street, Oregon City, Oregon.

## II. ROLL CALL

Committee members present included Chair Mary Smith, Vice-Chair Betty Mumm, Don Slack, Nancy Walters, Ron Haas and Terry Wright. Jonathan David and Betty Schaafsma were excused.

Staff members present included Aleta Froman-Goodrich, Senior Engineer; John Lewis, Operations Manager; and Kathy Griffin, Administrative Assistant.

## III. APPROVAL OF MINUTES

Nancy Walters moved to approve the minutes with one change. Betty Mumm seconded the motion.

Mary Smith asked that the minutes be modified to include a statement that William Gifford testified in favor of the bike lane striping on Warner Milne Road.

**Nancy Walters moved to approve the minutes of February 16, 2010 as edited. Betty Mumm seconded the motion and it carried with Betty Mumm, Ron Haas, Mary Smith, Don Slack, Nancy Walters and Terry Wright voting yes. Jonathan David and Betty Schaafsma were not in attendance.**

## IV. AGENDA ANALYSIS

No changes.

## V. BUSINESS

### A. Vehicles Parking on North Side of Pearl Street Adjacent to 221 Molalla

**Robert, 501 Pearl Street**, submitted a letter on the history of Pearl Street and Mr. Bundy read portions of it into the record. He outlined how Pearl went from being a neighborhood street in 1970 serving a residential three block area to its present-day status as a cut-through route from Division Street to the traffic signal on Molalla Avenue.

Other neighbors in attendance in support of Mr. Bundy included **Jewel Bundy, Betsy, Nancy Schoonover, and Joyce Huber**.

Joyce Huber testified that she was concerned for the welfare of the residents of Pearl Street and added that it wasn't even safe to walk along Pearl Street.

Mr. Bundy suggested that if a roundabout were constructed at the intersection of Molalla Avenue/Division Street/7<sup>th</sup> Street, commuters would be much more likely to use the roundabout than the Pearl Street cut-through route. He encouraged the City to get grants or stimulus money to improve the intersection.

Mr. Lewis confirmed that the width of Pearl Street was such that many of the concerns raised by the neighbors were valid. Pedestrian access on Pearl Street is inadequate through limited pavement widths, ongoing roadside parking by residents, no sidewalks, and little to no shoulder. Mr. Lewis described striping solutions that the City would pursue to help with the narrowest sections along Pearl, especially near 221 Molalla Avenue and on the east end of Pearl Street near Eluria Street. Mr Lewis indicated that the striping and some shoulder paving in front of 412 Pearl would be completed late spring or early summer.

The Transportation Advisory Committee agreed to look into a solution and Mr. Slack asked that a speed study be performed. Ms. Walters asked that the issue remain on the TAC's agenda as an ongoing item.

### B. Memorial on Holcomb Blvd.

City staff had yet to contact the family of the deceased regarding relocating the memorial. Terry Wright submitted a copy of 2008 House Bill 3623 relating to roadside memorial signs for the TAC's information.

**C. Committee Membership**

Former TAC member Scott Failmezger has submitted an application for membership on the TAC.

**D. Beaver Creek Road School Update**

John Lewis reviewed that Clackamas County owns Beaver Creek Road and the City was responsible for striping and signing. The School District is opposed to removing the school speed zone so they have been effective at keeping the speed zone from being removed.

The City's consultant looked at the traffic signal at Glen Oak Road and Beaver Creek Road and provided a report that indicated that not much could be done to improve traffic queues and improve the situation. Joe Marek from Clackamas County has been trying to meet with the school district and both the County and the City would like to enact a Safe Routes to School Program.

**E. Flashing Light at South End and Warner Parrott Roads**

The flashing light should be installed in the next two to three weeks.

**F. "No Parking" on S. 2<sup>nd</sup> Street Adjacent to Stillhouse Pub**

Mr. Lewis noted that the City improved the "no parking" message by painting the curb yellow.

**G. North Leg of Intersection at South End Road and Warner Parrott Road/Lawton Road**

John Lewis stated that the City was planning on striping a short right turn lane and improved placement of the vehicle parking signage. John Lewis described the striping needs as a priority and something the City was working with Clackamas County to complete early in their striping season.

**H. TriMet Budget Cuts**

Nancy Walters reported that she was unable to make it to the TriMet open house but that she submitted comments. She was unable to incorporate comments made by Commissioner Doug Neeley.

Ms. Griffin agreed to put together Commissioner Neeley's comments and submit them to TriMet.

**I. Downtown Parking Committee**

No changes.

**J. Transportation Construction Projects**

**1. McLoughlin Boulevard Enhancement Project**

Ms. Froman-Goodrich reported that a Dedication Ceremony would be held on May 19, at 10:00 AM at Jon Storm Park.

Skateboarders quit using the stepped seating area once the City installed stops. The City will continue to watch the ramp area.

Ms. Froman-Goodrich noted that ODOT would be installing variable message signs; one between 15<sup>th</sup> and NB onramps to I-205 and the other one will be just north of the McDonalds frontage area.

Mr. Haas noted that he felt the lane signage going northbound was confusing and Ms. Froman-Goodrich explained that it was designed by ODOT.

**2. Warner Milne Rd., Molalla Avenue to Beaver Creek Road**

The City's newest employee, Erik Wahrgren, is now the project manager for the Warner Milne project.

The utility work is complete and the contractor will soon start above-ground improvements. The project is slated for completion in May or June.

**3. Holcomb Boulevard Pedestrian Improvements**

No new updates.

**4. Downtown Sidewalk Replacement Project**

No new updates.

**5. Waterline Replacement Project**

Paving was underway with some of the streets scheduled to get full-lane width paving.

## **6. The Jughandle**

Ms. Froman-Goodrich noted that the City was working aggressively with OBEC towards the final design and monthly meetings were now being held with ODOT.

The City has federal aid money for the project which requires all the same regulations as with the ARRA projects which requires a lot of work. Contract documents are expected towards the end of the year with a bid date in 2011.

Ms. Walters asked about the utility locates on Redland and Holcomb. Ms. Froman-Goodrich suggested the consultant might be having additional survey work done to design the Redland Road portion of the project although there was only funding available for the Jughandle portion.

Ms. Walters asked about having a sign relocated that was disruptive to pedestrians and she showed on a map that it was located at the southwest corner of the intersection of Redland Road/Holcomb Boulevard/Abernethy Road.

## **K. Intersection of 12<sup>th</sup> and Washington**

Mr. Lewis reported that the City hired a consultant to review the intersection of 12<sup>th</sup> and Washington. He just received a memorandum back from the consultant whose conclusion was that a signal at the intersection was not the right solution, nor was the removal of the curb extensions necessary.

The consultant proposed sight distance improvements including the removal of shrubs and conveying the speeding concerns to the Police Department.

Many people expected a huge increase in traffic with the road being opened up all the way to McLoughlin Boulevard but traffic counts have not changed significantly.

## **L. Future Agenda Items**

- 1. West Linn Solar Highway Open House**
- 2. Beaver Creek Road and Warner Milne** – Green light is on westbound on Warner Milne when pedestrians are crossing Beaver Creek Road. Mr. Lewis agreed to resurrect some old language on why the County wants the signal left as is.

**VI. ADJOURNMENT**

There being no further business, the meeting adjourned at approximately 7:29 p.m.

Respectfully Submitted,

Kathy Griffin  
Administrative Assistant

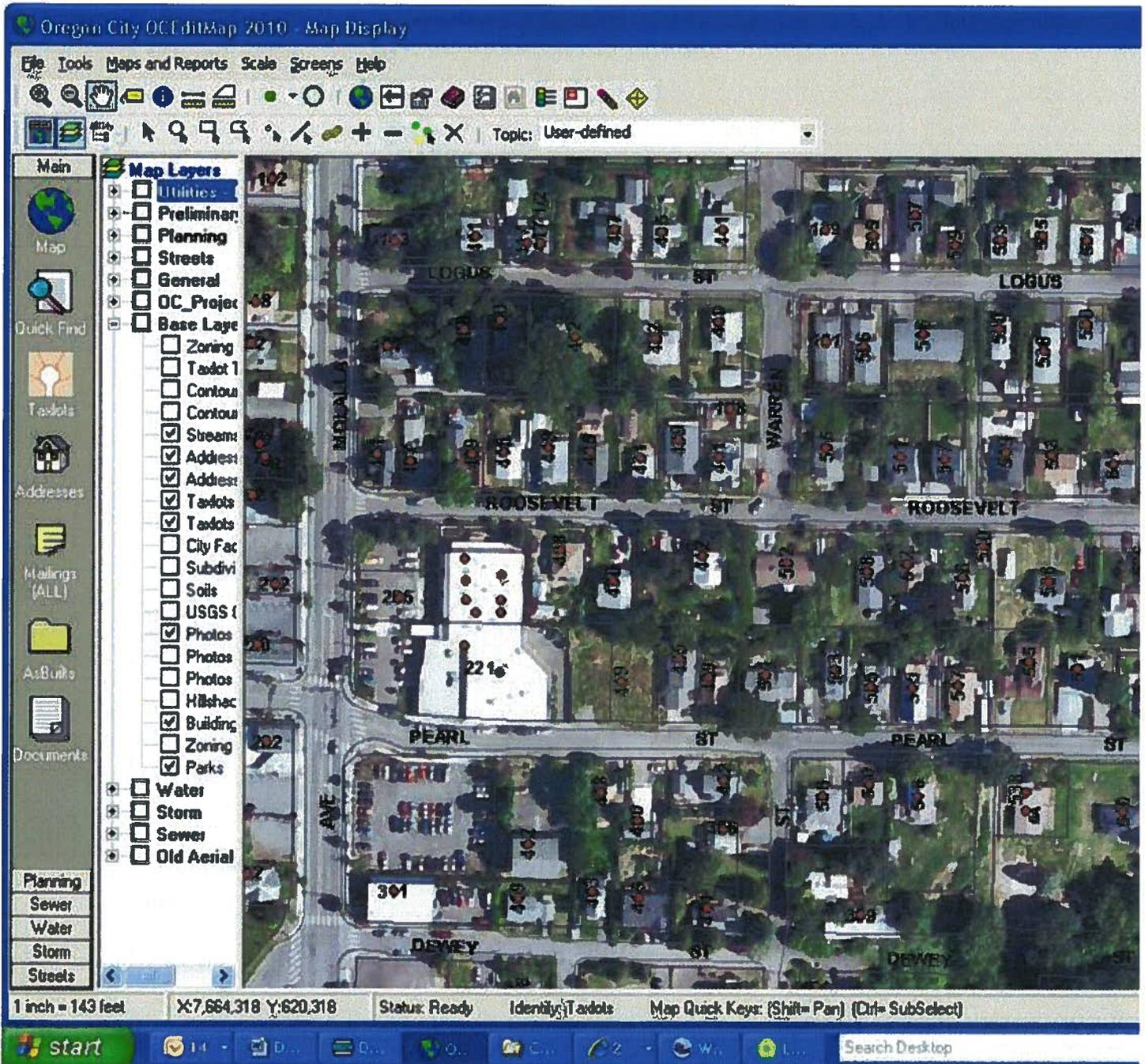
*A video recording of this meeting is available at*  
[http://www.orcity.org/cityrecorder/meeting-agendas-minutes-and-videos.](http://www.orcity.org/cityrecorder/meeting-agendas-minutes-and-videos)

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# Kathy Griffin

**From:** Kathy Griffin  
**Sent:** Wednesday, March 17, 2010 4:39 PM  
**To:** Jason Frazier  
**Cc:** Nancy Kraushaar; John M. Lewis  
**Subject:** Traffic Study Needed on Pearl Street

At the TAC meeting last night, the TAC asked that a traffic study be performed on Pearl Street between Molalla Avenue and Eluria. They were concerned with both volume and speeds. Could you please do this study when you get back from vacation? Thank you!



