6-17-1999

Meeting Notes 1999-06-17 [Part B]

Joint Policy Advisory Committee on Transportation

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DATE: June 10, 1999

TO: JPACT Members and Interested Parties

FROM: Andrew C. Cotugno, Transportation Director

SUBJECT: Draft Regional Transportation Plan (RTP) Resolution

At the April 28 joint JPACT, MPAC and Council workshop on the RTP update, staff presented highlights from the final stage of the RTP update, including a system analysis, proposed 20-year transportation solutions, and financial strategies for implementing the plan. Together with the RTP policies approved by resolution in July 1996, transportation elements of the Regional Framework Plan and the Urban Growth Management Functional Plan (UGMFP) in 1998, these recommendations complete a four year effort to update the RTP to reflect the 2040 Growth Concept.

The RTP update was guided by our 21-member Citizen Advisory Committee, and included several public outreach efforts, special newsletter, and a number of joint JPACT, MPAC and Council workshops held at key decision points. During the next six months, staff recommends that the RTP update be completed through a two-step process of (1) approving draft RTP recommendations for a final round of public review and comment through a Council resolution, and (2) adoption of the updated RTP through a formal hearings process.

A draft 'Resolution Decision Kit' is being developed by staff and will be presented to JPACT on June 17 in preparation for a July 8 recommendation to the Council. The following informational materials will be provided at the June 17 meeting:

Proposed Adoption Timeline - a simplified timeline for approval of both the RTP resolution and Ordinance, and a more detailed calendar of key meeting dates for the resolution period.

RTP Policies - Chapter 1 of the RTP has been updated for consistency with the Regional Framework Plan and the functional plan, and edited for readability and brevity.

RTP Subarea Tabloids - these will be the focus of public review of draft RTP recommendations, and include a brief description of strategic improvements, including proposed timing, and maps that illustrate the scope and nature of proposed improvements.

Comprehensive Project List - in addition to the tabloid descriptions of the strategic improvements, committee members will also be provided with a more detailed list of all projects that are contained in the draft plan.

Draft Staff Report and Resolution - draft of the proposed resolution in preparation for a JPACT recommendation to Council at the July 8 JPACT meeting.
STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 99-2810 FOR THE PURPOSE OF
AUTHORIZING RELEASE OF THE 1999 UPDATE TO THE REGIONAL TRANSPORTATION
PLAN FOR JURISDICTIONAL AND PUBLIC COMMENT

Date: June 17, 1999  Presented by: Andrew C. Cotugno

PROPOSED ACTION

This resolution would direct staff to complete a final draft of the updated Regional Transportation Plan (RTP) for public review and comment. The action would also authorize staff to prepare and print a series of public involvement materials that communicate the RTP policies, system analysis, recommended projects and financial analysis. These materials include:

- **RTP Policies** - Chapter 1 of the RTP has been updated for consistency with the Regional Framework Plan and the functional plan, and edited for readability and brevity.

- **RTP Subarea Tabloids** - these will be the focus of public review of draft RTP recommendations and include a brief description of strategic improvements, including proposed timing, and maps that illustrate the scope and nature of proposed improvements.

- **Comprehensive Project List** - in addition to the tabloid descriptions of the strategic improvements, committee members will also be provided with a more detailed list of all projects that are contained in the draft plan.

FACTUAL BACKGROUND AND ANALYSIS

At the April 28, 1999 joint JPACT, MPAC and Council workshop on the RTP update, staff presented highlights from the final stage of the RTP update, including a system analysis, proposed 20-year transportation solutions, and financial strategies for implementing the plan. Together with the RTP policies approved by resolution in July 1996, transportation elements of the Regional Framework Plan and the Urban Growth Management Functional Plan (UGMFP) in 1998, these recommendations complete a four-year effort to update the RTP to reflect the 2040 Growth Concept.

The RTP update was guided by a 21-member Citizen Advisory Committee and included several public outreach efforts, special newsletter, and a number of joint JPACT, MPAC and Council workshops held at key decision points. The update also reflects the efforts of local officials, citizens and staff to develop transportation proposals that reflect the policy direction developed by the CAC and regional growth management policies. Of the nearly 1,000 projects proposed through the year 2020 to address expected growth and to implement the 2040 Growth Concept, more than half are new to the regional plan, and many were generated by citizen input. These projects range from relatively modest bicycle and pedestrian improvements to major transit and highway projects, each developed with an eye toward promoting safety, responding to growth or leveraging the 2040 growth concept.

During the past year, staff tested these projects through three separate rounds of transportation modeling. Each project proposed in the draft plan was reflected in the modeling assumptions, and projects were further refined after each round of modeling to better respond to projected travel needs during the 20-year plan period. This phase of the RTP update was also based on a collaborative approach, with local jurisdictions overseeing the modeling process at every step, and modeling analysis completed in a series of
workshops with the regional partners. As a result, the draft project list is a consensus-based product, with project recommendations that are based on detailed analysis.

During the next six months, staff recommends that the RTP update be completed through a two-step process of (1) approving the draft RTP recommendations for a final round of public review and comment through adoption of this resolution, and (2) adoption of the final updated RTP through a formal hearings process, leading to adoption by ordinance.

The "RTP Resolution Kit" was developed by staff as a starting point for completing the "official" RTP draft document and to develop user-friendly materials intended to help citizens and agencies review the contents of the plan. Upon Council action on these materials, final versions will be printed and distributed in late August, as detailed in Exhibit 'A.' This exhibit also outlines the general review process, as proposed by staff, culminating in adoption of the RTP in fall '99.
BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AUTHORIZING ) RELEASE OF THE 1999 UPDATE TO THE
REGIONAL TRANSPORTATION PLAN ) FOR JURISDICTIONAL AND PUBLIC
COMMENT )

RESOLUTION NO. 99-2810

Introduced by
Councilor Jon Kvistad, Chair
JPACT

WHEREAS, Pursuant to Title 23, Code of Federal Regulations (CFR) Part 450 and Title 49 CFR part 613, Metropolitan Planning Rules, the federal Transportation Equity Act for the 21st Century (TEA-21) regulations require metropolitan planning organizations to update transportation plans every three years; and

WHEREAS, The Interim Federal Regional Transportation Plan (RTP) established compliance with the 15 federal planning factors and other federal regulations through Metro Resolution No. 95-2138A in May 1995; and

WHEREAS, The updated RTP policies approved by Resolution No. 96-2327 in July 1996 established a new policy direction for the RTP that emphasizes implementation of the 2040 Growth Concept; and

WHEREAS, The state Transportation Planning Rule (TPR) requires metropolitan planning organizations to complete transportation system plans that satisfy requirements of the rule; and

WHEREAS, Preliminary findings on the draft RTP appear to comply with regional, state and federal planning requirements; now, therefore,

BE IT RESOLVED,

That the Metro Council hereby declares:

That the draft policies, analysis, recommended projects and financial plan
be compiled by staff into a draft RTP document for the purpose of public
review and comment.

ADOPTED by the Metro Council this ____ day of ____________, 1999.

__________________________
Rod Monroe, Presiding Officer

Approved as to Form:

__________________________
Daniel B. Cooper, General Counsel
Regional Transportation Plan

Adoption Timeline

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
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<tbody>
<tr>
<td>April</td>
<td>RTP Round 2 modeling completed</td>
</tr>
<tr>
<td>May</td>
<td>TPAC workshops to review final projects, system performance</td>
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<tr>
<td></td>
<td>Joint JPACT &amp; MPAC workshop to review final RTP findings and recommendations</td>
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<tr>
<td>June</td>
<td>Draft RTP Resolution Kit provided to JPACT, MPAC and Council Transportation Committee</td>
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<tr>
<td>July</td>
<td>JPACT and MPAC recommendations for RTP Resolution</td>
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<tr>
<td></td>
<td>Council Resolution on draft RTP policies, projects and financial requirements</td>
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<tr>
<td>August</td>
<td>Draft RTP document prepared based on Council resolution</td>
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<tr>
<td>September</td>
<td>Draft RTP released for public comment; 45-day comment period begins</td>
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<tr>
<td>October</td>
<td>JPACT and MPAC review of public comments on draft RTP</td>
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<td></td>
<td>Council hearings on draft RTP</td>
</tr>
<tr>
<td>November</td>
<td>JPACT and MPAC recommendations for RTP adoption</td>
</tr>
<tr>
<td>December</td>
<td>Council adoption of RTP by Ordinance</td>
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<tr>
<td></td>
<td>One-year compliance timeline begins for compliance with state and regional plans</td>
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RTP Resolution Decision Kit

Subarea Tabloids
The subarea tabloids describe the proposed 20-year transportation plan in detail for each of the seven RTP subareas that cover the region.

Each subarea tabloid includes analysis highlights for the subarea, proposed strategic projects, timing of proposed improvements and a series of maps that provide both analysis information and the location of proposed projects within the subarea.

The subarea tabloids will be produced in quantity, and will serve as the main public outreach tool during the RTP adoption period. The maps will also be incorporated into the "official" RTP draft document following approval of the RTP resolution.

Policy Chapter
The policy chapter was approved by resolution in July 1996, and has served as the "recipe" for developing an updated, 20-year plan for transportation improvements tied to the 2040 Growth Concept. Since 1996, the policy chapter has been incorporated into the Regional Framework Plan, and the RTP system maps have been adopted. The Resolution Decision Kit will include an updated policy chapter that incorporates some proposed framework plan revisions and the RTP system maps.

Strategic and Preferred System Improvements
In addition to the "user friendly" description of strategic system improvements contained in the subarea packets, the RTP Resolution Decision Kit will include a detailed list of proposed strategic and preferred system improvements, including project costs. These projects will be incorporated into the draft RTP document to be released for public comment following approval of the resolution.

Financial Plan
The final piece of the Resolution Decision Kit is a financial analysis that outlines existing revenues, future revenue shortfalls and a possible strategy for meeting anticipated revenue needs. The financial analysis will be incorporated into the draft RTP document following approval of the resolution.
A close-up look at the 20-year regional transportation blueprint for East Multnomah County

Metro’s goal is to provide a range of transportation choices and to create livable communities now and in the future.

Planned Transportation Projects
Nearly 75 projects and programs have been identified to serve East Multnomah during the next 20 years. The following projects are considered to be the most critical in terms of serving planned growth in this subarea:

• Build interim phases of the Mount Hood Parkway, connecting the Gresham regional center to the highway system and providing safe, convenient connections from north and northeast Portland to Mt. Hood and Central Oregon. Additional right-of-way preservation and access management will be needed along the Hogan Road/242nd Avenue corridor.

• Conduct a detailed I-205 corridor study and phase the implementation of additional transit and road-related improvements needed to enhance interstate travel, particularly goods movement to and from the region. The long-term vitality of the eastern portion of the Columbia Corridor depends on continued access to the regional highway system, intermodal facilities in the western portion of the corridor, Portland international airport and the pool of workers in both Oregon and Washington.

• Develop Gateway traffic management plan that identifies projects to mitigate cut-through traffic on residential streets, improve traffic flow on regional streets and provide better bicycle and pedestrian connections and access to transit.

• Retrofit major streets in Gresham, Gateway, Troutdale and Fairview regional centers and town centers with “boulevard” designs, including Division Street, Burnside Street, Eastman Parkway in Gresham and Stark and Washington streets in Gateway. These boulevard designs will include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

• Expand Gateway transit service to include rapid bus service from Oregon City along I-205, light rail transit to Portland International Airport and improved Banfield light rail frequencies.
- Expand Gresham transit service to include rapid bus from downtown Portland along Division Street, frequent bus from Pleasant Valley/Damascus and primary bus on all other transit corridors.

- Implement a transportation management association with employers in Gresham and Gateway.

- Develop a regional strategy to evaluate the need for expanding park-and-ride facilities in and near Gateway where such facilities do not conflict with planned land uses.

## Total Costs by mode and mode distribution

## Linking land use and transportation

### The 2040 Growth Concept
Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land more wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

### The Regional Transportation Plan
The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: boulevard design retrofits, new street connections and capacity improvements, sidewalks and bicycle facilities, pedestrian access to transit and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-205, I-84 and the Mount Hood Parkway in East Multnomah County.

### For more info
To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the transportation department at trans@metro-region.org
2012 SE Stark/Washington Safety Improvements
Boulevard retrofit of street from 92nd to 108th Avenue, including bike lanes, wider sidewalks, curb extensions and safer street crossings. This project also provides traffic safety improvements and traffic management to limit motorist delays.

2015 NE/SE 102nd/Cherry Blossom Bikeway
Retrofits existing street with bike lanes from Halsey to Market Street to improve access to the regional center.

2016 NE Halsey/92nd Avenue Bikeway
Retrofits existing street with lanes from 92nd Avenue at Tillamook Street to 102nd Avenue at Halsey Street limits to improve access to the regional center.

2017 SE Stark/Washington Bikeway
Retrofits existing street with bike lanes from 75th Avenue to the Portland city limits (outside of Gateway regional center) to improve access to the regional center.

2019 NE Glisan Bikeway
Retrofits existing street with bike lanes from 47th to 162nd Avenue to improve access to the regional center.

2020 Gateway Regional Center Pedestrian District
Retrofits existing streets within regional center and pedestrian corridors linking to eastside MAX to include better sidewalks and crossings, lighting, extensions, bus shelters and benches.

2021 Gateway Regional Center Transportation Plan
Future study to identify long-term transportation needs for motor vehicle, truck, bicycle, pedestrian and transit travel in the regional center.

2024 102nd Corridor Safety Project
Provides full signal remodels at Glisan and Halsey streets, minor signal modifications, overhead signing along the corridor and channelization of 102nd at Stark and Washington streets.

2011 Glisan Street Boulevard and ITS
Boulevard retrofit of street within regional center, including wider sidewalks, curb extensions and crossing improvements, and improving traffic management to limit motorist delays.

2022 Gateway Traffic Management
Implements comprehensive traffic management plan throughout regional center to reduce cut-through traffic on residential streets and improve traffic flow on regional streets. This project also includes utility improvements.

2023 Gateway TMA Startup
Implements a Transportation Management Association (TMA) program with employers in the regional center.
2047 Division Street Improvements
Boulevard retrofit of street from Wallula Street to Hogan Road, including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2049 Powell Boulevard Improvements
Boulevard retrofit of street from Birdsdale Road to Hogan Road, including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2053 Gresham/Fairview Trail
Constructs a 5.2 mile multi-use path designed for bicycle and pedestrian use from the Springwater Corridor Trail to Marine Drive.