## Kathy Griffin

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**From:** Kathy Griffin  
**Sent:** Thursday, March 18, 2010 10:45 AM  
**To:** Ron Haas  
**Cc:** John M. Lewis  
**Subject:** FW: Traffic signal concern

FROM JOHN LEWIS:

Ron this is the email I have specific to the concern you were asking about. There was no follow up from Joe Marek or Bikram but I recall sending them a response indicating we wanted to leave it alone at this time. But I am not set on my initial response. With the re-stripping of Warner Parrott there may be other considerations at this location.

I'll be available to discuss further when I get back from vacation on the 30<sup>th</sup>.

Thanks.

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**From:** Bauman, Kent [mailto:KentBau@co.clackamas.or.us]  
**Sent:** Friday, June 26, 2009 9:19 AM  
**To:** John M. Lewis; Larry Griggs  
**Cc:** Raghubansh, Bikram; Marek, Joe  
**Subject:** RE: Traffic signal concern

John,

The indication / potential conflict has been brought up before at this intersection over the years. From an indication standpoint, it is a correct display, as there are not arrows in the right turn signal head which would give the driver a protected movement but "ball" indications which is not a "protected / exclusive" movement. Pete Irving had us install a "Right Turn Yield to Peds" sign on the SE signal pole three or four years ago due to the same complaint.

The situation Larry saw was where he was approaching to turn right and there were no side street or left turn demands. The "Don't Walk" was displayed on the ped head. A pedestrian pushed the button and immediately received a "Walk" since there were no other phases to be served first. The Right Turn ball indication did and would remain green throughout as it is a permissive movement, but I agree it can take a driver by surprise and be somewhat misleading.

To make this an exclusive Ped movement is difficult with the current 170 controller but is not impossible. The 2070 controller that is the new ODOT standard has provisions for an exclusive ped. called a "PED NOT Overlap" The exclusive ped requires the programmed head visibility to be very tight on the RT Turn lane because now there will be a red indication on with a green thru at the same time which can be confusing to drivers.

ODOT has gone away from the 3 section programmed visibility in favor of the 5 section head were the protected movement has an arrow but the permissive is a ball. The protected RT arrow comes on only when the left turn onto the opposite direction is active, otherwise it is a ball indication. This is the display at WB Beavercreek & Molalla. I don't know that the 5 section is any less confusing there, as we have had the exact same ped / Rt. turn conflict complaints there too. The one big difference between the two intersections is Beavercreek is the "minor" movement so the ped is always leading and would not be "re-serviced" as Larry saw at Warner Milne.

Joe, Bikram, any items I may have missed?

Thanks,

Kent Bauman  
Supervising Electrician  
Clackamas County DTD  
902 Abernethy Rd

Oregon City, OR 97045  
503-650-3735 office  
503-940-3643 pager  
503-789-1034 cell  
[kentbau@co.clackamas.or.us](mailto:kentbau@co.clackamas.or.us)

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**From:** John M. Lewis [mailto:jmlewis@ci.oregon-city.or.us]  
**Sent:** Friday, June 26, 2009 7:37 AM  
**To:** Larry Griggs; Bauman, Kent  
**Subject:** RE: Traffic signal concern

Thanks Larry. I didn't think the signal controller would prohibit this kind of pedestrian movement conflict.

Kent can you send me a quick update on your findings.

Thanks

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**From:** Larry Griggs [mailto:Larry.Griggs@pgn.com]  
**Sent:** Monday, June 22, 2009 12:48 PM  
**To:** John M. Lewis  
**Subject:** Traffic signal concern

John:

Hi.

I have just reported a signal concern to Kent Bauman, Clackamas County, and he says he will take a look. I wanted to let someone at the City know as well. At the intersection of Warner Milne Road and Beaver Creek Road, eastbound on Warner Milne: There is a right turn arrow directing vehicle travel southbound onto Beaver Creek Road. I was proceeding into the intersection preparing to turn southbound onto Beaver Creek Road. There were two kids standing at the crossing signal with a "WAIT" signal to walk eastbound on Warner Milne Road. As I was about to make the turn onto Beaver Creek Road, their "WAIT" signal changed to "WALK", with my green right-turn traffic arrow still showing. Close Call!

Hopefully Kent can resolve this soon.

Thanks,  
Larry

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## 2035 Regional Transportation Plan update

PLANNING AND CONSERVATION > TRANSPORTATION > REGIONAL TRANSPORTATION PLAN > 2035 RTP UPDATE

Learn about the region's plans for completing an integrated, multimodal transportation system from now through 2035.

### A transportation system for the 21st century

On Dec. 17, 2009, the Metro Council voted to accept a preliminary draft 2035 Regional Transportation Plan for the purpose of completing a federal and state-required air-quality conformity analysis of the proposed system. Since then, staff has completed a final draft RTP for 45 days of public review.

The final draft RTP presents the overarching policies and goals, system concepts for all modes of travel, funding strategies and local implementation requirements. The plan recommends how to invest more than \$20 billion in anticipated federal, state and local transportation funding in the Portland metropolitan area during the next 25 years. After considering public comment, the Joint Policy Advisory Committee on Transportation and the Metro Council will consider final approval on June 10, 2010.

This RTP update has been shaped by looking ahead to 2035 to anticipate 21st century needs and these desired outcomes for the region:

- promote jobs and create wealth in the economy
- reduce greenhouse gas emissions
- improve safety throughout the transportation system
- promote healthy, active living by making walking and bicycling safe and convenient
- move freight reliably and make transportation accessible, affordable and reliable for commuting and everyday life
- promote vibrant communities while preserving farm and forest land

### Linking transportation investments to the vision for a sustainable and prosperous region

The new RTP focuses on outcomes and achieving the region's 2040 Growth Concept – a publicly supported vision for directing growth toward centers, corridors and employment areas. The plan invests in the region's downtowns, main streets, employment areas and major travel corridors to help attract growth in these areas.

Well-developed centers and corridors manage growth in a way that makes daily life more convenient for residents by minimizing the distances they must travel to work. They also create centers of activity that can be served by multiple transportation options. These compact communities also result in lower greenhouse gas emissions and lower costs for providing roads and utilities.

### This RTP update has been completed in two steps

The first step produced an RTP that met federal timelines, fiscal requirements, and new requirements in the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). That RTP was approved by the U.S. Department of Transportation on Feb. 29, 2008.  
[Read the SAFETEA-LU](#)

The second step has produced a final RTP that meets regional and state as well as federal planning requirements. The final RTP includes:

- the first high-capacity transit plan since the early 1980s, which outlines priorities for future investments in an expanded light-rail network, bus rapid transit and other high-capacity transit corridors
- a regional freight plan that looks at how freight can move more efficiently through the region's transportation system
- the first comprehensive plan for transportation systems management and operations to make the most of investments already made in the transportation network
- the first climate change action plan to address how an integrated set of transportation investments, land use policies and other strategies can most effectively reduce greenhouse gases

### Final public comment opportunity

A third and final 45-day public comment period on the completed 2035 RTP and the associated air quality conformity analysis will be open from noon, Monday, March 22, 2010, until midnight on Thursday, May 6.

[Read the final draft 2035 RTP Comment on the RTP](#)  
[Learn about the air quality conformity analysis](#)

Mail comments anytime during the comment period to:

RTP Comments  
 Metro Planning and Development  
 600 NE Grand Ave.  
 Portland, OR 97232

### Public hearing

5 p.m. Thursday, May 6  
 Metro Council Chamber  
 600 NE Grand Ave., Portland

Testimony time is limited to three minutes per person. Please also either bring a summary of your remarks for the public record, or summarize them on comment forms that are available at the hearing.

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- performance measures to link transportation investments to reducing the region's carbon footprint, job creation, protecting the urban growth boundary and enhancing travel options for everyone

Read the final draft 2035 RTP

**Timeline of milestones and decisions**

Key actions that remain for the 2035 RTP update include public review and comment on the final draft RTP and the associated air-quality conformity report from March 22 through May 6; discussion and recommendations by Metro advisory committees in May, and consideration of approval of a final RTP by the Joint Policy Advisory Committee on Transportation and the Metro Council on June 10, 2010.

More on milestones and decisions

**NEED ASSISTANCE?**

Metro regional transportation planning  
503-797-1735  
rtp@oregonmetro.gov

**RELATED DOCUMENTS**

- ▢ Regional Transportation Plan (Final public review draft)  
29.1M Adobe Acrobat PDF | Published March 22, 2010
- ▢ RTP Technical Appendix (Projects only)  
2.3M Adobe Acrobat PDF | Published March 22, 2010
- ▢ RTP Project List (excel format)  
531K MS Excel | Published March 22, 2010
- ▢ Regional Transportation Functional Plan (Final public review draft)  
3.2M Adobe Acrobat PDF | Published March 22, 2010
- ▢ Regional Transportation System Management and Operations Plan (Final public review draft)  
15.4M Adobe Acrobat PDF | Published March 22, 2010
- ▢ Executive Summary: Regional Transportation System Management and Operations (TSMO) Plan  
2.6M Adobe Acrobat PDF | Published March 22, 2010
- ▢ Regional Freight Plan (Final public review draft)  
7.9M Adobe Acrobat PDF | Published March 22, 2010
- ▢ Regional High Capacity Transit Plan Summary Report (Final public review draft)  
14.6M Adobe Acrobat PDF | Published March 22, 2010
- ▢ RTP and 2010-13 MTIP Air Quality Conformity Determination (Public review draft)  
4.8M Adobe Acrobat PDF | Published March 22, 2010
- ▢ Presentation: Regional Transportation Plan  
2.8M Adobe Acrobat PDF | Published January 5, 2009

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**RELATED LINKS**

**2035 Regional Transportation Plan milestones and decision schedule**

Find out when the Metro Council and their advisory committees make key decisions on the 2035 Regional Transportation Plan.

**Freight and goods movement**

The Regional Freight Plan will present policies and strategies for moving freight that complement the region's multi-modal transportation system and support regional land use goals.

**Cost of congestion**

Download a study examining the relationship between investments in transportation and the economy.

**Public opinion research on quality of life and growth in the region**

To understand the underlying values and beliefs of the people in the region about quality of life and growth management principles, Metro commissioned extensive public opinion research in 2006 and 2009.