2057 Gresham RC Pedestrian Improvements
Retrofits existing streets within regional center and pedestrian corridors linking to eastside MAX to include better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

2064 Gresham-Fairview Trail Corridor
Determine the feasibility and implement a multi-use trail corridor between Gresham and Fairview.

2065 Phase 3 Signal Optimization
Implements comprehensive traffic management plan throughout Gresham and Multnomah County to limit traffic congestion and improve traffic flow. This project includes including traffic cameras, better signalization, variable message signs, highway advisory radio emitters throughout city and county facilities for detection and management of arterial incidents, especially in proximity to I-84.

2056 Division Street Bikeway
Retrofits existing street with bike lanes from 182nd to 235th Avenue.

2062 Gresham regional center TMA startup
Implements a Transportation Management Association program with employers in the regional center.

2011-2020

2025 Frequent bus service
Provides frequent bus service along Division Street from downtown Portland to Gresham.

2027 Civic Neighborhood LRT station/plaza
Completes redevelopment of land adjacent to Gresham City Hall MAX stop to include a new light rail station with retail services.

2031 Hogan Corridor Improvements
Moves regional freight route designation from 181st/ Burnside Road to 242nd Avenue/Burnside from 1-84 to US 26 and revises road signs in that corridor.

2035 Cleveland Street Reconstruction
Reconstructs existing street from Stark Street to Burnside Road.

2045 190th/Highland Drive Improvements
Reconstructs and widens street to five lanes from Butler Road to Powell Boulevard with sidewalks and bike lanes.

2048 Burnside Street Improvements
Completes boulevard retrofit of street from Wallula Street to Hogan Road, including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2050 Eastman Parkway Improvements
Completes boulevard retrofit of street from Burnside Road to Powell Boulevard, including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2054 Springwater Trail Connections
Provides bicycle access to the Springwater Corridor Trail at 182nd Avenue and 190th Avenue.

2055 SW Walters Road/ Springwater Trail Access
Provides bicycle access to the Springwater Corridor Trail from 7th Avenue to Powell Boulevard.
Springwater Trail Pedestrian Access
Provides pedestrian access to the Springwater Corridor Trail at Eastman Parkway, Towle Road, Roberts Road, Regner Road and Hogan Road. This project includes wider sidewalks and lighting.

2059 Division Street Pedestrian to Transit Access Improvements
Makes street safer for pedestrians and improves access to transit from 175th Avenue to the regional center with wider sidewalks, lighting, crossings, bus shelters and benches.

2063 Study LRT extension to Mt. Hood Community College
Future study to determine the feasibility of extending light rail to Mt. Hood Community College.

Columbia Corridor
2000-2005

2078 162nd Railroad Crossing Improvements
Reconstructs and widens a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2080 202nd Railroad Crossing Improvement
Reconstructs and widens a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2081 223rd Railroad Crossing Improvement
Reconstructs and widens a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2087 NE 158th Avenue Improvements
Upgrades existing street to urban standards from Sandy Boulevard to Marine Drive. This project addresses storm drainage issues and includes constructing bike lanes, sidewalks and a bridge to replace culverts along the Columbia Slough.

2088 NE Marine Drive/122nd Avenue Improvements
Adds a traffic signal to the intersection and widens the dike to install a left turn lane on Marine Drive.

2071 I-205 Auxiliary Lane
Constructs new north- and southbound auxiliary lanes from Airport Way to Columbia Boulevard.

2072 I-205 Auxiliary Lane
Constructs new north- and southbound auxiliary lanes from I-84 to Columbia Boulevard.

2077 181st Avenue Widening
Widens street to three lanes from Halsey Street to eastbound on-ramp at I-84.

2079 185th Railroad Crossing Improvement
Reconstructs and widens a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2082 Columbia River Highway Railroad Crossing Improvement
Reconstructs and widens a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2084 181st Avenue Intersection Improvement
Improves intersection of 181st Avenue and Glisan Street.

2085 181st Avenue Intersection Improvement
Improves intersection of 181st Avenue and Burnside Road.

Many improvements to the regional highway system focus on maintaining regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another.
This map identifies the main focus of each project, however all road expansion projects include bike and pedestrian facilities as part of their design.
2126 257th Avenue Pedestrian Improvements
Retrofits existing street from Cherry Park Road to Stark Street to widen sidewalks, move overhead utilities underground and install a raised median, traffic signals, lighting and landscaping.

2006-2010

2124 Halsey Street Improvements
Widen to three lanes with boulevard design from 238th to 257th Avenue, including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2003 Hogan Corridor Improvements
Constructs new four-lane limited access highway from Palmquist Road to US 26.

2007 Transit station and park-and-ride lot upgrades
Constructs, expands and/or upgrades transit stations and park-and-ride lots throughout subarea, including Troutdale, Gateway, Gresham, Rockwood and Fairview/Wood Village.

2130 162nd Avenue Bikeway
Retrofits existing street with bike lanes from Sandy Boulevard to Halsey Street and Stark Street to Powell Boulevard.

2004 I-84 Widening
Widens I-84 to six lanes from 238th Avenue to the Sandy River Bridge.

2133 I-205 Multi-use Path Crossing Improvements
Constructs safer bicycle and pedestrian crossings, improving access to the I-205 multi-use path at various locations.

2000 Hogan Corridor Improvements
Widens 242nd Avenue from Stark Street to Palmquist Road and implements access management strategies.

2001 Hogan Corridor Improvements
Constructs new interchange at I-84, extending this new interchange connection south to

Other improvements to the regional highway system will focus on maintaining access to regional centers like Gresham and Gateway.
A close-up look at the 20-year regional transportation blueprint for West Columbia Corridor from I-205 to Rivergate.

Metro’s goal is to provide a range of transportation choices and to create livable communities now and in the future.

Planned Transportation Projects

More than 50 projects and programs have been identified to serve this subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea.

- Complete the I-5 Trade Corridor study to determine the scope and phasing of transit and road-related improvements in the corridor. Implement identified 20-year improvements.

- Implement and refine Columbia Corridor study recommendations to address full corridor needs from Rivergate industrial area to I-205, including the development of a streamlined connection in the US 30 Bypass corridor that reduces the need for peak period freight use of I-84 and inner northeast portions of I-5.

- Expand transit service to include light rail transit from the Portland central city to North Portland, then to Vancouver, and from Gateway to Portland International Airport in addition to express bus, taxi service, inter-city shuttles and other shuttle service to the airport.

- Capacity improvements along northeast Portland Highway, I-5, Marine Drive and Lombard Street to maintain an acceptable level of freight access to marine terminals in the Rivergate and West Hayden Island intermodal areas and rail loading facilities in the Union Pacific Yard near Swan Island.

- Capacity improvements to I-205 and Airport Way to maintain an acceptable level of access to passenger and freight terminals in the airport area.

- Complete a corridor study of I-205 that focuses on freight mobility, access to the airport and future general purpose capacity needs. (see Urban Clackamas County packet for improvements in this corridor)

- New street connections in the Portland international center, including Marx Drive, Alderwood Road, International Parkway and Cornfoot Road extensions.
Linking land use and transportation

The 2040 Growth Concept
Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land more wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

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In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-20 5, I-84 and the Mount Hood Parkway in East Multnomah County.

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Priority projects by area

**Columbia Corridor**

2000-2005

4011 NE Marine Drive
Bikeway
Retrofits existing street with bike lanes from I-5 to 122nd Avenue to improve access to the Columbia Corridor.

4013 US 30 Bypass Phase I Refinement Study
Future study to refine long-term improvements defined in the Columbia Corridor Study, including consideration of additional system and access management strategies.

4014 US-30 Bypass Study - Phase 2
Future study to define improvements needed to support US 30 Bypass as a long-term primary freight route from I-5 to I-84.

017 "S-30 Bypass Improvements Study
Future study to define the need for a new bridge from US 30 to the Rivergate industrial area.

2006-2010

412 N/NE Lombard/Willingsworth ITS
Implements comprehensive traffic management plan in corridor to improve traffic flow, projects include better signalization at MLK Boulevard, Interstate Avenue, reeley Avenue, Portsmouth Place and Philadelphia Park, message signs, fiber optic interconnection and communication with the City of Portland's central management computer.

4016 North Willamette Crossing Study
Future study to determine the need for a new bridge from US 30 to the Rivergate industrial area.

Portland International Airport

2000-2005

4000 Airport Light Rail
New light rail transit service from Gateway regional center to the Portland International Airport terminal.

4019 Light rail station/track realignment
Constructs new light rail station within the Portland International Center development.

4020 Airport Way Improvements, East
Widens Airport Way to three lanes in both directions from 82nd Avenue to I-205.

4022 East End Connector
Constructs an at-grade intersection connection from Columbia Boulevard at 82nd Avenue to US 30 Bypass/I-205 interchange and widens I-205 southbound on-ramp at Columbia Boulevard. This project is intended to better distribute traffic between Columbia Boulevard and Lombard Street.

4023 Marx Drive Extension
Constructs a two-lane extension of Marx Drive to 82nd Avenue.

4024 Alderwood Road Extension
Constructs a three-lane extension of Alderwood Road to Clark Road.

4025 International Parkway Extension (Phase 1)
Constructs a three-lane extension of International Parkway to Cascades Avenue.
4027 Airpot Wy/ Cascades grade separation
Constructs grade-separated crossing at the intersection of Airport Way and Cascades Avenue and widens Airport Way to four lanes in each direction from new overcrossing to I-205.

4030 NE 11-13th Avenue Connector
Constructs a new three-lane roadway and bridge at Columbia Boulevard.

4032 Airport Way terminal entrance roadway relocation
Relocates and widens Airport Way at terminal entrance to maintain access and circulation in the terminal area.

4037 Columbia and Lombard Intersection Improvements
Widens turn lanes at the intersection of MLK and Columbia boulevards and MLK Boulevard and Lombard Street.

4040 47th Avenue Intersection and Roadway Improvements
Widens and channelizes intersection at 47th Avenue and Columbia Boulevard to better facilitate truck turning movements to the cargo area located within the airport area.

4041 Columbia Boulevard/Alderwood Improvements
Widens and signalizes intersection at Alderwood Road and Columbia Boulevard to better facilitate truck turning movements to the cargo area located within the airport area.

4042 Cornfoot Road Intersection Improvement
Widens turn lanes and signalizes intersection at Alderwood Road and Cornfoot Road.

4049 NE 82nd Avenue Bikeway
Retrofits existing street with bike lanes from Columbia Boulevard to Airport Way to improve access to the Columbia Corridor.

4054 N Columbia Pedestrian Improvements, Phase I and Phase II
Constructs sidewalks and safer pedestrian crossings.

4055 Airtrans/Cornfoot Rd Intersection Improvement
Signalizes intersection and channelizes traffic flow to provide efficient movement of traffic to adjacent properties.

4057 N/NE Marine Drive ITS
Implements comprehensive traffic management plan in corridor to improve traffic flow. This project includes three new traffic signals between I-205 and 185th Avenue, better signalization, message signs, fiber optic interconnection and communication with the City of Portland's central management computer.

4058 NE Airport Way ITS
Implements comprehensive traffic management plan in corridor to improve traffic flow. This project includes three new traffic signals between I-205 and 185th Avenue, better signalization, message signs, fiber optic interconnection and communication with the City of Portland’s central management computer.

4059 NE 82nd Avenue/Alderwood Road Improvement
Modifies traffic signal at intersection of 82nd Avenue and Alderwood Road and constructs right turn lane on southbound 82nd Avenue and a second right turn lane on westbound Alderwood Road.

4060 NE Boat Way Improvement
Retrofits existing street with bike lanes from Columbia Boulevard to Alderwood Trail to improve access to the Columbia Corridor industrial and employment areas.

2006-2010

4021 Airport Way Improvements, West
Widens Airport Way to three lanes in both directions from 82nd Avenue to the airport terminal.

4029 Cornfoot Road Extension
Constructs a two-lane extension of Cornfoot Road from Alderwood Road to Columbia Boulevard to better facilitate truck access to the cargo area located within the south airport area.

4038 82nd Avenue/Alderwood Road Improvement
Modifies traffic signal at intersection of 82nd Avenue and Alderwood Road and constructs right turn lane on southbound 82nd Avenue and a second right turn lane on westbound Alderwood Road.

4043 33rd/Marine Drive Intersection Improvement
Signalizes intersection at 33rd Avenue and Marine Drive.

4046 NE Alderwood Bikeway
Retrofits existing street with bike lanes from Columbia Boulevard to Alderwood Trail to improve access to the Columbia Corridor industrial and employment areas.

4050 N/NE Columbia Boulevard Bikeway
Retrofits existing street with bike lanes from Lombard Street east to MLK Boulevard to improve access to the Columbia Corridor industrial and employment areas.

The port terminals in the Rivergate area are a driving force in the regional economy. Improvements to I-5 and Marine Drive are planned to maintain long-term regional access to these key intermodal facilities.
Kolumbia Boulevard ITS implements comprehensive traffic management plan in corridor to improve traffic flow. This project includes better signalization between North Burgard Street and I-205, message signs, fiber optic interconnection and communication with the City of Portland's central management computer.

2011-2020

1028 Airport Way/82nd grade separation
Constructs a grade separated overcrossing at intersection of Airport Way and 82nd Avenue.

1039 NE 92nd Avenue
Improves street between Columbia Boulevard and Alderwood Road to better facilitate circulation in the Portland International Center development. Scope of project fully defined.

Rivergate Industrial Area 2000-2005

062 Marine Drive Improvement, Phase 1
Constructs Marine Drive to six lanes from Terminal 6/farine Drive intersection to 2.5 miles east, including bike lanes, sidewalks and vegetated buffer. Adjacent trail and natural resource area from the Columbia Slough to the North Marine Drive overpass. This project also signals the intersection of Terminal 6 entrance and Marine Drive to improve safety.

065 South Rivergate Entry Overpass
Constructs an overpass from the intersection at Columbia Boulevard and Lombard Street to South Rivergate entrance to the rail and vehicular lane.

066 Columbia River Channel Deepening Study
Study to determine the feasibility of deepening the Columbia River channel from Astoria to Portland.

4068 Rivergate Rail expansion
Expands rail capacity in the Rivergate industrial area to increase bulk capacity for mineral and agricultural products and improve train flows within the industrial area.

4073 Kelly Point Park AccessTrail/40 Mile Loop Trail
Constructs multi-use trail for bicycles and pedestrians along the north bank of the Columbia Slough.

4074 Rivergate Bicycle and Pedestrian Trail
Constructs multi-use trail for bicycles and pedestrians along the Columbia Slough in the Rivergate area.

4076 Columbia Slough Greenway Trail Study
Future study to determine the feasibility of constructing a multi-use trail from Kelly Point Park to Blue Lake Park.

2006-2010

4061 West Hayden Crossing
Constructs new four-lane bridge from Marine Drive to Hayden Island to serve as primary access to marine terminals on the island.

Many improvements to the regional highway system focus on maintaining regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another.

Interstate 5 2000-2005

4003 I-5 Interstate Bridge and I-5 Widening
Adds capacity to the I-5/Columbia River bridge and widens I-5 from Columbia Boulevard to the Interstate Bridge.

4009 I-5 Trade Corridor Study
Future study to define an appropriate mix of improvements from I-405 to I-205, including adding capacity and transit service within the corridor.

2006-2010

4005 I-5 North Improvements
Widens I-5 to three lanes in each direction from Lombard Street to the Expo Center exit.

4006 I-5/Columbia Boulevard Improvement
Constructs a full diamond interchange at I-5 and Columbia Boulevard.

2011-2020

4004 I-5 Reconstruction and Widening
Reconstructs and widens I-5 from I-84 to Greeley Avenue in addition to various bridge and ramp improvements along this section of I-5.
This map identifies the main focus of each project, however all road expansion projects include bike and pedestrian facilities as part of their design.
Getting There
Portland Central City Transportation Projects

A close-up look at the 20-year regional transportation blueprint for Portland Central City and Neighborhoods

Metro's goal is to provide a range of transportation choices and to create livable communities now and in the future.

Planned Transportation Projects
Nearly 120 projects and programs have been identified to serve this subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea.

- Capacity improvements to I-5 north of Lombard, I-5 south near I-405, 99E to Milwaukie, US 26 west of Sylvan and US 30 in the Columbia Corridor to address predicted increases in traffic that is expected to impact the movement of people and goods to the central city and through the region.
- Light rail service from Clackamas regional center to Portland central city, then to Vancouver, Washington in addition to more frequent service along eastside and westside MAX. Interim bus transit service to serve the Highway 99E/224 corridor from Clackamas regional center to the Portland central city until light rail service can be provided.
- Conduct a detailed I-5 North corridor study and phase implementation of future transit and road-related improvements needed to enhance interstate travel, particularly goods movement to and from the region in this corridor. (see Columbia Corridor subarea for improvements in this corridor)
- Expand transit service to include rapid bus service along Powell/Foster Road and high frequency transit service along this route.
- Complete a corridor study of Barbur Boulevard to determine feasibility and timing for high capacity transit service along this route.
- Expand park-and-ride facilities along the Banfield corridor east of I-205 where such facilities do not conflict with planned land uses.

INSIDE

Road expansion
- I-5 North
- 99E Airport Way
- US 30
- Northeast Portland Highway

Transit
- Expanded transit service
- Pedestrian access
- Bus shelters and benches
- Employee commuting programs

"Boulevard" retrofits
- Central city
- Town centers
- Main streets

Bicycle and pedestrian facilities
- Wider sidewalks
- Street lighting and landscaped buffers
- Bike lanes
- Multiuse paths

Picture
• Retrofit major streets in centers and main streets with "boulevard" designs, including Grand/MLK Boulevard and Broadway/Weidler Street couplets in the Lloyd district, Sandy Boulevard in the Hollywood town center, Hawthorne Boulevard and Division Street in southeast Portland and Barbur Boulevard, Capitol Highway and Beaverton-Hillsdale Highway in southwest Portland. Boulevard designs include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

• Preserve the Willamette River Bridges, including sidewalk repair, deck replacement, painting and liftspan repair. Implement south Willamette River crossing recommendations for the Sellwood Bridge.

• Emphasize system management strategies and traffic calming throughout southeast Portland to improve traffic flow and mitigate impact of spillover east/west traffic in the Banfield corridor, particularly along arterial streets parallel to I-84 such as Halsey, Glisan, Burnside and Stark streets.

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Total Costs by mode and mode distribution

Linking land use and transportation

The 2040 Growth Concept
Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land more wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-5, I-84, I-205, 99E, US 30 and Northeast Portland Highway in this subarea.

For more info
To learn more about meetings, hearings and other opportunities for involvement, call Metro’s transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the transportation department at trans@metro-region.org.
Priority projects by community

**Willamette River Bridges**

2000-2005

1005, 1006 and 1007 Willamette River Bridges rehabilitation
These projects provide a range of improvements to the Broadway, Burnside Morrison, and Sauvie Island bridges, including sidewalk repair, deck replacement, painting and lift span repair.

2006-2010

2006 Sellwood Bridge
Implements South Willamette River Crossing Study recommendations for the Sellwood Bridge.

**Regional Transit**

2000-2020

1001 and 1002 South/North Light Rail
Light rail service from Clackamas regional center to Portland central city, then to Vancouver, Washington in addition to more frequent service along eastside and westside MAX. Interim bus transit service to serve the Highway 99E/224 corridor from Clackamas regional center to the Portland central city until light rail service can be provided.

1021 Transit station and park-and-ride upgrades
Expands and/or upgrades transit stations and park-and-ride lots in various locations, including the River District, St. Johns, Lents, Hollywood, Parkrose and Hildendale.

Portland Central City

2000-2005

1009 Springwater Trail Study
Feasibility study for improving access to the Springwater Corridor.

1015 Central City Street Car
New streetcar service between North Macadam and Good Sam Hospital.

1019 Barbur Boulevard Rapid Bus
New rapid bus service along Barbur Boulevard from downtown Portland to Tigard.

1027 South Portland Improvements
Implements study recommendations to improve access to the central city by all modes.

1026 Kerby Street Interchange
Realignment of I-405 off-ramp at Kerby Street.

1029 Water Avenue Extension
Constructs new two-lane extension of street with sidewalks, bicycle lanes and landscaping to improve access to the Willamette River Greenway.

1032 Southern Triangle Circulation Improvements
Improves traffic movement and access to the Central Eastside Industrial District and the central city.

1033 Lovejoy Ramp Reconstruction
Removes the Lovejoy ramp to support development of housing in the River District area. Project will also include sidewalks and transit facilities.

1034 Lower Albina RR Crossing
Constructs a new roadway overcrossing of rail facilities to separate truck and rail freight movements. This project is intended to eliminate freight truck delay experienced when trains block multiple local street intersections.

1035 SW Columbia Street Reconstruction
Rebuilds street to improve access to central city by all modes.

1036 Broadway/Clift Arena Access
Realigned intersection to improve access to the Rose Garden arena.

1046 Transit Mall Restoration
Provides improvements to transit mall in downtown Portland in conjunction with construction to light rail transit.

1051 E/W Burnside Street Improvements and ITS
Boulevard retrofit of street from SE 12th Avenue to NW 22nd Avenue, including pavement reconstruction, wider sidewalks, curb extensions, safer crossings, and traffic management to limit motorist delays.

1052 North Macadam Improvements and ITS
Boulevard retrofit of street from Bancroft Street to Ross Island Bridge, including pavement reconstruction, wider sidewalks, curb extensions, safer crossings and traffic management to limit motorist delays.

1053 Naito Parkway Improvements and ITS
Boulevard retrofit of street from NW Davis Street to SW Market Street, including pavement reconstruction, median islands, bicycle lanes, wider sidewalks, curb extensions, safer crossings and traffic management to limit motorist delays.

1054 Broadway/Weidler Improvements, Phase II and III
Boulevard retrofit of street from 15th Avenue to 24th Avenue, including wider sidewalks, curb extensions, safer crossings, street trees and traffic signals.

1058, 1060, 1061, 1064, 1069 Bicycle Lane Retrofits
Retrofits existing streets with bicycle lanes throughout the central city, along

Citizen view
**Picture**

**2006-2010**

1025 I-5/North Macadam Access Improvements
Constructs new NB I-5 off-ramp to Macadam Avenue.

1037 Bybee Boulevard Overcrossing
Replaces existing bridge with a four-lane bridge with standard clearance.

1062 WRBAP Future Phase Project Implementation
Improves bicycle and pedestrian access to the Morrison Bridge.

1075 WRBAP Future Phase Project Implementation
Improves bicycle and pedestrian access to the Burnside Bridge.

1084 Clay/2nd Pedestrian/Vehicle Signal
Installs a new traffic signal to make street safer for pedestrian crossings.

1093 Central City Pedestrian Enhancements Study
Future study to identify needed pedestrian improvements to address locations lacking pedestrian crossings, difficult bridge crossings and access over freeways.

1096 Barbuse/5 Corridor Study
Future study to identify needed improvements for motor vehicle, truck, bicycle, pedestrian and transit travel in the corridor.

1100 Central City TSM improvements
Limits traffic congestion and improves traffic flow in the central city by improving traffic signal operations along arterial streets.

1104 NW Yeon/St. Helens ITS
Limits traffic congestion and improves traffic flow in the central city by improving traffic signal operations from I-405/23rd Avenue to Nicolai Street.

2006-2010

1105 SW-NW 14/16th - SW 13th/14th Avenue ITS
Implements comprehensive traffic management plan in the central city to limit traffic congestion and improve traffic flow. This project includes better signalization, message signs, fiber optic interconnection and communication with the City of Portland’s central management computer.

2011-2020

1109 Going Street Rail Overcrossing
Widens intersection at Swan Island entrance to improve access to industrial area.

1113 Swan Island Bicycle Lane Retrofit
Retrofit existing street with bicycle lanes to improve access to employment and industrial areas within the Columbia Corridor.

2011-2020

1115 N. Force/Broadacre/Victory Bikeway
Provides a signed Bikeway connection to I-5 river crossing.

**Hollywood Town Center**

2000-2005

1119 Sandy Boulevard/Burnside/12th Avenue Intersection
Redesigns existing intersection to make it safer for all modes of travel.

1120 Sandy Boulevard Multi-Modal Improvements, Phase I
Redesigns intersections from 12th to 47th Avenues to improve safety for all modes of travel.

1125 NE/SE 50’s Bicycle Boulevard Retrofit
Retrofit existing streets with a bicycle boulevard design, providing an important connection between northeast Portland and southeast Portland.

1130 Hollywood TC Pedestrian District Improvements
Identifies improvements that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as better lighting and crossings.

1133 Hollywood Town Center Plan
Future study to identify long-term transportation needs for motor vehicle, truck, bicycle, pedestrian and transit travel in the town center.

2006-2010

1118 Sandy Boulevard Frequent Bus
New frequent bus service along Sandy Boulevard.

1121 and 1122 Sandy Boulevard Multi-Modal Improvements, Phase II
Redesigns intersections from 47th to 109th Avenues to improve safety for all modes of travel.
Many improvements to the regional highway system focus on maintaining regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another.
traffic congestion and improve traffic flow. This project includes traffic count stations, better signalization, message signs, fiber optic interconnection and communication with the City of Portland’s central management computer.

2006-2010

1245 Capitol Highway, Phase II

Implements West Portland town center study recommendations.

2011-2020

1201 West Portland TC Pedestrian District

Retrofits Barbar Boulevard and Capitol Highway and intersecting streets within the town center to include better sidewalks and crossings, curb extensions, bus shelters and benches.

Portland Main Streets

2000-2005

1211 Garden Home/Olleson/Multnomah Improvements

Reconstructs intersection and provides better sidewalks and crossings to improve access to town center from Multnomah Boulevard to 71st Avenue.

1214 Division Street Transit Improvements, Phase I

Constructs improvements that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

2025 Frequent bus service

Provides frequent bus service along Division Street from downtown Portland to Gresham.

1217 Multnomah Pedestrian District

Constructs improvements in Multnomah along Capitol Highway and Multnomah Boulevard to that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1219 Belmont Pedestrian Improvements

Identifies improvements along Belmont from 12th to 83rd Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1220 Fremont Pedestrian Improvements

Identifies improvements along Fremont from 42nd Avenue to 52nd Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1221 Killingsworth Pedestrian Improvements

Identifies improvements along Killingsworth from Williams to 33rd and 42nd to Cully that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1222 NE Alberta Pedestrian Improvements

Constructs improvements along Alberta from MLK Boulevard to 33rd Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1224 NE Cully/57th Pedestrian and Bicycle Improvements

Constructs improvements that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1227 SE Tacoma Main Street Study

Future study to identify boulevard-type improvements from Sellwood to McLoughlin Boulevard that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1228 Powell Boulevard/Foster Road HCT Corridor Study

Future study of the potential for high-capacity transit service or other improvements from the Ross Island Bridge to Damascus town center to address travel demand in the corridor.

1229 SE Woodstock Main Street

Identifies improvements along Woodstock from 39th to 49th Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as better lighting, bus shelters, benches and crossings.

1232 NW 23rd/Mil Tabor Frequent Bus

New frequent bus service along Milwaukie between NW 23rd Avenue and Airport Way to limit traffic congestion and improve traffic flow. This project includes better signalization, message signs, fiber optic interconnection and communication with the City of Portland’s central management computer.

1236 Hawthorne Boulevard Improvements for Transit

Constructs improvements that enhance transit service, such as timing of traffic signals, bus shelters and benches, bus turnouts and restriping travel lanes.

1237 Foster Fast Link Improvements for Transit

Constructs improvements that enhance transit service, such as timing of traffic signals, bus shelters and benches, bus turnouts and restriping travel lanes.

1239 NE Sandy Boulevard ITS

Implements comprehensive traffic management plan along Sandy from Burnside Street to 82nd Avenue to limit traffic congestion and improve traffic flow. This project includes traffic count stations, better signalization, message signs, fiber optic interconnection and communication with the City of Portland’s central management computer.

1240 82nd Avenue ITS Corridor

Implements comprehensive traffic management plan along 82nd Avenue to limit traffic congestion and improve traffic flow. This project includes traffic count stations.

1241 Grand Avenue/MLK Boulevard Transit Preferred

Constructs improvements that enhance transit service, such as timing of traffic signals and restriping travel lanes.

2011-2020

1222 SE Milwaukee Pedestrian Improvements

Identifies improvements along Milwaukee from Yukon Street to Tacoma Street that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

Bannfield Station Communities

2006-2010

1265 Banfield SC Pedestrian Improvements

Retrofits existing streets along eastside MAX and at intersecting streets to include better sidewalks and crossings, curb extensions, bus shelters and benches.
This map identifies the main focus of each project. Emphasis on new transportation facilities and pedestrian facilities as part of their design.
Metro's goal is to provide a range of transportation choices and to create livable communities now and in the future.

Planned Transportation Projects

A close-up look at the 20-year regional transportation blueprint for North Washington County

Metro's goal is to provide a range of transportation choices and to create livable communities now and in the future.

Planned Transportation Projects

More than 130 transportation projects and programs have been identified to serve this subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea.