**RELATED INTERNET LINKS**

- Federal Highway Administration SAFETEA-LU website
- 2006 Oregon Transportation Plan Amendments
- 2006 Oregon Transportation Planning Rule Amendments

**REGIONAL TRANSPORTATION PLAN**

- 2035 RTP UPDATE
- FEDERAL 2035 RTP
- 2035 RTP PUBLICATIONS
- MILESTONES AND SCHEDULE
- AIR QUALITY CONFORMITY DETERMINATION
- HIGH CAPACITY TRANSIT PLAN
- FREIGHT AND GOODS MOVEMENT
- TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS
- COST OF CONGESTION
- 2004 RTP
- INVESTING IN TRANSPORTATION PROJECTS
- EXPANDING TRANSPORTATION CHOICES
- TOOLS FOR DESIGNING STREETS
- PUBLIC INVOLVEMENT POLICY
- PORTLAND-MILWAUKIE LIGHT RAIL
- LAKE OSWEGO TO PORTLAND TRANSIT
- PORTLAND STREETCAR LOOP
- TRANSPORTATION PROJECTS
- ADVISORY COMMITTEES

**GET INVOLVED**

**What do you think?**

Comment on the completed 2035 Regional Transportation Plan and the associated air quality conformity analysis through midnight Thursday, May 6.

Comment on the RTP  
Comment on the air quality conformity analysis

**March 2010**  
Final draft plan

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# 2035

REGIONAL TRANSPORTATION PLAN

**Final draft plan**

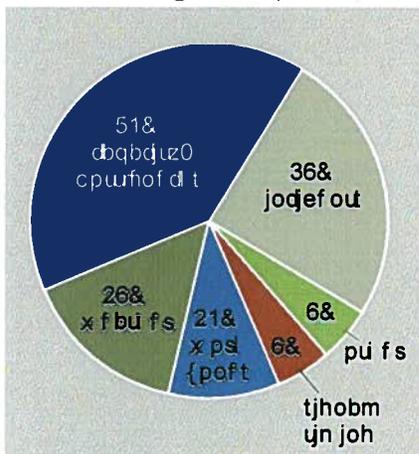
**March 2010**

## Causes of congestion

Congestion plagues all growing urban areas. Congestion growth manifests as greater severity, peak traffic periods that last longer and peak conditions that extend over a larger area. Congestion that arises from peak-hour volumes, known bottlenecks, and problematic interchanges are predictable. Although commute times due to predictable congestion may be long and frustrating, they are reliable. Congestion that arises from non-recurring incidents, such as crashes, breakdowns, construction, natural disasters and inclement weather, are unpredictable and negatively affect travel time reliability.<sup>44</sup> Travel time reliability is of growing interest to transportation practitioners as an important measure of mobility.

Figure 1.11 presents national data on the causes of congestion. As the figure shows, more than half of all congestion is caused by non-recurring incidents. In 2005, the region's freeway system averaged 1,000 such incidents a month (808 breakdowns and 249 crashes).

**Figure 1.11**  
**Causes of Congestion (national data)**<sup>45</sup>



Source: Federal Highway Administration

The 2005 study, *Cost of Congestion to the Economy of the Portland Region*, estimated potential losses in the region of \$844 million annually by 2025 from increased freight costs and lost worker productivity as a result of increases in travel time due to congestion.<sup>46</sup> Historically, roadway congestion has been described in terms of volume-to-capacity (v/c) ratio and level of service (LOS) using Metro's travel demand model. More recently congestion has been assessed using average travel speeds and travel times drawing from an

<sup>44</sup> FHWA, 2006. Travel Time Reliability: Making it there on time, every time.

<sup>45</sup> Traffic Congestion and Reliability: Linking Solutions to Problems, prepared for the Federal Highway Administration by Cambridge Systematics, Inc., and the Texas Traffic Institute, 2004, accessed at [www.ops.fhwa.dot.gov](http://www.ops.fhwa.dot.gov)

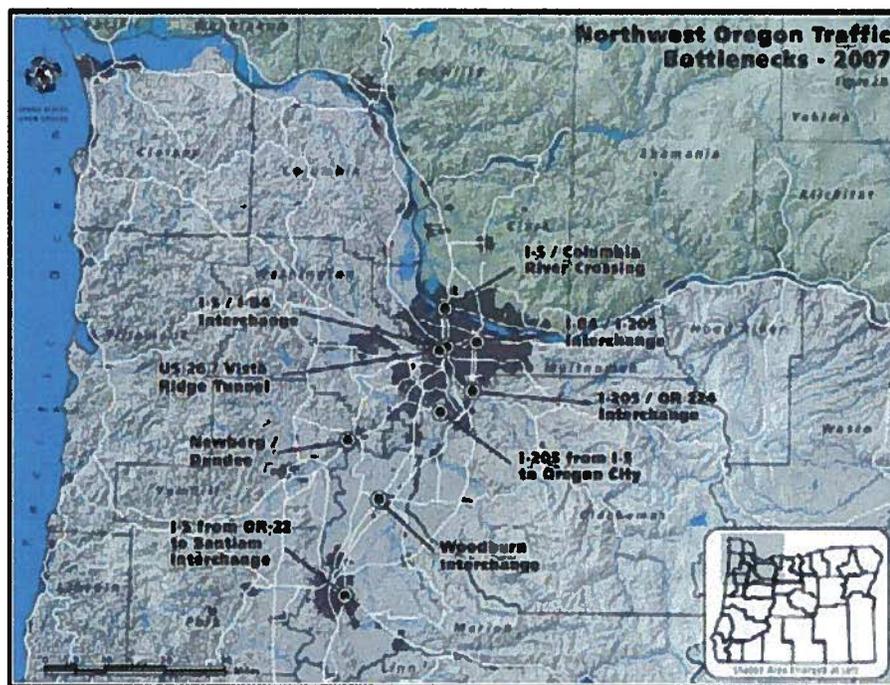
<sup>46</sup> Metro. *Cost of Congestion to the Economy of the Portland Region* (2005).

archive of real-time traffic monitors generated by the Oregon Department of Transportation (ODOT) and maintained by Portland State University (PSU). Currently these data are available only for the region's limited-access freeways. Efforts are underway to expand current data collection to include the regional arterial network. Research found that congestion is greatest on the freeways and interstate highway system.<sup>47</sup> PSU data from 2006 confirms—and drivers know—that the significant throughway system bottlenecks in the region include:

- I-5 Interstate Bridge Influence Area/Columbia River Crossing
- I-84/I-5 interchange
- US 26/Vista Ridge tunnel
- I-84/I-205 interchange
- I-205/OR 224 interchange
- I-205 from I-5 to Oregon City

**Figure 1.12** shows the locations of these significant bottlenecks on a map of the region. In 2007, ODOT identified six other significant bottlenecks in other parts of the state.

**Figure 1.12**  
**Northwest Oregon Traffic Bottlenecks (2007)**



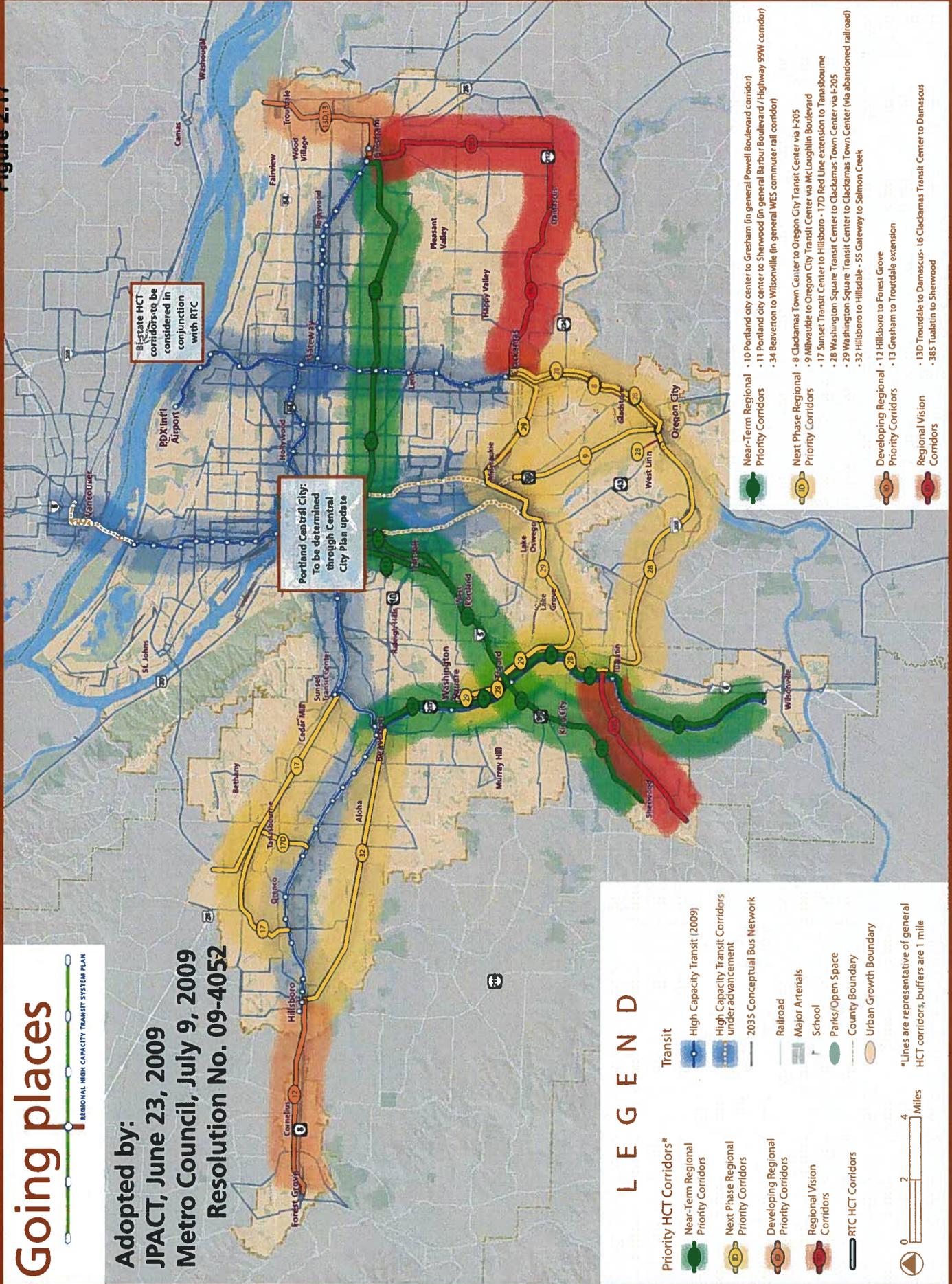
<sup>47</sup> Ibid, p. 12-13.

Figure 2.17

# Going places

REGIONAL HIGH CAPACITY TRANSIT SYSTEM PLAN

Adopted by:  
**JPACT, June 23, 2009**  
**Metro Council, July 9, 2009**  
**Resolution No. 09-4052**



Bi-state HCT corridors to be considered in conjunction with RTC

Portland Central City: To be determined through Central City Plan update

## LEGEND

- |  |   |
|--|---|
| <b>Priority HCT Corridors*</b>         | <b>Transit</b>                                    |
| Near-Term Regional Priority Corridors  | High Capacity Transit (2009)                      |
| Next Phase Regional Priority Corridors | High Capacity Transit Corridors under advancement |
| Developing Regional Priority Corridors | 2035 Conceptual Bus Network                       |
| Regional Vision Corridors              | Railroad  |
| RTC HCT Corridors                      | Major Arterials                                   |
|  | School  |
|  | Parks/Open Space                                  |
|  | County Boundary                                   |
|  | Urban Growth Boundary                             |
- \*Lines are representative of general HCT corridors, buffers are 1 mile

- |   |  |
|---|--|
| <b>Near-Term Regional Priority Corridors</b>  | • 10 Portland city center to Gresham (in general Powell Boulevard corridor)                |
|   | • 11 Portland city center to Sherwood (in general Barbur Boulevard / Highway 99W corridor) |
|   | • 34 Beaverton to Wilsonville (in general WES commuter rail corridor)                      |
| <b>Next Phase Regional Priority Corridors</b> | • 8 Clackamas Town Center to Oregon City Transit Center via I-205                          |
|   | • 9 Milwaukie to Oregon City Transit Center via McLoughlin Boulevard                       |
|   | • 17 Sunset Transit Center to Hillsboro - 17D Red Line extension to Tanaabourne            |
|   | • 28 Washington Square Transit Center to Clackamas Town Center via I-205                   |
|   | • 29 Washington Square Transit Center to Clackamas Town Center (via abandoned railroad)    |
|   | • 32 Hillsboro to Hillsdale - 55 Gateway to Salmon Creek                                   |
| <b>Developing Regional Priority Corridors</b> | • 12 Hillsboro to Forest Grove   |
|   | • 13 Gresham to Troutdale extension  |
| <b>Regional Vision Corridors</b>              | • 13D Troutdale to Damascus - 16 Clackamas Transit Center to Damascus                      |
|   | • 385 Tualatin to Sherwood   |

## CHAPTER 4

### MOBILITY CORRIDOR STRATEGIES:

#### HOW DO WE INVEST STRATEGICALLY IN OUR MOBILITY CORRIDORS?

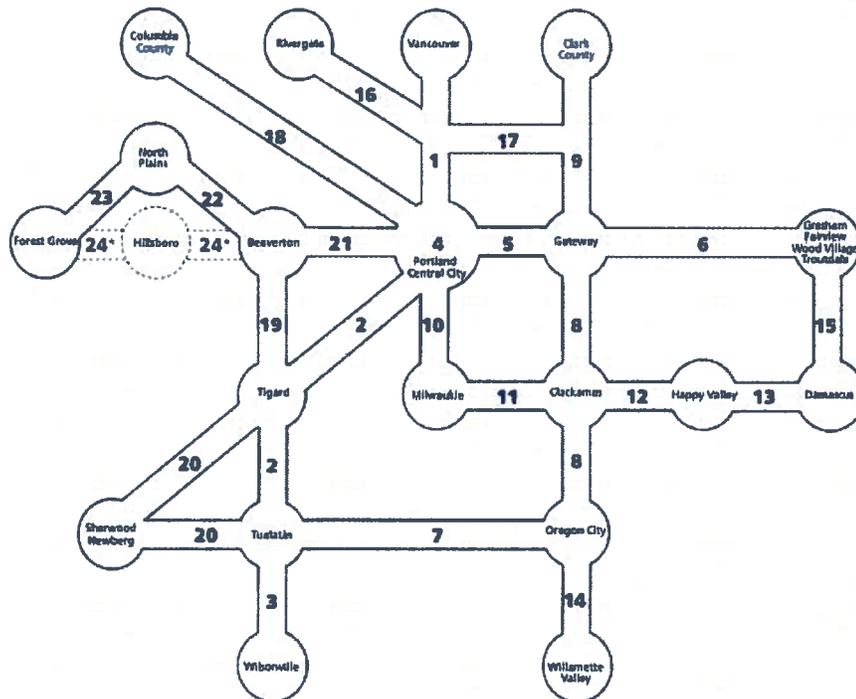
##### 4.1 INTRODUCTION

New RTP policies have been developed that call for a more comprehensive evaluation of potential solutions to address identified needs in the region's 24 mobility corridors. The 2035 RTP introduced the concept of regional mobility corridors, expanding the region's focus on mobility from individual facilities to the network of facilities and the adjacent land uses they serve.

The concept focuses on the region's network of freeways and highways and including parallel networks of arterial streets, regional bicycle parkways, high capacity transit, and frequent bus service. The function of this network of integrated transportation corridors is metropolitan mobility – moving people and goods between different parts of the region and, in some corridors, connecting the region with the rest of the state and beyond.

These corridors have a significant influence on the development and function of land uses they serve. The region's mobility corridors are shown in **Figure 4.1** and listed in **Table 4.1**.

**Figure 4.1**  
**Mobility Corridors in the Portland Metropolitan Region**



The mobility corridors provide a framework for changing the way in which the goals and policies of the RTP are implemented. The regional mobility corridor framework calls for consideration of multiple facilities, modes and land use when identifying needs and most effective mix of land use and transportation solutions to improve mobility within a specific corridor area. This emphasizes the integration of land use and transportation in determining regional system needs, functions, desired outcomes, performance measures, and investment strategies. At the same time, the mobility corridors are being used to satisfy state requirements for demonstrating the adequacy of the region’s transportation system its planned land uses.

**Table 4.1  
Mobility Corridors in the Portland Metropolitan Region**

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

## 4.2 MOBILITY CORRIDOR STRATEGIES

The idea of a “Mobility Corridor Strategy” emerged to better ground the outcomes-based policy framework of the RTP and to demonstrate compliance with state TPR requirements. They are intended as an early scoping tool to document land use and transportation needs, function and potential solutions for each mobility corridor. A mobility corridor strategy has been developed for each of the 24 corridors that includes:

- Scoping analysis that identifies land use, local aspirations, pedestrian, bike, management and operations, freight, highway, road and transit needs and issues
- Integrated statement of mobility function and purpose defined at a corridor-area level where a concept was not included in RTP
- Potential land use and transportation solutions identified

The strategies document regional system needs, functions, solutions to address identified needs and investment strategies to work towards over the life of the RTP. These include a wide range of strategies and projects to progress through project development and implementation at the local, regional and/or state levels. Project development activities include: Environmental Assessment (EA)/Environmental Impact Statement (EIS) work, Design Options Analysis (DOA), management plans, and transit Alternatives Analysis (AA). Community building projects and land use solutions are also be identified. All 24 mobility corridor strategies identify the relevant project development activities within each corridor and have been developed in partnership with local agencies.

Each mobility corridor strategy contains projects from the two investment tracks: mobility corridors and community building, identified in Chapter 3. The RTP project list contained in Appendix 1.X identifies projects by investment track and attributes it to a specific mobility corridor

#### **4.2.1 Overview and Guide to Using the Mobility Corridor Strategies**

The mobility corridor strategies present a series of information including a visual representation of the corridor’s geographic location, transportation facilities, 2040 land uses, an assessment of needs, and investment strategies. Each strategy contains the same elements and the following descriptions are included to serve as a guide to understanding the mobility corridor strategies.

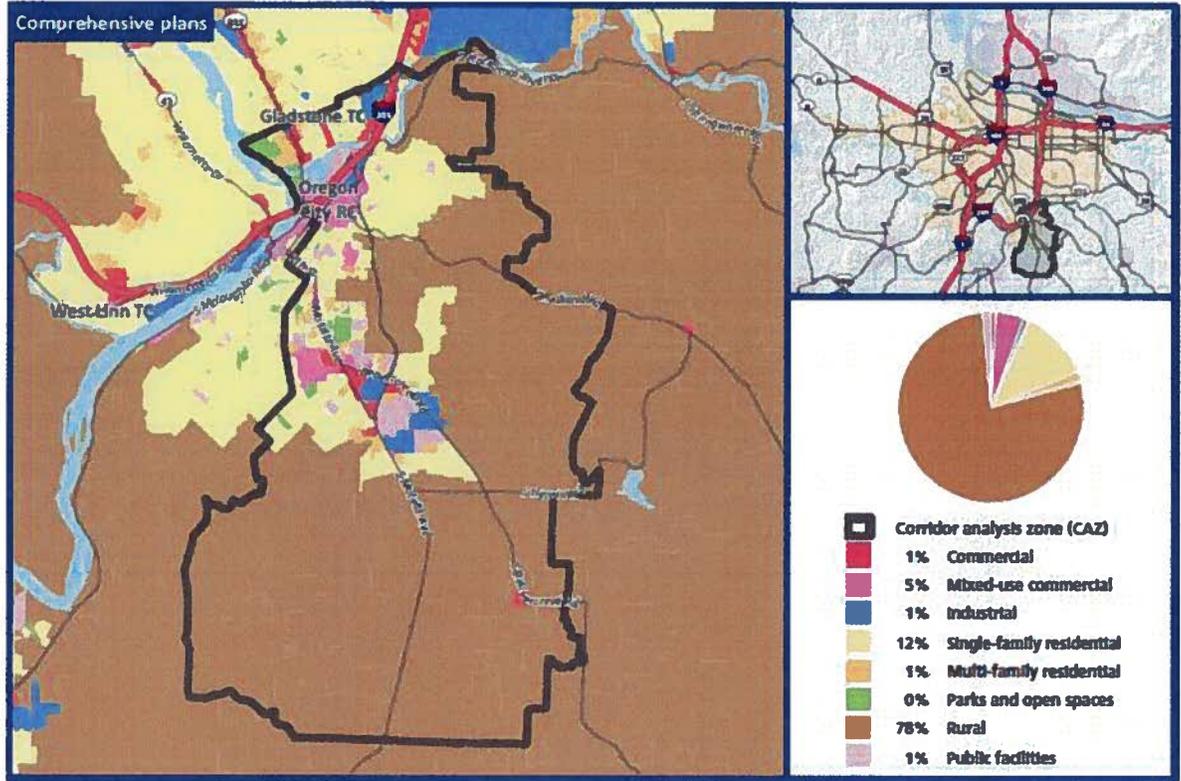
**Corridor Function** –Provides a statement of the mobility corridors function as it relates to accessing 2040 land uses and contributes to freight mobility and statewide travel.

**Corridor Characteristics** – Compares population, households, and employment in 2005 and 2035. It shows the percent change in the mobility corridor for all three categories and contrasts this with the increases in the overall regional totals.

**Regional Transportation Facilities** – Lists the major transportation facilities including high capacity transit (HCT), regional trails, regional bridges, state throughways, and major parallel arterial facilities.

**Regional 2040 Land Uses** – Lists the 2040 land uses that fall within the boundaries of the mobility corridor focusing on regional centers, town centers, employment and industrial areas, passenger and freight intermodal facilities and identifying other key destinations.

4.2.15 Mobility Corridor #14 – Oregon City to Willamette Valley



Corridor function

What function(s) does the corridor serve?

**2040 Access:** Serves as southern access to the Oregon City regional center and provides access to Clackamas Community College (Beavercreek Campus).

**Freight Mobility:** Provides freight access from surrounding agricultural areas and Beavercreek Industrial Area to I-205.