• Develop a phased strategy to widen Tualatin Valley Highway as a predominantly limited-access, divided facility to serve as the primary connection between Beaverton and Hillsboro. Develop and adopt an access management plan that supports planned improvements in the corridor as part of the Beaverton, Hillsboro and Washington County TSPs.

• Capacity improvements to streets parallel to Tualatin Valley Highway, including Farmington Road, Baseline Road and Walker Road to better serve local travel along the corridor.

• Phase improvements to widen US 26 to six lanes from the Sylvan interchange to 185th Avenue, including ramp improvements, to maintain adequate access to the central city and the Sunset Industrial area.

• Retrofit major streets in centers and main streets with “boulevard” designs, including Canyon Road, Hall/Watson couplet and Tualatin Valley Highway in Beaverton regional center and Tualatin Valley Highway in Hillsboro regional center and Cornelius town center. Boulevard designs will include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

• Consider added US 26 overcrossings west of Highway 217 and emphasize more street connectivity in Beaverton and Hillsboro to support local travel needs by all modes of travel.

• Conduct a detailed Highway 217 corridor study to identify future transit and road-related improvements and construction phasing to address travel demand in the corridor, including possible express lanes, high occupancy vehicle lanes and/or priced lanes.

The study should address the competing...
needs of serving local trips to Washington Square and Beaverton regional centers and longer trips through the corridor.

- Capacity improvements to streets parallel to Highway 217, including new overcrossings in the vicinity of Washington Square and Tigard, to better serve local travel and preserve regional mobility along the corridor.

- Capacity improvements to Cornell Road and Walker Road to maintain adequate access to and from the Sunset industrial area via US 26 and Highway 217.

- Expand transit service to Beaverton to include commuter rail service from Wilsonville, increased frequencies on westside MAX and frequent bus service on Beaverton-Hillsdale Highway and Tualatin Valley Highway.

### Total Costs by mode and mode distribution

### Linking land use and transportation

#### The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land more wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including US 26, Highway 217 and Tualatin Valley in North Washington County.

#### The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: boulevard design retrofits, new street connections and capacity improvements, sidewalks and bicycle facilities, pedestrian access to transit and expanded transit service to destinations throughout the region.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro’s transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the transportation department at trans@metro-region.org.
Beaverton
Regional Center
2000-2005

3019 Beaverton Connectivity Improvements
Completes several downtown Beaverton street connections to improve access and circulation within the regional center by all modes of travel.

3023 Highway 217 Interchange Improvements
Constructs new frontage roads adjacent to the Highway from Walker Road to Tualatin-Valley Highway, braided ramps at Tualatin-Valley Highway and other ramp improvements at Beaverton-Hillsdale Highway and Walker Road.

3026 Millikan Extension
Constructs new three-lane extension of Millikan Way to connect to Cedar Hills Boulevard at Henry Street with sidewalks and bike lanes.

3027 Davis Improvements
Widens street to three lanes from 160th Avenue to 170th Avenue, and includes sidewalks and bike lanes to improve safety.

3028 Hart Improvements
Widens street to three lanes from Murray Boulevard to 165th Avenue. Project will include sidewalks, bike lanes and a traffic signal at 155th Avenue to improve safety.

3029 Lombard Improvements
Realigns street and adds turn lanes from Broadway Avenue to Farmington Road to improve access to the regional center. This project will also include sidewalks.

3030 Farmington Road Improvements
Widens street to five lanes from Hocken Road to Murray Boulevard. This project will also include sidewalks, bike lanes and an additional left turn lane at Murray Boulevard to improve safety.

3033 125th Avenue Extension
Constructs a two-lane extension of street with turn lanes from Brockman Street to Hall Boulevard. Project will also include sidewalks and bike lanes to improve safety.

3034 Hall Boulevard Extension
Extends Hall Boulevard from Cedar Hills Boulevard to Hocken/Ternan Avenue. This project is a three-lane extension that includes sidewalks and bike lanes.

3041 Hall/Watson Improvements
Retrofits street with boulevard design from Allen Boulevard to Cedar Hills Boulevard, including wider sidewalks, new plantings and safer street.

3046 Hall Boulevard Bikeway
Retrosfits bike lanes to existing street from Beaverton-Hillsdale Highway to Cedar Hills Boulevard.

3047 Watson Avenue Bikeway
Retrosfits bike lanes to existing street from Beaverton-Hillsdale Highway to Hall Boulevard.

3049 Downtown Beaverton Pedestrian Improvements
Makes street safer for pedestrians within the regional center along Hocken Avenue, Cabot Street, 110th Avenue, 113th Avenue and Tualatin-Valley Highway. This project includes wider sidewalks, bike lanes, lighting and safer crossings.

3051 110th Avenue Pedestrian Improvements
Completes sidewalks where missing from Beaverton-Hillsdale Highway to Canyon Road.

3053 117th Avenue Pedestrian Improvements
Makes street safer for pedestrians and improves access to light rail at Center Street with wider sidewalks, lighting and safer street crossings.

3063 Murray Boulevard Improvements
Interconnects traffic signals from Tualatin-Valley Highway to Allen Boulevard to limit traffic congestion and improve traffic flow in the corridor.

2006-2010

3020 Beaverton Connectivity Improvements II
Completes several downtown Beaverton street connections to improve access and circulation within the regional center by all modes of travel.

3021 Jenkins Road Improvement
Widens street to three lanes from Cedar Hills Boulevard to Murray Boulevard. Project will also include sidewalks and bike lanes.

3022 Jenkins Road Improvement
Widens street to five lanes from Murray Boulevard to 158th Avenue. Project will also include sidewalks and bike lanes.

3024 Cedar Hills Interchange Improvement
Installs eastbound US 26 ramp metering signals to improve traffic flow.

3032 Cedar Hills Boulevard Improvements
Widens street to five lanes from Farmington Road to Walker Road. Project will also include sidewalks and bike lanes.

3042 TV Highway/Canyon Road Boulevard Improvements
Retrofits street with boulevard design from Murray Boulevard to Highway 217, including wider sidewalks, curb extensions, safer street crossings, bus shelters and benches.

3051 Hall Boulevard/Watson Pedestrian-to-Transit Improvements
Makes street safer for pedestrians and improves access to transit within the regional center from Cedar Hills Boulevard to Tigard. Project includes wider sidewalks, lighting and safer crossings.

2011-2020

3031 Allen Boulevard Improvements
Widens street to five lanes from Highway 217 to Murray Boulevard. Project will also include sidewalks and bike lanes.

3046 158th/Marlo Road Improvements
Widens street to five lanes from 170th Avenue to Walker Road. Project will also include sidewalks and bike lanes.

3053 Center Street Improvements
Widens street to three lanes from Hall Boulevard to 113th Avenue. Project will also include sidewalks and bike lanes.

3059 Scholls Ferry Road Improvements
Widens street to seven lanes from Highway 217 to 125th Avenue. Project will also include sidewalks, bike lanes and access management.

3064 Murray Boulevard Bike/Pedestrian Improvements
Makes street safer for bicyclists and pedestrians from Scholls Ferry Road to Tualatin Valley Highway by constructing pedestrian refuges and better crossings at intersection and filling in gaps in the bicycle network.

3055 Beaverton-Hillsdale Highway Pedestrian and Bicycle Improvements
Makes street safer for bicyclists and pedestrians and improves access to transit from 65th Avenue to Highway 217, with bike lanes, wider sidewalks, better crossings, bus shelters and benches.

Beaverton inset map
3056 Canyon Road/TV Highway Bike and Pedestrian Improvements
Makes street safer for bicyclists and pedestrians from 91st Avenue to Highway 217, with bike lanes, sidewalks and better crossings.

**Beaverton Corridor 2000-2005**

3072 Beaverton Powerline Multi-use Trail
Constructs new multi-use trail for bicyclists and pedestrians from Farmington Road to Schools Ferry Road.

3074 Hall Boulevard Bikeway
Completes regional bicycle system from Farmington Road to Highway 217 by constructing bike lanes from 12th Avenue to south of Allen Boulevard.

3075 Cedar Hills Boulevard Pedestrian Improvements
Improves pedestrian safety and access to transit with wider sidewalks, lighting, safer street crossings, bus shelters and benches.

2006-2010

3067 185th Avenue Improvements
Widens street to five lanes from Rock Creek Boulevard to Springfield Road. This project will include sidewalks and bike lanes.

3076 Allen Boulevard Improvements
Widens street to five lanes from Highway 217 to Western Avenue. This project will include sidewalks and bike lanes.

2011-2020

3107 SW 205th Avenue Improvements
Widens street to five lanes from light rail to Baseline Road. This project will include a new bridge, sidewalks and bike lanes.

3108 SW 231st to 234th Avenue Connector
Constructs new three-lane street from Century High School to Baseline Road. Project will also include sidewalks and bike lanes.

**Westside Station Community 2000-2005**

3085 170th Improvement
Widens street to three lanes from Rigert Road to Blanton Road and to five lanes from Blanton Road to Alexander Road with sidewalks and bike lanes to improve safety.

3094 Cornell Road Bikeway
Retrims bike lanes to existing street from Elam Young Road to Roy Circle.

3095 170th Avenue Pedestrian Improvements
Improves pedestrian safety and access to LRT by completing missing sidewalks from Tualatin Valley Highway to Elmonica light rail station.

3096 Pedestrian Access to MAX
Improves pedestrian safety and access to LRT with wider sidewalks, lighting and better crossings in areas adjacent to light rail stations.

2006-2010

3091 Quatama Street Improvements
Widens street to three lanes from 205th Avenue to 227th Avenue and extends street south to Baseline Road. This project will include sidewalks and bike lanes.

3102 Baseline Road Improvements
Widens street to three lanes from Lisa Avenue to 21st Avenue. Project will also include sidewalks and bike lanes.

3103 226th to 231st Avenue Connector
Constructs new three-lane street from Century High School to Baseline Road. Project will also include a new bridge, sidewalks, bike lanes and widening 231st Avenue to three lanes.

3107 303rd to 306th Avenue Improvements
Widens street to three lanes from Lisa Avenue to 201st Avenue. Project will also include sidewalks and bike lanes to improve safety.

3109 Jackson School Road Improvements
Channelizes intersection at US 26 to improve safety. Project restricts turn movements and cross-intersection travel.

3110 First Avenue Improvements
Makes street safer for pedestrians from Grant Street to Glencoe High School, with wider sidewalks, better street crossings and transit improvements.

3113 10th Avenue Improvements
Constructs new right turn lane and sidewalks in light rail station area from Main Street to Baseline Road.

3114 NE 28th Avenue Improvements
Widens street to three lanes from Grant Street to Main Street. Project also improves safety and access to light rail with bike lanes, wider sidewalks, better lighting, safer crossings and landscaped buffers.

3119 TV Highway Improvements
Boulevard retrofit of street within regional center from Shute Park to 10th Avenue, including wider sidewalks, curb extensions and safer street crossings.

3121 TV Highway Corridor Study
Future study to identify needed improvements for motor vehicle, truck, bicycle, pedestrian and transit travel in the corridor. Study area is from Cedar Hills Boulevard to Wooden Shoe Bridge.

3122 St. Mary's Urban Reserves Future Street Plan
Future study to define a future street plan for the urban reserve areas located south of Tualatin Valley Highway in Washington County.

3123 Hillsboro Regional Center TMA Startup
Implements a Transportation Management Association program with employers in the region.

3124 TV Highway System Management
Interconnects traffic signals from 209th Avenue to 10th Avenue in Hillsboro to limit traffic congestion and improve traffic flow in the corridor.

**Hillsboro Regional Center 2000-2005**

3102 Baseline Road Improvements
Widens street to three lanes from Lisa Avenue to 21st Avenue. Project will also include sidewalks and bike lanes to improve safety.

3104 NW Almeda Drive Extension
Constructs a three-lane extension of street from Amberswood Drive to Cornelius Pass Road. Project will also include sidewalks and bike lanes.

3105 E/W Collector
Constructs new three-lane street from 185th Avenue to 231st Avenue. Project will also include sidewalks and bike lanes.

3106 226th/227th/234th Avenue Connector
Constructs new three-lane street from Century High School to Baseline Road. Project will also include a new bridge, sidewalks, bike lanes and widening 231st Avenue to three lanes.

3108 Baseline Road Improvements
Widens street to two lanes from Lisa Avenue to 201st Avenue. Project will also include sidewalks and bike lanes to improve safety.

3110 Jackson School Road Improvements
Channelizes intersection at US 26 to improve safety. Project restricts turn movements and cross-intersection travel.

3116 10th Avenue Improvements
Constructs additional northbound turn lane from Walnut Street to Baseline Street and rechannels westbound Baseline Street approach to 10th Avenue to improve safety.

3125 Cornell Road Improvements
Widens street to five lanes from Arrington Road to Main Street. This project will include sidewalks and bike lanes.

**Sunset Industrial Area 2000-2005**

3130 Evergreen Road Improvements
Widens street to three lanes from Glencoe Road to 28th Avenue. Project will also include sidewalks and bike lanes to improve safety.

3132 Cornelius Pass Road Improvements
Widens street to five lanes from US 26 to West Union Road. Project will also include sidewalks and bike lanes to improve safety.

3133 Cornelius Pass Road Interchange Improvement
Adds capacity at the interchange and northbound Cornelius Pass Road to improve traffic flow and freight access to US 30.

3134 Cornelius Pass Road Improvements
Widens street to five lanes from Tualatin Valley Highway to Baseline Road. Project will also include sidewalks, bike lanes and traffic signals to improve safety.
2011-2020

3139 US 26 Overcrossing

3138 Cornelius Pass Road Extension
Constructs three-lane extension from Tualatin Valley Highway to 209th Avenue. This project will include sidewalks and bike lanes.

3194 Cedar Mill Multi-Use Path
Constructs multi-use path north of Cornell Road from 113th Avenue to 119th Avenue and helps fill the gap between existing bicycle and pedestrian facilities.

Sunset
Town Center
2000-2005

3177 Cedar Hills Boulevard/Barnes Road Intersection Improvement
Reconstructs intersection and approaches to add new travel lanes and turn lanes and upgrades traffic signals.

2006-2010

3179 West Couplet Enhancement
Expands street with boulevard design from 1st Avenue to 10th Avenue, including wider sidewalks, curb extensions, safer street crossings, bus shelters and benches.

3185 Barnes Road Improvement
Widens street to five lanes from Saltzman Road to 119th Avenue. Project will also include sidewalks and bike lanes.

Forest Grove
Town Center
2000-2005

3184 Cornelius Pass Road Improvements
Widens street to three lanes from Baseline Road to Airport Road and five lanes from Airport Road to Cornell Road. Project will also include sidewalks and bike lanes to improve safety.