**Statewide Travel:** Serves as a secondary southern gateway to the region and connects agricultural areas in the Northern Willamette Valley to I-205.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	39,115	75,742	3,097,402	2.4%	93.6%	57.9%
Households	14,376	29,128	1,208,686	2.4%	102.6%	57.6%
Employment	16,116	30,881	1,799,152	1.7%	91.6%	74.3%

**Regional transportation facilities**

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials
	<ul style="list-style-type: none"> <li>Oregon City Loop Trail</li> </ul>		<ul style="list-style-type: none"> <li>OR 213</li> </ul>	<ul style="list-style-type: none"> <li>Molalla Ave.</li> </ul>

**Regional 2040 land uses**

Regional Centers	Town Centers	Intermodal Facilities	Employment/Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> <li>Oregon City</li> </ul>	<ul style="list-style-type: none"> <li>Gladstone</li> </ul>			<ul style="list-style-type: none"> <li>Beavercreek</li> <li>Metro Transfer Station</li> </ul>

**Needs assessment**

(To be developed spring 2010)

Summary of Needs		Strategies Identified to Address Needs
<b>High Capacity Transit Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Frequent Bus Service Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>Abernethy Rd. and Redland Rd. do not have any transit service.</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Bike and Pedestrian Network Gaps</b>	<ul style="list-style-type: none"> <li>Need to improve actual and perceived bicycle and pedestrian safety along arterials.</li> <li>Need to improve bike and pedestrian access to major destinations, including major bus stops, major employers, and retail and housing located on arterials.</li> <li>Need to make pedestrian and bike crossings of arterials easier and safer.</li> <li>Need to manage auto access points along arterials to provide better safety to bikes and pedestrians.</li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Regional Trail Network Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>

<p><b>Throughway Network Gaps and Deficiencies<sup>28</sup></b></p>	<ul style="list-style-type: none"> <li>• OR 213 is a district highway from the OR 213/I-205 interchange and it has several signalized intersections.</li> <li>• Both the Washington St./Clackamas River Dr. and Redland Rd. intersections are spaced less than a half-mile apart.</li> <li>• There is less than one-mile spacing between the Beaver creek Rd. and Molalla Ave. intersections.</li> <li>• In the 2005 PM 2-hour peak, OR 213 meets the performance threshold except for the southbound stretch from I-205 interchange to the Redland Rd. intersections.</li> <li>• In the 2035 NB PM 2-hour peak, congestion worsens, both the northbound and southbound worsens and OR 213 does not meet the performance threshold in the southbound direction from the I-205 interchange down to S. Henrici Rd.</li> </ul>	<ul style="list-style-type: none"> <li>• Improvements to OR 213 in the area of the I-205 interchange in FC projects 11180, 10141.</li> <li>• OR 213 widening projects from Redland road south to UGB in State RTP, projects 10119 and 10140.</li> <li>• Additional unfunded interchange improvements on OR 213 at Washington, Redland, and Beaver creek totaling \$168,000,000.</li> </ul>
<p><b>Arterial Network Gaps and Deficiencies<sup>29</sup></b></p>	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> <li>• There is a gap in east/west connectivity between south of Warner Parrot Rd. between S. End Rd., Leland Rd., and Molalla Ave.</li> <li>• There is a gap in east-west connectivity between Division St. and Holly Lane</li> </ul> <p><u>Arterial Deficiencies</u></p> <ul style="list-style-type: none"> <li>• Molalla Ave. meets the performance threshold for both 2005 and 2035 NB PM 2-hour peak. However, in the 2035 NB PM 2-hour peak, southbound congestion worsens near the Beaver creek Rd. intersection and the OR 213 intersections.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<p><b>Regional Bridges Deficiencies</b></p>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>

<sup>28</sup> Do not meet performance thresholds defined in RTP Tables 3.16 (Regional Motor Vehicle Performance Measures)

<sup>29</sup> Do not meet performance thresholds defined in RTP Tables 3.16 (Regional Motor Vehicle Performance Measures)

<b>Safety Deficiencies</b>	<ul style="list-style-type: none"> <li>• OR 213 ranks on the ODOT SPIS list as Category 4 (Scale 1-5, 5 being highest priority) through Oregon City RC, becoming Category 3 south of the City.</li> <li>• Two locations rank above the 85<sup>th</sup> percentile and as Category 5 at the Beavercreek Rd. and Molalla Ave. intersections, although recent safety upgrades have improved these areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Regional Freight Network Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>

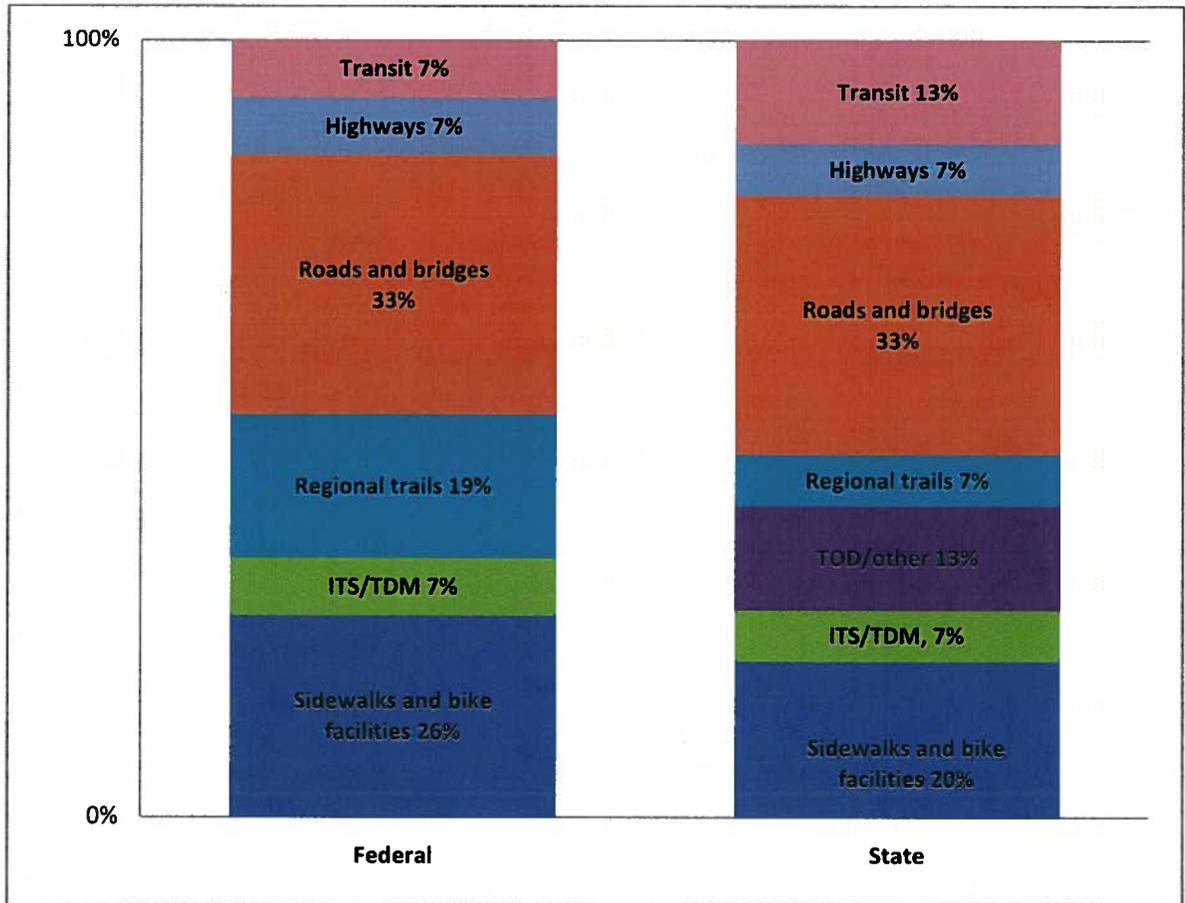
**Corridor performance**

Performance Measure	2005	2035 Federal	% Change over 2005	2035 State	% Change over Federal
<b>Mode Share</b>	51.50%	51.70%	1%	51.87%	0%
<b>Travel Time between Key Destinations</b>	Available by spring 2010				
<b>Congested Facilities</b>	Available by spring 2010				

**2035 RTP Investments**

<p><b>What are the strategies identified in the federal and state RTP?</b></p>
<p><b>Investment Summary:</b> In the Federal RTP, MC #14 has 27 projects totaling more than \$281 million. Roads and bridges projects account for 33% of all of projects and 38% of the total corridor project costs (\$106 million). Sidewalk and bike projects comprise 26% of all of projects and 35% of the total corridor project costs (\$100 million). The State RTP adds 15 more projects and an additional \$329 million. Highway projects account for 7% of all of projects and 52% of the total corridor project costs (\$170 million) for operational improvements to I-205. Roads and bridges projects account for 33% of all of projects and 28% of the total corridor project costs (\$92 million). For both the Federal and State systems investments total just over \$610 million.</p>

**Projects by mode for federal and state systems**



**RTP projects by cost and mode**

Mode	Federal System Cost by Mode	% of MC #14 Total Project Cost	State System Cost by Mode	% of MC #14 Total Project Cost
Sidewalks and bike facilities	\$99,700,000	35%	\$20,846,598	6%
Freight	\$0	0%	\$0	0%
ITS/TDM	\$6,500,000	2%	\$0	0%
TOD/other	\$0	0%	\$11,000,000	3%
Regional trails	\$8,600,000	3%	\$5,000,000	2%
Roads and bridges	\$105,710,000	38%	\$91,627,801	28%
Highways	\$55,000,000	20%	\$170,000,000	52%
Transit	\$6,100,000	2%	\$31,000,000	9%
<b>TOTAL</b>	<b>\$281,610,000</b>	<b>100%</b>	<b>\$329,474,399</b>	<b>100%</b>

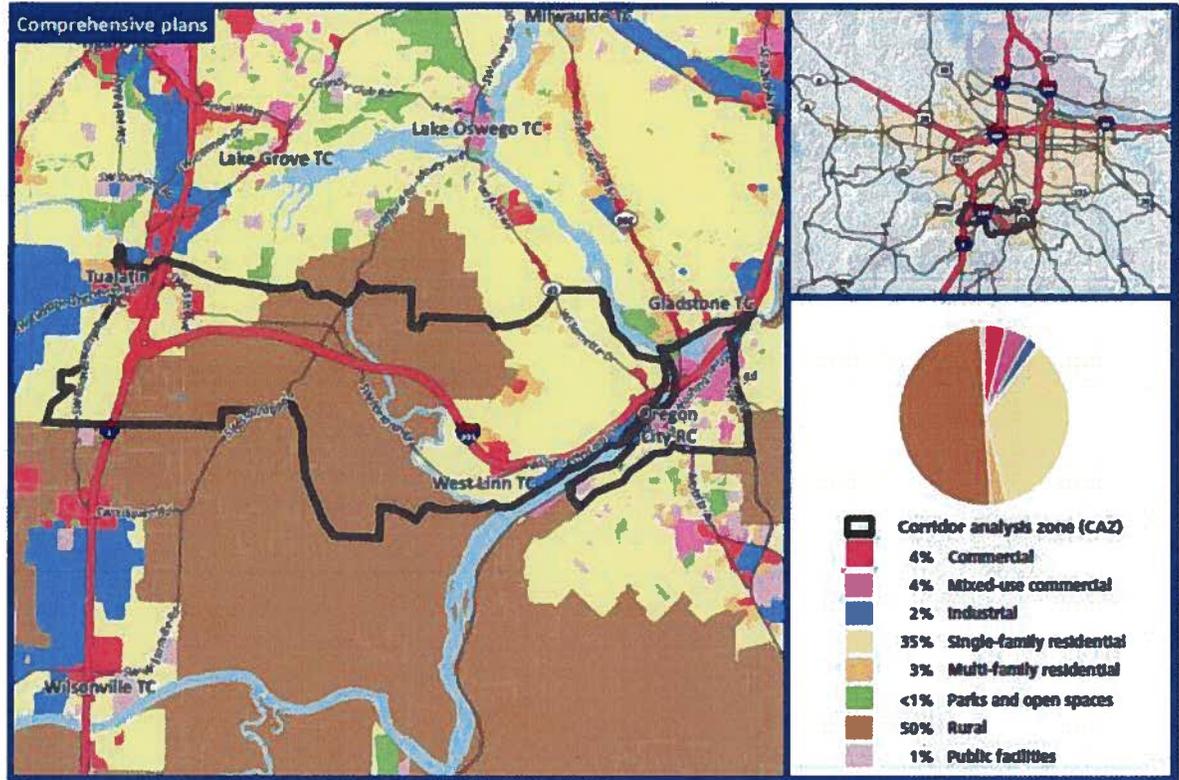
**2035 investment strategy**

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> <li>System and demand management along mobility corridor and Parallel Facilities for all modes of travel</li> <li>Address arterial crossings (enter specific crossings later).</li> <li>I-205/OR 213 Interchange.</li> </ul>
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> <li>Complete gaps in the arterial network.</li> </ul>
Long-term (10 – 25 years)	
Unfunded Projects	
<ul style="list-style-type: none"> <li>Unfunded projects to be added by ODOT, TriMet, and local jurisdictions</li> <li>I-205/OR 213 Interchange – Grade separate at Washington St., \$15,600,000</li> <li>OR 213 Redland Road interchange, \$72,400,000</li> <li>OR 213 Beavercreek Road Interchange, \$80,000,000</li> </ul>	
Regional Actions	Local Actions
<ul style="list-style-type: none"> <li>I-205/OR 213 Interchange</li> </ul>	<ul style="list-style-type: none"> <li>Initiate actions related to the HCT System Expansion Policy</li> <li>Address local street connectivity issues as part of local TSPs</li> <li>Incorporate strategies from the Regional TSMO plan into local TSPs</li> </ul>

**Corridor performance**

Performance Measure	2005	2035 Federal	% Change over 2005	2035 State	% Change over Federal
<b>Mode Share</b>	48.86%	52.76%	8%	53.55%	2%
<b>Central City to Tigard Auto pm peak travel time (SOV)</b>	28.2 minutes	37.9 minutes	34%	37.7 minutes	-1%
<b>Washington Sq. to Oregon City</b>	33.9 minutes	51.2 minutes	51%	49.4 minutes	-4%
<b>Central City West to Tigard Transit pm peak travel time</b>	30.2 minutes	29.9 minutes	-1%	29.9 minutes	0%
<b>Central City West to Tualatin Industrial Area Transit pm peak travel time</b>	34.0 minutes	40.9 minutes	20%	28.0 minutes	-32%
<b>Central City East to Tigard Transit pm peak travel time</b>	45.3 minutes	55.9 minutes	23%	37.7 minutes	-33%
<b>Central City East to Tualatin Industrial Area Transit pm peak travel time</b>	40.1 minutes	62.7 minutes	56%	52.0 minutes	-17%
<b>Tigard to Tualatin Industrial Area Transit pm peak travel time</b>	16.7 minutes	6.8 minutes	-59%	6.8 minutes	0%
<b>Congested Facilities</b>	Available by spring 2010				

4.2.8 Mobility Corridor #7 – Tualatin to Oregon City



Corridor function

What function(s) does the corridor serve?
<b>2040 Access:</b> Connects southern Washington County Corridor performance cities of West Linn and Tualatin to the Oregon City Regional Center.
<b>Freight Mobility:</b> Serves as the West Coast Trade (from Canada to Mexico) alternative to I-5 and air freight access to Portland International Airport.
<b>Statewide Travel:</b> Serves as an extension of the southern gateway to the region, provides statewide access to Portland International Airport and connects to the Willamette Greenway Trail corridor.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	41,869	101,764	3,097,402	3.3%	143.1%	57.9%
Households	15,284	31,797	1,208,686	2.6%	108.0%	57.6%
Employment	18,691	31,601	1,799,152	1.8%	69.1%	74.3%

**Regional transportation facilities**

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials
	<ul style="list-style-type: none"> <li>Lower Tualatin River Greenway Trail</li> </ul>		<ul style="list-style-type: none"> <li>I-205</li> </ul>	<ul style="list-style-type: none"> <li>Borland Rd</li> <li>Willamette Falls Dr.</li> </ul>

**Regional 2040 land uses**

Regional Centers	Town Centers	Employment Areas	Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> <li>Oregon City</li> </ul>	<ul style="list-style-type: none"> <li>Tualatin</li> <li>Gladstone</li> <li>West Linn</li> </ul>			

**Needs assessment**

Improvements are needed in this corridor to address existing deficiencies and expected growth in travel demand in Clark, Multnomah and Clackamas counties. Transportation solutions in this corridor should address the following needs and opportunities:

- Provide for some peak period mobility for longer trips
- Preserve freight mobility from I-5 to Clark County, with an emphasis on connections to Highway 213, Highway 224 and Sunrise Corridor
- Maintain an acceptable level of access to the Oregon City, Clackamas and Gateway regional centers and Sunrise industrial area
- Maintain acceptable levels of access to PDX, including air cargo access

Potential transportation solutions in this corridor should evaluate the potential of the following design concepts:

- Auxiliary lanes added from Airport Way to I-84 East
- Consider express, peak period pricing or HOV lanes as a strategy for expanding capacity
- Relative value of specific ramp, overcrossing and parallel route improvements
- Eastbound HOV lane from I-5 to the Oregon City Bridge
- Truck climbing lane south of Oregon City
- Potential for rapid bus service or light rail from Oregon City to Gateway
- Potential for extension of rapid bus service or light rail north from Gateway into Clark County
- Potential for refinements to 2040 land-use assumptions in this area to expand potential employment in the subarea and improve jobs/housing imbalance

- Potential for re-evaluating the suitability of the Beaver Creek area for urban growth boundary expansion, based on ability to serve the area with adequate regional transportation infrastructure
- Provide recommendations to the Bi-State Coordination Committee prior to JPACT and Metro Council consideration of projects that have bi-state significance.

Summary of Needs		Strategies Identified to Address Needs
<b>High Capacity Transit Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>• Oregon City RC lacks HCT connection.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Frequent Bus Service Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>• None of the surrounding arterial streets have 30 minute or better transit service, with the exception of a circulator through West Linn TC and along Willamette Falls Dr.</li> <li>• None of the surrounding arterial streets have 15 minute or better peak transit service.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Bike and Pedestrian Network Gaps</b>	<ul style="list-style-type: none"> <li>• Need to improve actual and perceived bicycle and pedestrian safety along arterials.</li> <li>• Need to improve bike and pedestrian access to major destinations, including major bus stops, major employers, and retail and housing located on arterials or HCT lines.</li> <li>• Need to make pedestrian and bike crossings of arterials easier and safer.</li> <li>• Need to manage auto access points along arterials to provide better safety to bikes and pedestrians.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Regional Trail Network Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>• There is a need for a Clackamas River crossing.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Throughway Network Gaps and Deficiencies<sup>14</sup></b>	<ul style="list-style-type: none"> <li>• 3 interchanges starting just west of the Willamette River (Hwy 43), east of the river (Hwy 99E), and OR 213 are spaced less than one-mile apart.</li> <li>• In both 2005 and 2035 NB in the PM 2-hour peak I-205 does not meet the performance threshold from Stafford</li> </ul>	<ul style="list-style-type: none"> <li>• Over \$300,000,000 in unfunded projects identified to address congestion and capacity issues on I-205 between Stafford Rd. and Oregon City.</li> </ul>

<sup>14</sup> Do not meet performance thresholds defined in RTP Tables 3.16 (Regional Motor Vehicle Performance Measures)

Summary of Needs		Strategies Identified to Address Needs
	<p>Rd. to Hwy. 213.</p> <ul style="list-style-type: none"> <li>I-205 is 4 lanes from I-5 until the 99E interchange, when it becomes 6 lanes.</li> <li>There is congestion in the AM peak on I-205 southbound.</li> </ul>	
<b>Arterial Network Gaps and Deficiencies<sup>15</sup></b>	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> <li>Lack of east/west connectivity north and south of I-205. Gap in north/south connections between I-205 and SW Stafford Rd., S. Salerno Rd., and Willamette Dr.</li> <li>There is a potential need for an additional Willamette River crossing.</li> <li>There is a potential need for an I-205 overcrossing west of 10<sup>th</sup> St. to relieve through trips on 10<sup>th</sup> St. in West Linn.</li> <li>There is a need for more Clackamas River crossings. One potential location is near the OR 213 and I-205 interchange.</li> </ul> <p><u>Arterial Deficiencies</u></p> <ul style="list-style-type: none"> <li>Borland Rd. does not meet the performance thresholds in both 2005 and 2035 NB in the PM 2-hour peak from I-5 to Stafford Rd.</li> <li>Borland Rd. is 2 lanes with a few stretches with left turn lanes.</li> <li>Rosemont Rd. has some traffic issues.</li> <li>Nyberg St. and Borland Rd. east of I-5 were mentioned as areas of concern.</li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Regional Bridges Deficiencies</b>	<ul style="list-style-type: none"> <li>The Oregon City West Linn Arch Bridge located on OR 43 is weight-restricted, but a planned construction project will address the weight restriction issue.</li> <li>There is a need to keep transit on this bridge.</li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Safety Deficiencies</b>	<ul style="list-style-type: none"> <li>I-205 from Tualatin to Oregon City ranks on the ODOT SPIS list as Category 4 and 5 (Scale 1-5, 5 being highest priority).</li> <li>Auxiliary lanes on the Abernethy Bridge</li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>

<sup>15</sup> Do not meet performance thresholds defined in RTP Tables 3.16 (Regional Motor Vehicle Performance Measures)

Summary of Needs		Strategies Identified to Address Needs
	are a safety problem.	
<b>Regional Freight Network Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>There are midday freight problems on the Abernethy Bridge.</li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>