3183 Cornelius Road Improvements
Widens street to three lanes from 143rd Avenue to Saltzman Road. Project will also include sidewalks and bike lanes.

2011-2020

3168 Baseline Street/Adair Street
Couplet Intersection Improvements
Installs traffic signals at intersection of 14th Avenue to improve safety.

3170 West Couplet Enhancement
Expands street with boulevard design from 1st Avenue to 10th Avenue, including wider sidewalks, curb extensions, safer street crossings, bus shelters and benches.

Hillsboro inset map
3188 Saltzman Road Improvements
Widens street to three lanes from Cornell Road to Burman Street. This project will include sidewalks and bike lanes.

3191 Cornell Road Intersection Improvements
Modifies intersections at Saltzman Road, Barnes Road, Murray Boulevard and Trail Avenue to make them safer for all modes.

Bethany Town Center 2000-2005

Bethany Boulevard Improvements, Phase 1
Widens street to three lanes from Bronson Road to West Union Road. Project will also include sidewalks, bike lanes and a soundwall.

2011-2020

3198 Bethany Boulevard Improvements, Phase 2
Widens street to five lanes from Bronson Road to West Union Road. This project will include sidewalks and bike lanes.

Farmington Town Center 2000-2005

3213 Farmington Road Improvements
Widens street to five lanes from Murray Boulevard to 172nd Avenue. Project will also include sidewalks and bike lanes.

2006-2010

3222 185th Avenue Bike and Pedestrian Improvements
Constructs bike lanes and sidewalks along one side of street from Kinnaman Road to Blanton Street.

3216 185th Avenue Improvements
Widens street to three lanes from Tualatin Valley Highway to Bany Road. This project will include sidewalks and bike lanes.

3217 Farmington Road Improvements
Widens street to three lanes from 185th Avenue to 20th Avenue. This project will include sidewalks and bike lanes.

2011-2020

3214 Farmington Road Improvements
Widens street to five lanes from 172nd Avenue to 185th Avenue. This project will include sidewalks and bike lanes.

3215 Kinnaman Road Improvements
Widens street to three lanes from Farmington Road to 20th Avenue. This project will include sidewalks and bike lanes.

3220 Farmington TC Pedestrian Improvements
Improves pedestrian safety and access to transit within town center, with wider sidewalks, better crossings, lighting, bus shelters and benches.

Regional Highways 2000-2005

3016 Washington County ATMS
Purchases hardware for new traffic operations center to serve Washington County.

3062 TV Highway System Management
Interconnects traffic signals from Beaverton to Hillsboro to tie into Washington County signal system.

2006-2010

3006 US 26 Improvements
Completes Phase 2 and 3 of US 26 improvements from Camas Court to Milestone Road by adding third through lane and collector distributor system.

2011-2020

3000 Highway 217 Improvements
Adds a north and southbound express lane and/or HOV lane from I-5 to US 26.

3001 Highway 217 Improvements
Widens northbound Highway 217 to three lanes from Tualatin Valley Highway to US 26 with ramp improvements.

3002 US 26/217 Interchange Improvement
Reconfigures interchange with braided ramps.

3009 US 26 Improvements
Widens freeway to six lanes from Murray Boulevard to 185th Avenue, with possible HOV lane.

3025 TV Highway Improvements
Widens highway to seven lanes from Cedar Mills Boulevard to Murray Boulevard, six lanes with limited access from Murray Boulevard to Brookwood Road and five lanes from Brookwood Road to 10th Avenue to limit congestion.

Regional Trails 2000-2005

3071 Fanno Creek Greenway Multi-Use Path
Constructs multi-use path along Fanno Creek Greenway from Allen Boulevard to Denney Road east of Highway 217 and from Highway 217 east to Allen Boulevard near the Scholls Ferry Road intersection.

3013 Bronson Creek Greenway Study
Future study to determine the feasibility of new multi-use trail along Bronson Creek Greenway.

2011-2020

3001 Highway 217 Improvements
Widens northbound Highway 217 to three lanes from Tualatin Valley Highway to US 26 with ramp improvements.

3008 US 26 Improvements
Widens US 26 to three lanes in each direction from Highway 217 to Murray Boulevard.

3061 TV Highway System Management
Interconnects traffic signals from 20th Avenue to Highway 217 to limit congestion and improve traffic flow.

Regional Trails 2000-2005

3013 Bronson Creek Greenway Study
Future study to determine the feasibility of new multi-use trail along Bronson Creek Greenway.

3014 Powerline Beaverton Trail Corridor Study
Completes planning, design and construction of new multi-use trail that connects Bronson Creek Greenway to Farmington Road.

3015 Beaverton Creek Greenway Study
Future study to determine the feasibility of new multi-use trail along Beaverton Creek Greenway.
This map identifies the main focus of each project, however all road expansion projects include bike and pedestrian facilities as part of their design.
GETTING THERE

Urban Clackamas County Transportation Projects

A close-up look at the 20-year regional transportation blueprint for Urban Clackamas County

Metro's goal is to provide a range of transportation choices and to create livable communities now and in the future.

Planned Transportation Projects

Nearly 100 projects and programs have been identified to serve this subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea.

- Conduct a detailed I-205 corridor study to identify and phase implementation of additional transit and road-related improvements needed to enhance interstate travel, particularly goods movement to and from the region and strategies for meeting future general-purpose capacity needs, including possible express lanes, high occupancy vehicle lanes and/or priced lanes.

- Phase Sunrise Highway construction as follows: (a) complete I-205 to Rock Creek segment first, followed by (b) right-of-way acquisition of remaining segments, then (c) construction of Boring to US 26 segment, and (d) last, construction of middle segment from Rock Creek to Boring after the Damascus town center develops. Final highway design should examine use of possible express lanes, high occupancy vehicle lanes and/or priced lanes, as phases are constructed and potential for highway to serve as a "hard edge" for the urban growth boundary in this area. (see Damascus packet for improvements in this corridor)

- Capacity improvements along the Highway 99E/224 corridor, including widening to six lanes with some access management and intersection grade separation and light rail service from Milwaukie to Clackamas regional center. Local TSPs should monitor local collector routes and mitigate spillover effect from traffic congestion along corridor.

- Expand transit service to include rapid bus service along I-205 connecting Oregon City, Clackamas and Gateway regional centers, light rail service from Clackamas regional center to Portland central city, then to Vancouver, Washington, and from Oregon City to Milwaukie, excursion rail service and frequent bus service between Portland and Lake Oswego. Define interim high capacity transit service to serve the Highway 99E/224 corridor from Clackamas regional center to the central city.

- Implement South Willamette River Crossing study recommendations for the Sellwood Bridge.
Conduct a high capacity transit study to examine rail transit opportunities in the Lake Oswego area, including the Macadam/Highway 43 corridor to Portland and existing rail connections from Lake Oswego to Milwaukie and Tualatin.

Retrofit major streets in regional centers and town centers with "boulevard" designs, including 82nd Avenue and Sunnyside Road in Clackamas regional center, McLoughlin Boulevard in Oregon City and Milwaukie and "A" Street in Lake Oswego. Boulevard designs include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

Capacity improvements to streets parallel to I-205, including new overcrossings and street extensions near Clackamas regional center, to better serve local travel and preserve regional mobility along the corridor.

Implement a transportation management association (TMA) with employers in Clackamas, Oregon City and Milwaukie. Consider a TMA and other TDM strategies to address congestion in the vicinity of the Clackamas industrial area.

**Linking land use and transportation**

**The 2040 Growth Concept**

Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land more wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

**The Regional Transportation Plan**

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: boulevard design retrofits, new street connections and capacity improvements, sidewalks and bicycle facilities, pedestrian access to transit and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including Sunrise Highway corridor, I-205, Highway 99E/224 and Highway 213 in Urban Clackamas County.

**For more info**

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the transportation department at trans@metro-region.org
## Priority projects by community

### Clackamas Regional Center

#### 2000-2005

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5065 Clackamas Regional Center TMA Startup</td>
<td>Implements a Transportation Management Association program with employers in the regional center.</td>
</tr>
<tr>
<td>5073 Monterey Improvements</td>
<td>Widens street to five lanes from 82nd Avenue to I-205 and extends street over I-205 to new frontage road east of I-205. This project will include sidewalks and bike lanes.</td>
</tr>
<tr>
<td>5086 82nd Avenue Boulevard Design Improvements</td>
<td>Retrofits street with boulevard design from Monterey Avenue to Sunnybrook Road, including wider sidewalks, curb extensions and safer street crossings.</td>
</tr>
<tr>
<td>5095 Phillips Creek Greenway Trail</td>
<td>Constructs a multi-use trail for bicyclists and pedestrians from Causey Avenue to Mt. Scott Greenway trail.</td>
</tr>
<tr>
<td>District Park Trail</td>
<td>Constructs a multi-use trail for bicyclists and pedestrians from Phillips Creek Trail to Mt. Scott trail.</td>
</tr>
<tr>
<td>5097 Hill Road Bike Lanes</td>
<td>Retrofits bike lanes to existing street from Oatfield Road to Thrusson Road.</td>
</tr>
<tr>
<td>5100 Fuller Road Pedestrian Improvements</td>
<td>Widens street from Harmony Road to King Road to construct new curbs and sidewalks on the west side and new sidewalks were missing on the eastside. This project will include bike lanes.</td>
</tr>
<tr>
<td>5103 Clackamas County ITS Plan</td>
<td>Implements advanced transportation system management and intelligent transportation system plan for county facilities, including signal timing, signal interconnects and traffic control and incident management strategies.</td>
</tr>
</tbody>
</table>

#### 2006-2010

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5066 East Sunnyside Road Improvements</td>
<td>Widens street to five lanes from 127th Avenue to 172nd Avenue.</td>
</tr>
<tr>
<td>5069 Harmony Road Improvements</td>
<td>Widens street to five lanes from Sunnyside Road to Highway 224.</td>
</tr>
<tr>
<td>5072 West Monterey Extension</td>
<td>Constructs two-lane extension of street from 82nd Avenue to Price Fuller Road to improve east-west connectivity by all modes of travel.</td>
</tr>
<tr>
<td>5082 82nd Avenue Multi-Modal Improvements</td>
<td>Widens street to construct sidewalks and bike lanes, better crossings and street lighting. Project also includes new traffic signals.</td>
</tr>
<tr>
<td>5089 Sunnyside Road Bikeway</td>
<td>Retrofits bike lanes to existing street from 82nd Avenue to I-205.</td>
</tr>
<tr>
<td>5091 Causey Avenue Bikeway</td>
<td>Retrofits bike lanes to existing street from I-205 to Fuller Road.</td>
</tr>
<tr>
<td>5094 CTC Connector</td>
<td>Constructs multi-use path for bicyclists and pedestrians from Clackamas regional park to Philips Creek.</td>
</tr>
<tr>
<td>5105 82nd Drive Bicycle Improvements</td>
<td>Widens street from Jennifer Street to Fred Meyer to include bike lanes.</td>
</tr>
</tbody>
</table>

### Clackamas Industrial Area

#### 2000-2005

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5068 Johnson Creek Boulevard Interchange Improvements</td>
<td>Upgrades interchange at I-205 and Johnson Creek Boulevard to include a loop ramp, new northbound on-ramp and realign southbound off-ramp.</td>
</tr>
<tr>
<td>5069 Johnson Creek Boulevard Improvements</td>
<td>Widens street to three lanes and widens bridge over Johnson Creek to improve freight access to I-205.</td>
</tr>
<tr>
<td>5071 Otty Road Extension</td>
<td>Constructs two-lane extension of street from Stevens Road to Valley View Terrace to improve east-west circulation. This project includes sidewalks and bike facilities.</td>
</tr>
<tr>
<td>5074 Causey Avenue Extension</td>
<td>Constructs three-lane extension of street over I-205 to new frontage road east of freeway to improve east-west circulation. This project includes sidewalks and bike facilities.</td>
</tr>
<tr>
<td>5080 Fuller Road Improvements</td>
<td>Widens street to three lanes from Harmony Road to King Road to improve north-south circulation in the regional center area.</td>
</tr>
</tbody>
</table>

### 2011-2020

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5067 Johnson Creek Boulevard Improvements</td>
<td>Constructs two-lane extension of street from 82nd Avenue to Fuller Road to improve east-west circulation. This project includes sidewalks and bike facilities.</td>
</tr>
<tr>
<td>5085 Clackamas RC Bike/Pedestrian Corridors</td>
<td>Constructs bicycle and pedestrian facilities as part of new and existing developments in the Clackamas regional center.</td>
</tr>
<tr>
<td>5101 Clackamas RC Pedestrian Improvements</td>
<td>Retrofits existing streets within regional center to include better sidewalks and street crossings, lighting, curb extensions, bus shelters and benches.</td>
</tr>
</tbody>
</table>

### Citizen view

#### Picture

#### Quote
Clackamas Corridor  2000-2005
5115 Rothe Road Bicycle Improvements
Widens street from River Road to Highway 99E to include shared bike and pedestrian path. This project also installs curbs and drainage.
5117 Linwood Road Bike Lanes
Widens street from Monroe Street to Johnson Creek Boulevard to include bike lanes.

2011-2020
5116 Warner Milne Bikeway
Retrofits street with bike lanes from Central Point Road to Highway 213 to provide access to Oregon City employment area.

Oregon City Regional Center  2000-2005
5148 McLoughlin Boulevard Relocation Study
Future study to evaluate moving the segment of McLoughlin Boulevard from the Clackamas River to the Southern Pacific tunnel to improve access to the Willamette River.
5153 Beavercreek Road Improvements Phase 2
Widens street to five lanes from Highway 213 to Clackamas Community College. This project includes access management, a median, bike lanes and sidewalks.

2006-2010
5128 Oregon City Rapid Bus
Provides rapid bus service from Tigard to Tualatin park-n-ride to Oregon City.
5137 Washington Street Improvements
Retrofits street with boulevard design from Abernathy Road to 5th Street, including wider sidewalks, curb extensions and safer street crossings.

2011-2020
5128 Oregon City Rapid Bus
Provides rapid bus service along I-205 from Vancouver to Oregon City.

Oregon City Corridor  2006-2010
5135 McLoughlin Boulevard Improvements
Boulevard retrofit of street from Clackamas River to Southern Pacific railroad tunnel, including bike lanes, wider sidewalks, curb extensions and better crossings.
5150 Oregon City TMA Startup Program
Implements a Transportation Management Association program with employers in the regional center.

Milwaukie Town Center  2000-2005
5035 McLoughlin Boulevard Rapid Bus
Provides rapid bus service along McLoughlin Boulevard from Milwaukie to Oregon City.
5036 King Road Improvements/34th Avenue Extension
Constructs a two-lane extension of King Road from 32nd Avenue to 42nd Avenue to improve local street connectivity for all modes. This project will include sidewalks, bike lanes and new traffic signals at Oak Street, Monroe Street, Harrison Street and 34th Avenue.

5038 Johnson Creek Boulevard Phase 2 Improvements
Reconstructs street from 32nd Avenue to 45th Avenue. This project will include sidewalks, bike lanes and landscaping along the south side of the street.
5045 Linwood/Harmony/Lake Road Improvements
Modifies intersection to include turn lanes on Harmony and Linwood roads.
5049 McLoughlin Boulevard Improvements
Retrofits street with boulevard design from Highway 224 to River Road, including wider sidewalks, curb extensions and better crossings.
5050 Harrison Street Bikeway
Retrofits bike lanes to existing street from Highway 99E to King Road.
5051 Lake Road Bikeway
Retrofits bike lanes to existing street from 21st Avenue to Oatfield Road.

2006-2010
5040 Railroad Avenue Bike/Ped Improvement
Retrofits bike lanes and sidewalks to existing street from 37th Avenue to Linwood Road.
5046 Railroad Crossing Improvements
Makes railroad crossings at Harrison Street, 37th Avenue and Oak Street safer for all modes of travel.
5062 Milwaukie TMA Startup
Implements a Transportation Management Association program with employers in the town center.

Lake Oswego Town Center  2000-2005
5161 Frequent bus service
Provides frequent bus service along Macadam Avenue from Lake Oswego to downtown Portland.
5169 Trolley Trestle Repairs
Repairs trestles along rail line from Lake Oswego to Portland.
Future study to develop long-term comprehensive traffic management plan for corridor from McVey Road to I-205 to limit traffic congestion, improve traffic flow and address alternative mode needs in the corridor.

Future study to evaluate phasing of future trolley commuter service between Lake Oswego and Portland.

Many improvements to the regional highway system focus on maintaining regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another.
Regional Transit
2000-2005

5001 Transit station and park-n-ride lot upgrades
Constructs, expands and/or upgrades transit stations and park-and-ride lots throughout subarea, including Oregon City, Milwaukie, Gladstone, Happy Valley and West Linn.

Regional Trails
2000-2005

5026 Portland Traction Co. Multi-Use Trail Planning
Completes planning, design and construction of a multi-use trail from Milwaukie to Gladstone.

5032 North Clackamas Greenway Corridor Study
Future study to determine the feasibility of constructing a multi-use trail for bicyclists and pedestrians from Milwaukie to Clackamas regional center.

5033 Willamette River Greenway Corridor Study
Future study to determine the feasibility of constructing a multi-use trail for bicyclists and pedestrians from the Sellwood Bridge to Lake Oswego town center.

2011-2020

5005 Sunrise Highway
Constructs new four-lane highway from Rock Creek/152nd Avenue to 242nd Avenue.

5006 Sunrise Highway
Constructs new four-lane highway from 242nd Avenue to US 26.

5009 I-205 Improvements
Widens freeway to six lanes from West Linn to I-5.

5012 I-205 Bridge Improvements
Widens Oregon City bridge to six lanes with auxiliary lanes in each direction.

5013 I-205 Climbing Lanes
Constructs new southbound truck climbing lane at I-205 bridge from the Highway 43 to 10th Street in West Linn.

5014 I-205 Auxiliary Lanes
Constructs new auxiliary lanes in each direction from 82nd Drive to Highway 212.

5015 Highway 99E/224 Improvements
Constructs one reversible travel lane from Ross Island Bridge to Harold Street and widens highway to six lanes from Harold Street to I-205. Project includes access management strategies along corridor, particularly from Highway 224 to I-205.

5029 Highway 99E/224 Access Management Plan
Develops long-term access management plan for corridor from Tacoma Street to I-205 to limit congestion and improve traffic flow.

5030 Highway 213 Green Corridor Plan
Develops green corridor plan for Highway 213 south of Leland Road to protect rural uses from the impacts of urban travel.

2011-2020

5024 WRBAP Future Phase Project Implementation
Relocates light poles at the Sellwood.

Other improvements to the regional highway system will focus on maintaining access to regional centers like Gresham and Gateway.
Urban Clackamas County Transportation Projects

June 1999

This map identifies the main focus of each project. However, all road expansion projects include bike and pedestrian facilities as part of their design.

Urban Clackamas County Transportation Projects

PRELIMINARY DRAFT

June 17, 1999
REGIONAL TRANSPORTATION PLAN UPDATE

Getting There
South Washington County Transportation Projects
SUMMER-FALL 1999

A close-up look at the 20-year regional transportation blueprint for South Washington County

Metro's goal is to provide a range of transportation choices and to create livable communities now and in the future.

Planned Transportation Projects

More than 70 transportation projects and programs have been identified to serve this subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea.

- Conduct a more detailed Highway 217 corridor study to identify future transit and road-related improvements and construction phasing to address travel demand in the corridor, including possible express lanes, high occupancy vehicle lanes and/or priced lanes. The study should address the competing needs of serving local trips to Washington Square and Beaverton regional centers and longer trips through the corridor. (see North Washington County subarea packet for improvements in this corridor)

- Capacity improvements to streets parallel to Highway 217, including new overcrossings in the vicinity of Washington Square and Tigard, to better serve local travel and preserve regional mobility along the corridor.

- Expand transit service to Washington Square to include commuter rail service from Wilsonville to Beaverton with possible extensions to Salem and downtown Portland via Lake Oswego and Milwaukie, frequent bus service along Hall Boulevard from Tualatin to Tualatin Valley Highway and express bus service from Wilsonville to downtown Portland.

- Retrofit major streets in regional and town centers with "boulevard" designs, including Hall Boulevard and Greenburg Road in Washington Square, Sherwood Road and Oregon Street in Sherwood and Wilsonville Road and Town Center Loop in Wilsonville. Boulevard designs include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

- Conduct a corridor study to further examine phasing implementation of I-5 to 99W connector to the north or south of Sherwood to improve regional access from I-5.

"Boulevard" retrofits
Washington Square
Sherwood
Tualatin
Tigard
Wilsonville

Bicycle and pedestrian facilities
Wider sidewalks
Street lighting and landscaped buffers
Bike lanes
Multiuse paths

Road expansion
I-5 to 99W connector
Highway 217
I-5
New street connections

Transit
Expanded transit service, including commuter rail
Pedestrian access
Bus shelters and benches
Employee commuting programs
to 99W. Phasing should reflect conditions along Tualatin-Sherwood Road and the impacts of congestion on Tualatin town center and adjacent industrial area.

- Capacity improvements to I-5/Nyberg Road interchange and Tualatin-Sherwood Road to maintain adequate access to and from the Tualatin industrial area.

- Conduct a more detailed I-5 South corridor study to identify future travel demand from outside the region and consider high capacity transit solutions to address travel demand in the corridor. Support intercity-transit service to the extent that it benefits the I-5 corridor.

- System management strategies along 99W and new street connections and capacity improvements to streets parallel to 99W to improve local circulation and limit congestion on 99W, including extension of Hall Boulevard across the Tualatin River.

### Linking land use and transportation

#### The 2040 Growth Concept
Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land more wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

#### The Regional Transportation Plan
The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: boulevard design retrofits, new street connections and capacity improvements, sidewalks and bicycle facilities, pedestrian access to transit and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-5 and Highway 217 in South Washington County.

### For more info
To learn more about meetings, hearings and other opportunities for involvement, call Metro’s transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send email to the transportation department at trans@metroregion.org
Washington Square Regional Center
2000-2005

012 Highway 217 Corridor Improvements
Initiate traffic congestion and improve traffic flow along corridor with system management and intersection improvements from Allen Boulevard/Western Avenue to Canyon Road at Walker Road.

014 Greenburg Road Improvements
 Widens street to five lanes from Washington Square Road to Shady Lane. This project includes sidewalks and bike lanes.

319 Oak Street Improvements
 Constructs sidewalks and bike lanes along street from Hall Boulevard to 80th Avenue. This project also upgrades a traffic signal.

124 Washington Square RC Plan
Future study to identify long-range transportation needs for motor vehicle, truck, bike, pedestrian and transit travel in the regional center.

125 Scholls Ferry Road TSM Improvements
Initiate traffic congestion and improve traffic flow along corridor from Highway 217 to 80th Avenue.

6026 Washington Square Regional Center TMA Startup Program
Implements a Transportation Management Association program with employers in the regional center.

6029 Barbur Boulevard Rapid Bus
Provides rapid bus service along Barbur Boulevard from Tigard to downtown Portland.

6009 Highway 217 Ramp Improvements
Widens Greenburg Road off-ramps and installs ramp meters at interchange on-ramps.

6013 Hall Boulevard Improvements
Widens street to five lanes from Scholls Ferry Road to Locust Street. This project includes bike lanes and sidewalks.

6018 Scholls Ferry Intersection Improvement
Realigns intersection at Allen Boulevard to improve safety.

2011-2020

6008 Washington Square Connectivity Improvements
Implements new local street connections based on regional center plan recommendations.

6101 Highway 217 Interchange Improvements
Modifies on and off-ramps at Denny Road to include lights and covered culverts.

6017 Taylors Ferry Road Extension
Constructs three-lane extension of street from Washington Drive to Oleson Road. This project includes bikeways and sidewalks.

6010 Highway 217 Interchange Improvements
Modifies on and off-ramps at Denny Road to include lights and covered culverts.

6022 Washington Square Pedestrian Improvements
Retrofits streets within regional

center to make safer and improve access to transit, including Scholls Ferry Road, Hall Boulevard, Greenburg Road, Oleson Road, Cascade Avenue and intersecting neighborhood streets. This project includes better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

6023 Scholls Ferry Pedestrian Improvements
Makes street safer for pedestrians and improves access to transit from Beaverton-Hillsdale Highway to Hall Boulevard. This project includes better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.
Tigard
Town Center
2000-2005

6027 I-5/217 Interchange
Completes Phase 2 reconstruction of I-5/Highway 217 interchange.

6030 Hall Boulevard Improvements
Widens street to five lanes from Locust Street to Durham Road. This project includes bike lanes and sidewalks.

6033 Walnut Street Improvements, Phase 1
Widens street to three lanes from 121st Avenue to Gaarde Street. This project includes traffic signals.

5046 Walnut Street Improvements, Phase 2
Modifies intersection at Gaarde Street.

5040 72nd Avenue Improvements
Widens street to five lanes from 99W to Hunziker Road. This project includes a median, bike lanes and sidewalks with planter strips.

3051 Hall Boulevard Bikeway and Pedestrian improvements
Retrofitts street from Oak Street to 99W to include bike lanes, sidewalks and better street crossings to improve safety.

3054 Highway 99W Access Management Plan
Develops access management plan for 99W from I-5 to Durham Road.

2006-2010

6028 I-5/217 Interchange
Completes Phase 3 reconstruction of I-5/Highway 217 interchange. Project includes new southbound Highway 217 to northbound I-5 fly-over ramp.

6029 Frequent Bus
New frequent bus service between Tigard, Lake Oswego and Kruse Way.

6034 Walnut Street Improvements, Phase 3
Widens street to three lanes from Gaarde Street to 135th Avenue. This project includes bikeways and sidewalks.

6036 Bonita Road Improvements
Widens street to four lanes from Hall Boulevard to Bangy Road. This project includes bikeways and sidewalks.

6037 Durham Road Improvements
Widens street to five lanes from Upper Boones Ferry Road to Hall Boulevard. This project includes bikeways and sidewalks.

6039 99W Improvements
Widens highway to seven lanes from I-5 to Highway 217 with access management to limit congestion and improve traffic flow.

6041 72nd Avenue Improvements
Widens street to five lanes from Hunziker Road to Bonita Road. This project includes center turn lane, bike lanes and sidewalks.

6042 72nd Avenue Improvements
Widens street to five lanes from Bonita Road to Durham Road. This project includes bike lanes and sidewalks.

6043 Upper Boones Ferry Road
Widens street to five lanes from I-5 to Durham Road.

6047 Highway 217/72nd Avenue Interchange Improvements
Completes interchange reconstruction with additional ramps and a two-lane overcrossing extending from Hunziker Road to 72nd Avenue.

6049 Highway 99W Bikeway
Retrofitts street from Hall Boulevard to Greenburg Road to include bike lanes.

6055 Highway 99W System Management
Interconnects traffic signals along 99W from I-5 to Durham Road to limit congestion, and improve traffic flow.

6056 Highway 99W Intersection Improvements
Modifies traffic signal and adds turn lanes at Hall Boulevard.

King City
Town Center
2000-2005

6059 Beef Bend Improvements
Widens street to three lanes from King Arthur to 131st Avenue. This project includes sidewalks.

6061 King City Sidewalks
Upgrades street from 131st Avenue to Fischer Road to include sidewalks.
2006-2010

6062 King City TC Plan
Future study to identify long-term transportation needs for motor vehicle, truck, bike, pedestrian and transit travel in the town center.

Tualatin Town Center
2000-2005

6064 Frequent bus service
Provides rapid bus service along Hall Boulevard from Tualatin to Tigard.

6066 I-5 Interchange Improvement
Widens Nyberg Road overcrossing to four lanes and widens southbound off-ramp from I-5 to Nyberg Road to limit congestion and improve traffic flow. This project includes sidewalks along the roadway.

6070 Lower Boones Ferry Improvements
Retrofits street from Boones Ferry Road to Bridgeport to include bike lanes, sidewalks and interconnected traffic signals.

6072 Tualatin Road Improvements
Widens street from 115th Avenue to Boones Ferry Road to include sidewalks, bike lanes and safer railroad crossings.

6079 Tualatin TC Pedestrian Improvements
Retrofits streets within town center to include better sidewalks and street crossings, lighting, curb extensions, bus shelters and benches. Streets included in this project are: Nyberg Road, Boones Ferry Road, Tualatin Road, Tualatin Sherwood Road, Sagert Road and intersecting neighborhood streets.

6080 Tualatin River Pedestrian Bridge
Constructs cantilevered pedestrian and bicycle multi-use path on railroad trestle across the Tualatin River from Durham City Park to Tualatin Community Park.

6081 Nyberg Road Pedestrian and Bike Improvements
Retrofits street from 65th Avenue to I-5 to complete sidewalks and bicycle facilities.

6082 Tualatin Freight Access Plan
Develops interim freight circulation plan for the Tualatin industrial area to address traffic congestion and freight access issues in the Tualatin-Sherwood Road corridor.