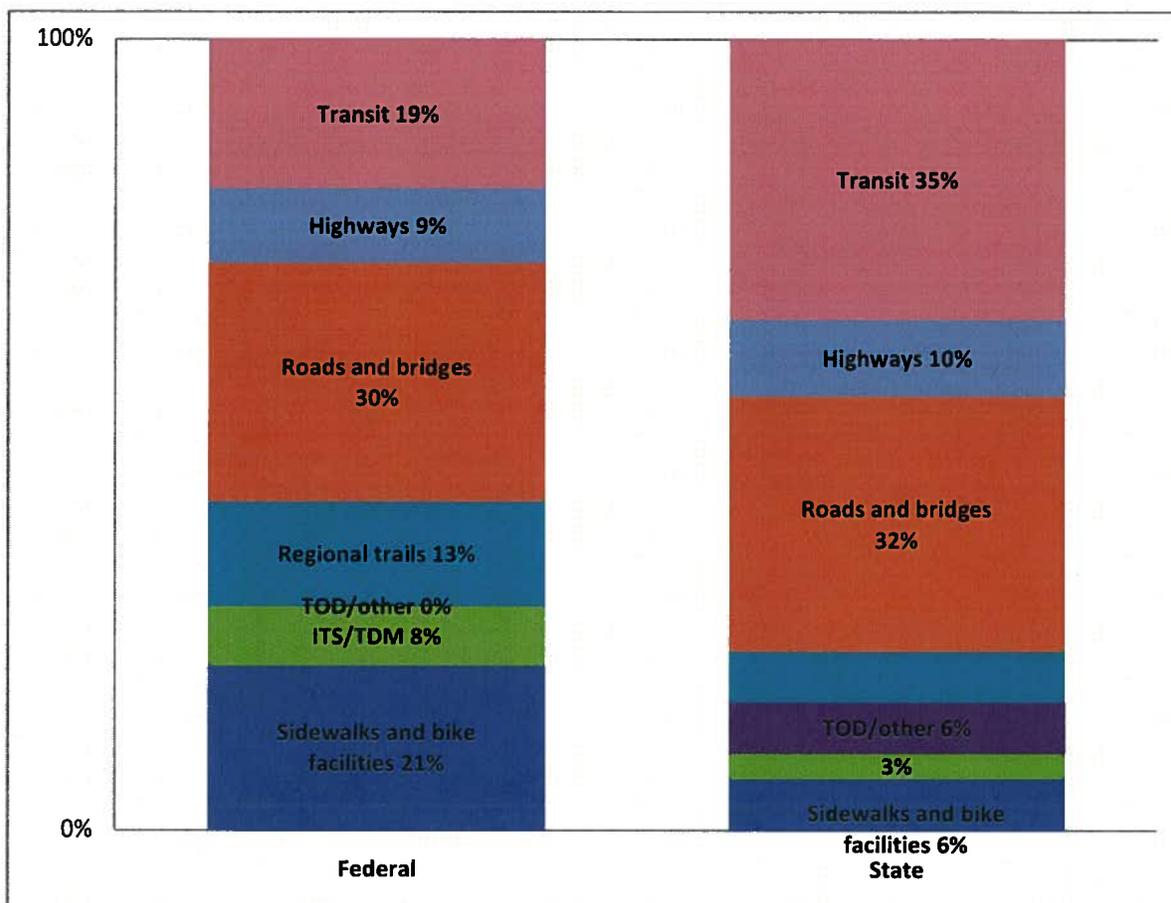
**Corridor performance**

Performance Measure	2005	2035 Federal	% Change over 2005	2035 State	% Change over Federal
<b>Mode Share</b>	50.84%	53.91%	6%	53.89%	0%
<b>Travel Time between Key Destinations</b>	Available by spring 2010				
<b>Congested Facilities</b>	Available by spring 2010				

**2035 RTP Investments**

What are the strategies identified in the federal and state RTP?
<p><b>Investment Summary:</b> In the Federal RTP, MC #7 has 53 projects totaling more than \$600 million. Roads and bridges projects account for 30% of all of projects and 45% of the total corridor project costs (\$300 million). The State RTP adds 31 more projects and an additional \$1.5 billion. Transit capital accounts for 35% of the projects and 49% of the additional costs (\$770 million). This includes upgrades to WES service accessible in Tualatin, I-205 BRT and other bus improvements in the corridor. The state system consists of an additional 32% of roads and bridges projects and 25% of the additional costs (\$390 million). For both the Federal and State systems investments total just under \$2.1 billion.</p>

**Projects by mode for federal and state systems**



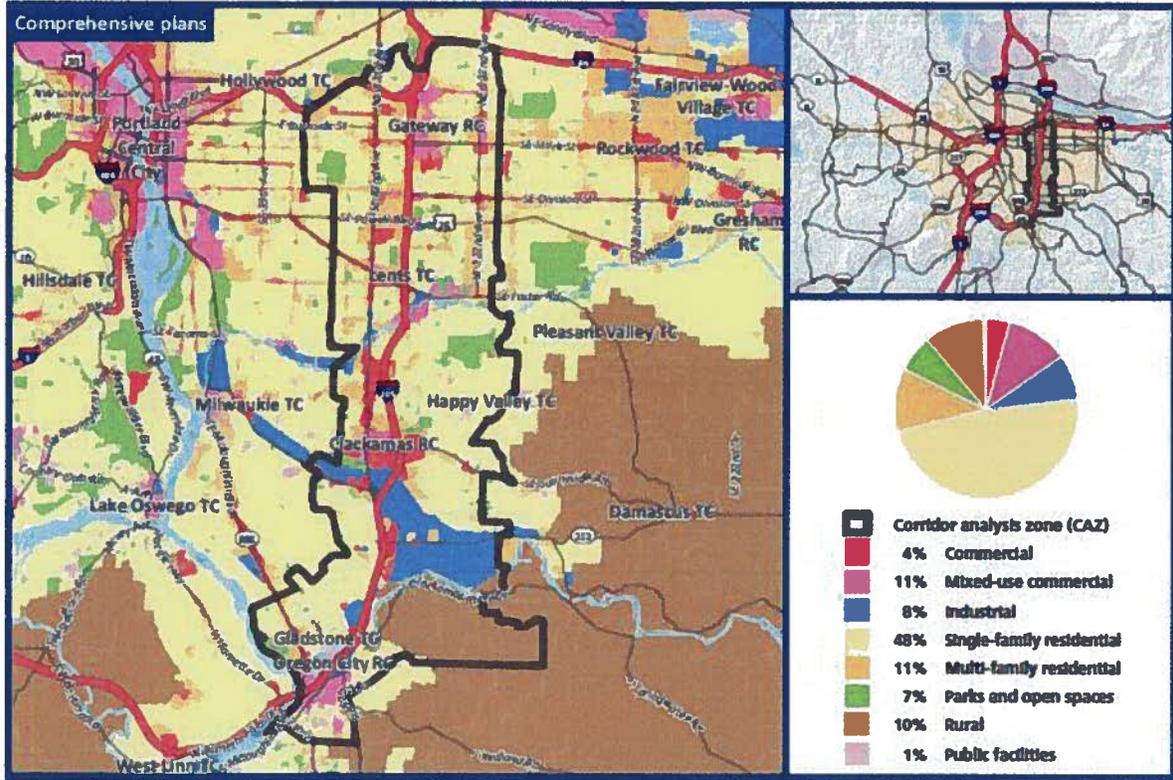
**RTP projects by cost and mode**

Mode	Federal System Cost by Mode	% of MC #7 Total Project Cost	State System Cost by Mode	% of MC #7 Total Project Cost
Sidewalks and bike facilities	\$139,300,000	23%	\$12,846,598	1%
Freight	\$0	0%	\$0	0%
ITS/TDM	\$6,578,000	1%	\$0	0%
TOD/other	\$0	0%	\$11,000,000	1%
Regional trails	\$19,200,000	3%	\$7,000,000	0%
Roads and bridges	\$273,544,000	45%	\$372,151,423	24%
Highways	\$95,700,000	16%	\$390,000,000	25%
Transit	\$80,129,837	13%	\$771,497,000	49%
<b>TOTAL</b>	<b>\$614,451,837</b>	<b>100%</b>	<b>\$1,564,495,021</b>	<b>100%</b>

**2035 investment strategy**

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> <li>• System and demand management along mobility corridor and Parallel Facilities for all modes of travel</li> <li>•</li> </ul>
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> <li>• Complete gaps in the arterial network.</li> <li>• Complete corridor refinement plan for MC #7, #8 and #9.</li> </ul>
Long-term (10 – 25 years)	<ul style="list-style-type: none"> <li>•</li> </ul>
Unfunded Projects	
<ul style="list-style-type: none"> <li>• I-205 widening, Stafford to Willamette, \$77,600,000</li> <li>• Abernethy Bridge widening, \$106,400,000</li> <li>• I-205 climbing lanes, \$56,800,000</li> <li>• I-205 South aux lane improvements, \$74,600,000</li> </ul>	
Regional Actions	Local Actions
<ul style="list-style-type: none"> <li>• Continue work on identifying resources to complete corridor refinement plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Initiate actions related to the HCT System Expansion Policy</li> <li>• Address local street connectivity issues as part of local TSPs</li> <li>• Incorporate strategies from the Regional TSMO plan into local TSPs</li> </ul>

4.2.9 Mobility Corridor #8 – Oregon City to Gateway



Corridor function

What function(s) does the corridor serve?

**2040 Access:** Connects the Oregon City, Clackamas and Gateway regional centers and serves as the main access to the Clackamas Industrial Area and the South Metro waste transfer station.

**Freight Mobility:** Serves as the West Coast Trade (from Canada to Mexico) alternative to I-5, air freight access to Portland International Airport and provides Class I mainline freight rail access.

**Statewide Travel:** Serves as an extension of the southern gateway to the region, provides statewide access to Portland International Airport and provides statewide Amtrak service.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	144,231	190,334	3,097,402	6.1%	32.0%	57.9%
Households	55,824	87,166	1,208,686	7.2%	56.1%	57.6%
Employment	77,846	133,823	1,799,152	7.4%	71.9%	74.3%

**Regional transportation facilities**

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials
<ul style="list-style-type: none"> <li>Green Line MAX</li> </ul>	<ul style="list-style-type: none"> <li>I-205 Trail</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>I-205</li> </ul>	<ul style="list-style-type: none"> <li>82<sup>nd</sup> Ave.</li> <li>122<sup>nd</sup> Ave.</li> <li>92<sup>nd</sup> Ave/Schumacher</li> <li>McLoughlin Blvd.</li> </ul>

**Regional 2040 land uses**

Regional Centers	Town Centers	Intermodal Facilities	Employment/Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> <li>Gateway</li> <li>Clackamas</li> <li>Oregon City</li> </ul>	<ul style="list-style-type: none"> <li>Lents</li> <li>Gladstone</li> </ul>	<ul style="list-style-type: none"> <li>Portland International Airport</li> </ul>	<ul style="list-style-type: none"> <li>Clackamas</li> <li>Johnson Creek</li> </ul>	<ul style="list-style-type: none"> <li>Metro Transfer Station</li> </ul>

**Needs assessment**

(To be developed spring 2010)

	Summary of Needs	Strategies Identified to Address Needs
<b>High Capacity Transit Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>Oregon City RC lacks HCT connection.</li> <li>Park and ride capacity constraints: Gateway @ 99% of capacity</li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Frequent Bus Service Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>Potential transit center capacity issues: Oregon City Transit Center</li> </ul>	<ul style="list-style-type: none"> <li>Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Bike and Pedestrian Network Gaps</b>	<ul style="list-style-type: none"> <li>Need to improve actual and perceived bicycle and pedestrian safety along arterials.</li> <li>Need to improve bike and pedestrian access to major destinations, including major bus stops, major employers, and retail and housing located on arterials or HCT lines.</li> <li>Need to make pedestrian and bike crossings of arterials easier and safer.</li> <li>Need to manage auto access points along arterials to provide better safety</li> </ul>	<ul style="list-style-type: none"> <li>Over \$20,000,000 in multimodal improvements to 82<sup>nd</sup> Ave. identified in RTP (projects 10014, 10291, 10018).</li> <li>\$6,000,000 in unfunded streetscape and ped/bike access to transit projects on 82<sup>nd</sup>.</li> <li>\$48,000,000 in multimodal improvements to McLoughlin Boulevard</li> </ul>