6085 Wilsonville Express Bus Service
Provides express bus service from Wilsonville Road to downtown Portland.

6086 Kinsman Road Extension
Constructs two-lane extension of street from Kinsman Road to Boeckman Road with sidewalks and bike lanes. This project provides an alternate north-south route parallel to I-5 for local travel needs.

6087 Kinsman Road Extension
Constructs two-lane extension of street from Boeckman Road to Ridder Road with sidewalks and bike lanes. This project provides an alternate north-south route parallel to I-5 for local travel needs.

6090 Boeckman Road Extension
Constructs three-lane extension of street from Boeckman Road to Grahams Ferry Road with sidewalks and bike lanes. This project increases east-west street connectivity to serve local travel needs.

6091 Boeckman Road I-5 Overcrossing
Widens street to five lanes from Parkway Avenue to 100th Avenue. This project includes sidewalks and bike lanes.

Rapidly growing employment areas and town centers along the I-5 corridor, such as Wilsonville, are placing new demands on the freeway. Improvements to both the freeway and parallel routes are included in the strategic system to address these demands, as well as an increased emphasis on transit solutions, such as rapid bus and commuter rail.
5097 Stafford Road Safety Improvements
This project addresses safety issues from I-205 to Boeckman Road.

5101 Wilsonville Road Bikeway
Retrofits street from Rose Lane to Willamette Way West to include bike lanes.

5102 Parkway Avenue Bikeway
Provides signs and re-stripes street from Boeckman Road to Town Center Loop to create wide outside lanes that are shared by bikes and motor vehicles and a center turn lane.

5105 Town Center Loop Bike and Pedestrian Improvements
Retrofits street from Parkway Avenue to Wilsonville Road to include bike lanes and sidewalks.

Sherwood Town Center
2000-2005

Highway 99W Circulation Improvements Study
Future study to evaluate the potential use of frontage roads along 99W to manage access in the corridor, limit congestion and improve traffic flow.

Beech Bend Road Extension
Constructs two-lane extension of street from Scholls Ferry Road to 99W. This extension would be designed with limited access.

Oregon Street Improvements
Widens street to three lanes from Tualatin-Sherwood Road to Murdock Street. This project includes a new traffic signal at Tualatin-Sherwood Road.

2011-2020

4004 Sherwood-Wilsonville Arterial Connector
Constructs interim four-lane arterial connection south of Sherwood from 99W at Brookman Road to Grahams Ferry Road. This project would be designed to have limited access with additional intersections at Baker Street and Laid Hill Road.

5117 Sherwood TC Pedestrian Improvements
Makes street safer for pedestrians and improves access to transit along Sherwood Road, Oregon Street, Pacific Street and intersecting streets. This project includes better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

Murray/Scholls Town Center
2000-2005

6121 Murray Boulevard Extension
Constructs four-lane extension of street from Scholls Ferry Road to Gaarde Street. This project includes sidewalks and bike lanes.

2006-2010

6122 Davies Road Connection
Constructs three-lane extension of street from Scholls Ferry Road to Barrows Road. This project includes bikeways and sidewalks.

Lake Oswego Corridor
2006-2010

6124 Carmen Drive Improvements
Reconstructs and widens street to four lanes from I-5 to Quarry Road to improve access from I-205 to the Kruse Way employment area. This project will include left turn lanes at major intersections.

6125 Bangy Road Improvements
Widens street to four lanes from Bonita Road to Kruse Way to improve internal access and circulation within the Kruse Way employment area. This project will include left turn lanes at major intersections.

6126 Meadows Road Improvements
Widens street to four lanes from Bangy Road to Carmen Drive to improve internal access and circulation within the Kruse Way employment area. This project will include left turn lanes at major intersections.

6127 Boones Ferry Road Improvements
Widens street to five lanes from Kruse Way to Washington Court. This project will include sidewalks and bike lanes.

6128 Carmen Drive Intersection Improvements
Realigns intersection at Meadows Road, including new traffic signal and turn lanes.

6129 Bangy Road Intersection Improvements
Add traffic signals and turn lanes to intersection at Bonita Road.

6130 Bangy Road Intersection Improvements
Add traffic signals and turn lanes to intersection at Meadows Road.

6131 Willamette River Greenway
Constructs a multi-use path for bicyclists and pedestrians from Roehr Park to Tryon Creek.

Lake Grove Town Center
2000-2005

6137 Lake Grove Town Center Plan
Future study to identify long-term transportation needs for motor vehicle, truck, bike, pedestrian and transit travel in the town center.

2006-2010

6133 Bonita Road Improvements
Reconstructs and widens street to three lanes from Bangy Road to Carmen Drive. This project will include sidewalks and bike lanes.

6134 Kruse Way Intersection Improvements
Upgrades traffic signal at Boones Ferry Road intersection.

Regional Transit 2000-2020

6000 Commuter Rail
Provides alternatives analysis, permitting, environmental and design work for commuter rail service from Wilsonville to Beaverton.

6002 Commuter Rail Extension
Extends commuter rail service from Tualatin to Union Station via Lake Oswego and Milwaukie. This project uses existing railroad tracks.

6003 Commuter Rail Extension
Extends commuter rail service from Tualatin to Union Station via Lake Oswego and Milwaukie. This project uses existing railroad tracks.

6006 Transit station and park-and-ride lot upgrades
Constructs, expands and/or upgrades transit stations and park-and-ride lots throughout subarea, including Tualatin, Washington Square, Sherwood, Lake Oswego, King City and Murray/Scholls.

Regional Trails 2000-2020

6007 Fanno Creek Greenway
Planning and PE to extend greenway from Tigard to Tualatin.

6020 Powerline Trail Corridor
Plan, design and construct multi-use path from Farmington Road to the lower Tualatin Greenway.
This map identifies the main focus of each project; however, all road expansion projects include bicycle and pedestrian facilities as part of their design.
A close-up look at the 20-year regional transportation blueprint for Pleasant Valley and Damascus

**Planned Transportation Projects**

Nearly 20 projects and programs have been identified to serve this subarea as it urbanizes during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea. Additional projects will be identified as future planning for this area occurs.

- **Phase Sunrise Highway** construction as follows: (a) complete I-205 to Rock Creek segment first, followed by (b) right-of-way acquisition of remaining segments, then (c) construction of Boring to US 26 segment, and (d) last, construction of middle segment from Rock Creek to Boring after the Damascus town center develops. Final highway design should examine use of possible express lanes, high occupancy vehicle lanes and/or priced lanes, as phases are constructed and potential for highway to serve as a "hard edge" for the urban growth boundary in this area. Configuration of interchange locations should be examined as part of future street plans for the urban reserve areas and incorporated in the final DEIS for the highway.

- Complete a future street plan of arterial and collector streets adequate to serve expected growth in the Pleasant Valley and Damascus area while protecting environmentally sensitive areas and adjacent rural reserves from the impacts of urbanization. This plan may include a major north/south axis that links 172nd Avenue to Highland Drive at 182nd Avenue and other possible street connections. The plan will also address the potential impact of traffic generated in Pleasant Valley/Damascus urban reserves on southwest Gresham neighborhoods.

- Expand transit service to include rapid bus service along Powell/Foster Road to downtown Portland, frequent bus service from Pleasant Valley to Gresham along Eastman Parkway/Towlie Road and from Damascus to Clackamas regional center along Sunnyside Road and primary bus service along 172nd Avenue.
Further evaluate how to implement high capacity transit service along the Powell/Foster Road corridor given the right-of-way constraints in the corridor.

- Capacity improvements to major routes, including 172nd Avenue, Foster Road, Sunnyside Road, Towle Road, 190th Avenue and Highland Drive.

**Total Costs by mode and mode distribution**

**Metro Boilerplate**

**Linking land use and transportation**

**The 2040 Growth Concept**

Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land more wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

**The Regional Transportation Plan**

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: boulevard design retrofits, new street connections and capacity improvements, sidewalks and bicycle facilities, pedestrian access to transit and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including Sunrise Highway corridor in the Damascus area.

**For more info**

To learn more about meetings, hearings and other opportunities for involvement, call Metro’s transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the transportation department at trans@metro-region.org
Priority projects by community

Pleasant Valley and Damascus Town Centers 2000-2005

1228 Powell Boulevard/ Foster Road HCT Corridor Study
Future study of the potential for high-capacity transit service or other improvements from the Ross Island Bridge to Damascus town center to address travel demand in the corridor.

7013 Foster Road Corridor Plan
Future study to identify right-of-way and transportation needs along Foster Road corridor from I-205 to Highway 212 in Damascus.

70* Damascus/Pleasant Valley Future Street Plan
Develops future street plan for Damascus/Pleasant Valley urban reserves to serve planned growth in the area. Throughout the 20-year planning period, implement multi-modal local and collector street system as development occurs.

Damascus Town Center 2006-2010

7001 Sunnyside Road Improvements
Widens street to three lanes from 172nd Avenue to Highway 212. This project includes sidewalks and bike lanes.

7002 Frequent bus service
New frequent bus service along Sunnyside Road from Clackamas regional center to Damascus.

7003 Rapid bus service
New rapid bus service along Powell/Foster Road corridor from downtown Portland to Damascus.

7004 SE Foster Improvements
Widens street to three lanes from 136th Avenue to Jenne Road.

7005 SE Jenne Road Improvements
Widens street to three lanes from Foster Road to Powell Boulevard.

7006 190th Avenue Improvements
Realigns 190th Avenue to 142nd Avenue at Sunnyside Road to provide additional access into town center.

7007 SE 145th/147th Bike Lanes
Widens street from Clatsop Street to Monner Road to include bike lanes.
7012 Highland Corridor Plan
Future study of Highland Drive from Powell Boulevard to Foster Road to develop a corridor plan to address north-south access to urban reserves.

7015 Towle/Eastman Corridor Plan
Future study of Towle Road/Eastman Parkway from Powell Boulevard to 190th Avenue to develop a corridor plan to address north-south access to urban reserves.

7016 Jenne Road Traffic Management Plan
Develops comprehensive traffic management plan for street from Powell Boulevard to Foster Road to manage the impacts of planned growth in the urban reserves.

Pleasant Valley and Damascus Town Centers 2011-2020

7010 SE 162nd Avenue Bike Lanes
Widens street from Monner Road to Sunnyside Road to include bike lanes.

7011 SE Monner Bike Lanes
Widens street from 147th Avenue to 162nd Avenue to include bike lanes.

7020 Regner/222nd Corridor Plan
Future study to develop traffic management plan for street from Roberts Avenue to Highway 212 to manage the impacts of planned growth in nearby urban reserves and identify an urban-to-urban connector route that serves the corridor.

7024 Transit station
Constructs new transit station in support of expanded transit service to this area.

Sunrise Highway 2000-2005

5003 Sunrise Highway
Constructs new four-lane highway from I-205 to Rock Creek/152nd Avenue. Project includes construction of interchanges at 122nd Avenue and 152nd Avenue and modification of I-205 interchange.

5004 Sunrise Highway R-O-W Preservation
Preserves right-of-way for future four-lane highway from 152nd Avenue to 242nd Avenue.

2011-2020

5005 Sunrise Highway
Constructs new four-lane highway from Rock Creek/152nd Avenue to 242nd Avenue.

5006 Sunrise Highway
Constructs new four-lane highway from 242nd Avenue to US 26.
This map identifies the main focus of each project, however all road expansion projects include bike and pedestrian facilities as part of their design.
SOUTH WILLAMETTE RIVER CROSSING STUDY
Findings and Recommendations Report

May 1999

Prepared by Metro's Transportation Department
Metro

If you live, work and play in the metropolitan area, Metro regional services matter to you and your family. That's because Metro is working to help ensure that you have

- access to nature
- clean air and water
- balanced transportation choices
- safe and stable neighborhoods
- access to arts and culture
- a strong regional economy
- resources for future generations

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INTRODUCTION

The South Willamette River Crossing Study was initiated to recommend multi-modal crossing improvements during the next 20 years for the Willamette River corridor between the Marquam Bridge in Portland and the I-205 Bridge in Oregon City. Metro’s Joint Policy Advisory Committee on Transportation has developed recommendations for the South Willamette River Crossing Study for public comment. JPACT is a forum for local and regional elected officials and representatives of agencies involved in transportation to resolve transportation needs in this region.

This report summarizes the findings from the South Willamette River Crossing study and presents JPACT’s recommendations for crossing improvements. After public review of the recommendations in this report, JPACT and the Metro Council will adopt final recommendations for inclusion into Metro’s 20-year Regional Transportation Plan. Funding to implement South Willamette River Crossing Study recommendations will compete with funding for other projects in the plan.

Metro leads transportation planning studies that transcend local government boundaries and involve roadways owned by more than one jurisdiction or agency or in corridors that can be served by multiple modes of transportation. Metro’s role in the study has been to bring jurisdictions and the public together to agree on crossing improvements that support regional growth management strategies.

During the course of this study, Metro has worked with the public and elected officials in jurisdictions most affected by existing crossing conditions. These include representatives from the cities of Gladstone, Lake Oswego, Milwaukie, Oregon City, Portland and West Linn; Multnomah and Clackamas counties; and Tri-Met and Oregon Department of Transportation.

The following sections in this report present a study summary and recommendations, describe the need for the South Willamette River Crossing Study, the study process, study assumptions, the evaluation methodology and the findings.
SUMMARY AND RECOMMENDATIONS

Metro’s Joint Policy Advisory Committee on Transportation has recommended improvements for public comment in the South Willamette River corridor. The Metro Council and JPACT are seeking public comment on the recommendations contained in this report. In developing these recommendations, JPACT collected input from elected officials and the public in the jurisdictions most affected by the crossing options.

The South Willamette River Crossing Study was initiated to identify needed improvements for motor vehicles, transit, bicycles and pedestrians across the Willamette River between the Marquam Bridge in Portland and the I-205 Bridge in Oregon City.

Given other regional transportation funding priorities and potential community impacts, no new bridge crossing capacity is recommended in either the Sellwood or Milwaukie/Lake Oswego areas during the next 20 years. Instead, regional traffic movements will continue to focus on the Ross Island and I-205 bridges. The study identifies needed projects at these locations plus other demand management and land-use strategies to address anticipated traffic growth for the study area. Study recommendations are illustrated on Figure 1 and presented in detail on page 6. Public comment on these recommendations is being accepted until June 15, 1999. A public hearing will be held on June 14, 1999.

What is Metro’s role?