Summary of Needs		Strategies Identified to Address Needs
	to bikes and pedestrians.	through Oak Grove, Gladstone, and Oregon City identified in RTP (projects 10118, 10145, 10146, 11186).
<b>Regional Trail Network Gaps and Deficiencies</b>	•	• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.
<b>Throughway Network Gaps and Deficiencies<sup>16</sup></b>	<ul style="list-style-type: none"> <li>• All of the I-205 interchanges are spaced less than two-miles apart, with a handful at less than one-mile.</li> <li>• In both 2005 and 2035 NB in the PM 2-hour peak, I-205 does not meet the performance threshold from Gateway RC to Oregon City RC in both the northbound and southbound directions.</li> </ul>	<ul style="list-style-type: none"> <li>• Unfunded I-205 interchange improvement projects at OR 212, Johnson Creek, Powell/Division, and OR 213 totaling over \$125,000,000</li> <li>• Unfunded widening, auxiliary lane, and braided ramp projects totaling over \$300,000,000.</li> <li>• \$170,000,000 in operational improvements to I-205 in State RTP (project 11305) may include some of the above unfunded projects.</li> </ul>
<b>Arterial Network Gaps and Deficiencies<sup>17</sup></b>	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> <li>• There is a need for better north-south connectivity east of 122<sup>nd</sup> Ave.</li> <li>• Gaps emerge south of Clackamas RC.</li> <li>• There is a potential need for an additional Willamette River crossing.</li> </ul> <p><u>Arterial Deficiencies</u></p> <ul style="list-style-type: none"> <li>• The following at-grade heavy rail crossings exist in this corridor: <ul style="list-style-type: none"> <li>○ SE Linwood Ave./SE Harmony Rd.</li> <li>○ SE Lawnfield Rd.</li> <li>○ SE 37<sup>th</sup> Ave.</li> <li>○ SE Oak St.</li> <li>○ SE Harrison St.</li> <li>○ SE Clackamas Rd.</li> <li>○ Edgewater Rd.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>

<sup>16</sup> Do not meet performance thresholds defined in RTP Tables 3.16 (Regional Motor Vehicle Performance Measures

<sup>17</sup> Do not meet performance thresholds defined in RTP Tables 3.16 (Regional Motor Vehicle Performance Measures

Summary of Needs		Strategies Identified to Address Needs
	<ul style="list-style-type: none"> <li>○ Forsythe Rd.</li> <li>○ 17<sup>th</sup> St.</li> <li>○ 16<sup>th</sup> St.</li> <li>○ 10<sup>th</sup> St.</li> </ul>	
<b>Regional Bridges Deficiencies</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Safety Deficiencies</b>	<ul style="list-style-type: none"> <li>• I-205 ranks on the ODOT SPIS list as Category 4 (Scale 1-5, 5 being highest priority). Multiple locations rank above the 90<sup>th</sup> percentile.</li> <li>• 82<sup>nd</sup> Ave. ranks as Category 5 with multiple intersections in the 95<sup>th</sup> percentile (Division, Powell, Holgate, Foster, and Sandy).</li> <li>• 122<sup>nd</sup> Ave. has multiple intersections in the 95<sup>th</sup> percentile (Halsey, Glisan, Stark, Division, and Powell).</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>
<b>Regional Freight Network Gaps and Deficiencies</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Specific strategies yet to be identified, but will work with local agencies to add more information by June 2010.</li> </ul>

**Corridor performance**

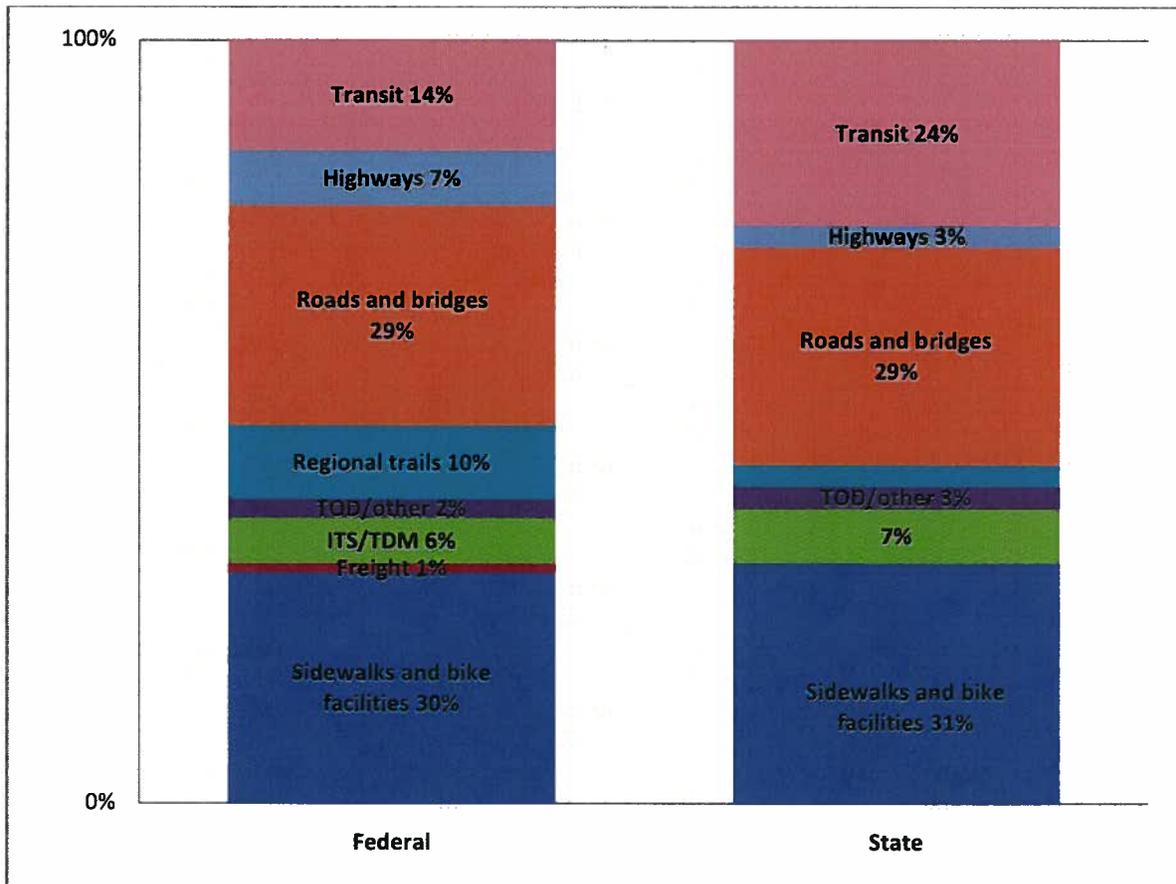
Performance Measure	2005	2035 Federal	% Change over 2005	2035 State	% Change over Federal
<b>Mode Share</b>	53.62%	53.75%	0%	54.27%	1%
<b>Travel Time between Key Destinations</b>	Available by spring 2010				
<b>Congested Facilities</b>	Available by spring 2010				

**2035 RTP Investments**

**What are the strategies identified in the federal and state RTP?**

**Investment Summary:** In the Federal RTP, MC #8 has 83 projects totaling more than \$1 billion. Sidewalk and bike projects account for 30% of the federal projects and 21% (\$225 million) of the total corridor project costs. Roads and bridges projects account for 29% of all of projects and 29% of the total corridor project costs (\$300 million). Highway projects comprise only 7% of federal projects, but account for 36% (\$388 million) of the total corridor project costs, including improvements to I-205 for the Sunrise project. The State RTP adds 70 more projects and an additional \$1.2 billion. Sidewalk and bike projects account for 31% of the state projects and 11% (\$130 million) of the total corridor project costs. Roads and bridges projects account for 29% of all of projects and 10% of the total corridor project costs (\$130 million). Transit capital accounts for 24% of the projects and 54% of the additional costs (\$643 million). This includes, maintenance and operations facilities and other bus improvements in the corridor. The state system consists of an additional 32% of roads and bridges projects and 25% of the additional costs (\$390 million). For both the Federal and State systems investments total just under \$2.1 billion.

**Projects by mode for federal and state systems**



**RTP projects by cost and mode**

Mode	Federal System Cost by Mode	% of MC #8 Total Project Cost	State System Cost by Mode	% of MC #8 Total Project Cost
Sidewalks and bike facilities	\$225,783,568	21%	\$132,435,967	11%
Freight	\$25,650,000	2%	\$0	0%
ITS/TDM	\$11,465,703	1%	\$1,675,000	0%
TOD/other	\$5,511,000	1%	\$11,000,000	1%
Regional trails	\$16,194,000	2%	\$7,000,000	1%
Roads and bridges	\$307,332,540	29%	\$123,315,046	10%
Highways	\$388,000,000	36%	\$280,000,000	23%
Transit	\$85,017,446	8%	\$643,721,000	54%
<b>TOTAL</b>	<b>\$1,064,954,257</b>	<b>100%</b>	<b>\$1,199,147,013</b>	<b>100%</b>

**2035 investment strategy**

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> <li>System and demand management along mobility corridor and Parallel Facilities for all modes of travel</li> <li>Address arterial crossings (enter specific crossings later).</li> </ul>
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> <li>Complete gaps in the arterial network.</li> <li>Complete corridor refinement plan for MC #7, #8 and #9.</li> </ul>
Long-term (10 – 25 years)	<ul style="list-style-type: none"> <li></li> </ul>
Unfunded Projects	
<ul style="list-style-type: none"> <li>I-205 Powell/Division interchanges, \$17,700,000</li> <li>I-205/OR 213 interchange, \$200,900,000</li> <li>I-205/OR 212 interchange, \$21,300,000</li> <li>I-205 widening, OR 212 to I-84, \$63,400,000</li> <li>I-205 aux lanes, Gladstone to OR 212, \$18,500,000</li> <li>OR 213 Ped and Bike access to transit, \$5,000,000</li> <li>82<sup>nd</sup> Ave Street Improvements, \$5,400,000</li> <li>I-205/Johnson Creek interchange improvements, \$9,800,000</li> <li>I-205 SB flyover to OR 213, \$49,100,000</li> <li>I-205 East Portland aux lane improvements, \$49,900,000</li> <li>I-205 north aux lane improvements, \$46,000,000</li> </ul>	
Regional Actions	Local Actions
<ul style="list-style-type: none"> <li>Continue work on identifying resources to complete corridor refinement plan.</li> </ul>	<ul style="list-style-type: none"> <li>Initiate actions related to the HCT System Expansion Policy</li> <li>Address local street connectivity issues as part of local TSPs</li> <li>Incorporate strategies from the Regional TSMO plan into local TSPs</li> </ul>