Metro leads transportation planning studies that transcend local government boundaries, involve roadways owned by more than one jurisdiction or agency and corridors that can be served by multiple modes of transportation. Metro’s role in this study is to bring jurisdictions and the public together to agree on crossing improvements that best support regional and local growth management and transportation strategies. During the course of this study, Metro has worked with the cities of Gladstone, Lake Oswego, Milwaukie, Oregon City, Portland and West Linn; Multnomah and Clackamas counties; Tri-Met and the Oregon Department of Transportation.

Why study crossing improvements?

The Sellwood Bridge is the only river crossing between the Ross Island and the I-205 bridges, a distance of 10 miles. As such, it plays a significant role in the transportation system.

Built in 1925, the Sellwood Bridge is nearing the end of its lifespan. For safety and service, the bridge needs to be upgraded or replaced. The lanes and sidewalks are too narrow, and the bridge requires increasingly more maintenance. The study has addressed the question of whether the cost to maintain the bridge will become more expensive in the long term than the cost to replace it.

The study also addressed whether the bridge should be widened to increase its capacity if it were replaced. Alternatively, should a new bridge be built at a different location?
Recommendations

1. Preserve existing Sellwood Bridge or replace it as a 2-lane bridge with better service for bike and pedestrian travel.

2. Consider improvements to the Ross Island and I-205 bridges in a different study.

3. Increase motor vehicle capacity on regional facilities, such as McLoughlin and Highway 224.

4. Mitigate traffic on Tacoma Street, Highway 99E in Milwaukie and on A Avenue and Highway 43 in Lake Oswego.

Other recommendations

• Increase transit services and improve bicycle and pedestrian facilities in the corridor.

• Bring more jobs to Clackamas County.

Not recommended

A. Replace the Sellwood Bridge with a 4-lane crossing.

B. Fully rehabilitate the existing Sellwood Bridge or use the bridge for bikes and pedestrians only.

C. 2- and 4-lane bridge crossings in Clackamas County at north Lake Oswego, Marylhurst or Milwaukie.

Figure 1  Recommended Crossing Improvements for the South Willamette River Corridor
Who uses the Sellwood Bridge?

The Sellwood Bridge primarily serves Portland, Milwaukie and Lake Oswego, and other areas of Multnomah and Clackamas counties. The bridge provides little service to areas east of I-205. These cities and counties have grown significantly in the past 73 years since the bridge opened; bridge traffic and congestion have grown as the population increased. Clackamas County population, for example, has grown tenfold since the bridge was built, and Multnomah County population has doubled, as shown in Figure 2.

Trip destination studies show that half of the traffic on the bridge is going between Clackamas County and Portland. The rest of the traffic involves various destinations around the tri-county area, as shown in Figure 3.

What options in the Sellwood Bridge area did the study consider?

Metro initiated the South Willamette River Crossing Study in 1994 with a series of public meetings and workshops to solicit comments on the nature of the crossing problem and potential improvement options. The public identified more than 20 crossing options for consideration in the study. In 1997, the Joint Policy Advisory Committee on Transportation and Metro Council adopted a short list of options for evaluation that had the greatest potential to address the crossing problems at the Sellwood Bridge and support land-use goals.
Options studied:

- Modifications to the existing Ross Island Bridge to reduce bottlenecks at its west end and to increase the bridge to three lanes each way.

- Alternative preservation strategies of the existing Sellwood Bridge:
  1. in its current configuration
  2. upgraded to meet seismic, bike and pedestrian standards
  3. close it to traffic but leave it open as a bicycle and pedestrian-only facility.

- Replacement of the Sellwood Bridge as a two- or four-lane facility.

- A new crossing in Clackamas County in Milwaukie, North Lake Oswego or near Marylhurst College as a two- or four-lane facility.

- Additional transit services and programs that reduce travel demand.

Key crossing evaluation factors included the recognition of the need:

- for bridge alternatives to be sensitive to community needs within the study area. In particular, the need for Tacoma Street to support a mixed-use, pedestrian-friendly type of urban character through the Sellwood business district, for McLoughlin Boulevard to serve a similar function through downtown Milwaukie and Highway 43 and for A Avenue to serve this function through downtown Lake Oswego.

- to focus capacity investments in regional facilities (I-205, US 26, Highway 99E) to serve regional traffic in the Southeast Corridor rather than establishing a new cross-regional route between I-5 and I-205. Regional plans do not propose new regional routes between I-205 and I-5.

JPACT recommendations for further consideration

JPACT has developed a recommendation to address motor vehicle, transit, bicycle and pedestrian access across the river and is seeking public comment on them. The recommendations are:

- The region can best support growth management goals for Southeast Portland by either preserving the existing Sellwood Bridge in its current condition or replacing it as a two-lane bridge. If the bridge is replaced, it should be of high aesthetic quality. In either case, the bridge should be improved to better meet the needs of pedestrians and bicycles. Further assessment of costs versus impacts of replacement versus rehabilitation should be considered in the environmental impact statement phase. Further environmental analysis is required prior to a decision to build.

- Instead of adding capacity in the Sellwood or Milwaukie/Lake Oswego area, actions to meet traffic needs should focus on:
  - Mitigating traffic growth on Tacoma Street, Highway 99E in Milwaukie and on State Street in Lake Oswego where traffic conflicts with land-use goals.
  - Increasing transit services and improving transit, bicycle and pedestrian facilities on either side of the river and across the river to support alternatives to driving. The region should consider investments in more east-west bus routes, bus priority treatment, improved transit between central Portland and Clackamas County to reduce traffic demand, and the potential use of the existing railroad bridge for passenger rail and/or bike/pedestrian improvements.
  - Increasing motor vehicle capacity on appropriate regional facilities in order to direct traffic away from areas of conflict with land-use goals, such as improvements to McLoughlin Boulevard, Highway 224 and I-205.
In the long term, efforts should focus on bringing more jobs to Clackamas County to reduce the need to travel across the river for work trips.

The region should further consider improvements to the Ross Island Bridge and to the I-205 Corridor/Oregon City Bridge but not as an alternative to addressing the needs of the Sellwood Bridge. Analysis showed that improvements to the Ross Island and I-205 bridges would not reduce travel demand on the Sellwood Bridge but could support other regional growth management goals.

**JPACT recommended options to be set aside**

JPACT has recommended that the following options be set aside and *not* considered further:

- Pursuit of crossings at North Lake Oswego or near Marylhurst as either two- or four-lane bridges as they do not address South Willamette River crossing needs or other land-use goals.
- A new river crossing in Milwaukie. Such a crossing would reduce demand at the Sellwood Bridge but would not be the best way to support Milwaukie's land-use goals and would significantly change the character of existing communities on both sides of the river.
- Full rehabilitation of the existing Sellwood Bridge to bring it to current design standards because the costs would be greater than replacement costs.
- Using existing Sellwood Bridge for bicycles and pedestrians only (i.e., closed to traffic) as it would not address South Willamette River crossing needs or support land-use goals.

**Next steps**

- **Adoption process:** JPACT is seeking public comment until June 15 on these recommendations. There will be a public hearing before JPACT and the Metro Council’s Transportation Planning Committee on Monday, June 14. The Metro Council will adopt a final decision sometime in July and forward recommendations for inclusion into the Regional Transportation Plan (RTP) currently being developed.

- **Implementation:** Prior to any bridge replacement or major bridge improvements, additional environmental studies would be needed. Funding of the recommended options will need to compete for funding with other transportation projects in the region, as identified in Metro’s Regional Transportation Plan.
As defined in this study, the South Willamette River corridor extends for 12 miles between the Marquam Bridge (I-5) in Portland and I-205 Bridge in Oregon City. Located within this corridor are the cities of Portland, Milwuakie, Gladstone, Oregon City, West Linn and Lake Oswego, and Multnomah and Clackamas counties. The four-lane Ross Island, two-lane Sellwood and two-lane Oregon City bridges also cross the river in the corridor. The Sellwood Bridge is the only crossing in the corridor for approximately 10 miles between the Ross Island and I-205 bridges. Figure 4 illustrates the study corridor within the region.

2040 Growth Concept for the corridor

The 2040 Growth Concept is the adopted vision for accommodating population and employment growth in the metropolitan region. Within the South Willamette River corridor, the 2040 Growth Concept targets growth for the Portland central city, the Oregon City regional center and the Milwaukie regional center. Reducing speeds and increasing pedestrian crossings on McLoughlin Boulevard is a key part of Milwaukie regional center plans. The growth concept designates West Linn and Lake Oswego as town centers with a target for less intense development than regional centers.

The growth concept designates several areas in the corridor as main streets, a land-use designation that supports mixed-use development and a pedestrian-friendly character. Tacoma Street in the Sellwood community east of the Sellwood Bridge, A Avenue in downtown Lake Oswego and Nevada Street in the Johns Landing area are examples of main street land-use designations within the corridor.

Other portions of the corridor are targeted for less intense growth. On the east side of the river, the residential area along River Road and commercial area along McLoughlin Boulevard between Milwaukie and Gladstone are examples of areas planned for lower levels of density. On the west side of the river, the residential area along Highway 43 is an example of areas planned for lower density. The 2040 Growth Concept areas are shown on Figure 5 for the corridor.

Mobility needs generated by the 2040 Growth Concept

Bridges have played an important part in the development of downtown Portland, the Sellwood community and other parts of the region. The estimated population and employment growth accommodated in the 2040 Growth Concept will increase the demand to cross the river. On a daily basis, by 2015, people will cross the river more than 900,000 times in the metropolitan region. Metro expects about 79 percent of these trips to be made by people driving alone and the rest by walking, bicycling, sharing a ride or using transit.

In the South Willamette River corridor, travel demand to cross the river during peak hours exceeds the available crossing capacity for vehicles. As a result, the bridges are congested, particularly in the morning and afternoon peaks. In the coming years, Metro expects the congestion to extend over a longer time in the afternoon and affect both east and west bound traffic, not just traffic in the peak direction. The amount of delay for each vehicle will increase. Vehicle hours of delay in the afternoon peak is forecast to be 44 percent of the total vehicle hours traveled on the Sellwood Bridge.
Figure 4  Study Area Within Regional Context
Figure 5  2040 Growth Concept Areas in the Corridor
For the two-hour afternoon period, Metro projects that the South Willamette River bridges and many of the roads leading to them will be congested at levels that are unacceptable or grossly unacceptable in 2015 and exceed policy standards. Metro’s regional policies measure congestion during a two-hour afternoon period (between 4 and 6 p.m.). Different levels of congestion are acceptable in different areas. In the central city, regional centers, town centers and mixed-use areas, higher levels of congestion are accepted than in less dense areas because more travel alternatives are available. The Sellwood Bridge is expected to be at “grossly unacceptable” congestion levels for the peak two hours in both directions. Regional congestion thresholds are identified in the RTP as either preferred, acceptable or grossly unacceptable. The latter indicates essentially stop-and-go traffic during the two-hour afternoon peak. Conditions on both Highway 43 and Tacoma Street, leading to and from the Sellwood Bridge, are also expected to be congested, though largely in the peak direction. The other crossings are expected to be congested in the peak direction.

In addition to motor vehicle delay, congestion in the corridor creates conflicts with land-use goals. Congestion on Tacoma Street, A Avenue in Lake Oswego and McLoughlin Boulevard in downtown Milwaukie conflict with plans that reduce traffic flows with additional pedestrian crossings and more mixed-use development. Congestion also sends spillover traffic onto neighborhood streets that are not designed for through traffic leading to additional traffic and safety problems.

The lack of bridge capacity also contributes to longer vehicle trip lengths in the corridor. The average trip length for peak-hour vehicle trips in the metropolitan area is 5.5 miles. Because of the need for out-of-direction travel, average trip length for river crossings in the corridor are longer than the average for all trips. On the Sellwood Bridge, the average trip length for peak-hour trips is 8.3 miles or more than 50 percent longer than the regional average. Figure 6 illustrates the average trip length for the bridges in the corridor for 2015.

The Oregon State Land Conservation and Development Commission has established a goal for regions to reduce the vehicle miles traveled per capita during the next 20 years. Like other regions in the state, Metro has implemented policies to help reduce trip lengths and shift trips to other modes.

### The Sellwood Bridge condition and use

The Sellwood Bridge is safe today but is nearing the end of its planned life span. Built in 1925, the bridge is considered structurally old and the lanes and sidewalks are narrow. The two 11-foot travel lanes on the bridge do not meet today’s standards for vehicular traffic. In addition to routine deck replacement, painting and repair, the bridge needs to be upgraded to meet seismic standards. Although the bridge is currently stable, Multnomah County, which owns and maintains the bridge, monitors conditions at the west end of the bridge as a result of a shift in the piers that occurred in the 1960s. These conditions raise the question of the cost-effectiveness of continuing to preserve the existing bridge compared to the cost of replacing it.

In 1985, Multnomah County imposed weight restrictions as a means to extend the life of the bridge. Prohibiting trucks weighing more than 26,000 pounds from using the bridge limits commercial vehicle use of the Sellwood Bridge. The restriction is not as significant as it could be because the bridge is not part of a key freight route. The bridge lacks direct access to industrial areas and the steep grade on Southwest Taylors Ferry Road from Highway 43 to I-5 is difficult for large trucks to negotiate.

The single 4-foot, 3-inch sidewalk on the north side of the bridge does not meet today’s standards for bicycle and pedestrian traffic. The significance of this limitation for bicycles and pedestrians has increased as the bicycle and pedestrian system has become more developed on both sides of the river, including improvements to the region’s Springwater Corridor trail. Previous studies have
looked for low-cost opportunities to improve pedestrian and bicycle conditions on the bridge. None have been found. The only recommendation that has emerged from previous studies was to relocate and consolidate the light standards. This would free six more inches of sidewalk space at a few spots on the bridge.

The Sellwood Bridge is used by people from throughout the region. About half of the use of the bridge in the afternoon peak is for trips between Portland and Clackamas County. Another 17 percent is for trips between the east and west side of the river in Portland, 7 percent between the east and west sides of the river in Clackamas County and 26 percent between either Portland or Clackamas and Washington counties.

The areas that use the bridge fall primarily between I-205 on the east, Highway 217 on the west, Tualatin and West Linn on the south and downtown Portland on the north. Figure 7 illustrates the origin and destination zones for people who use the Sellwood Bridge. The figure illustrates the concentration of bridge use that is higher in the areas closest to the bridge.

The role of the Sellwood Bridge in meeting regional travel demands conflicts with the role of Tacoma Street in meeting its main street land-use designation. With traffic volumes of about 3,500 vehicles per hour on the two-lane bridge, traffic on Tacoma Street is higher than for other main streets in the region. Tacoma Street is not designed for high traffic volumes. Its 60-foot width includes sidewalks on both sides of the street, two traffic lanes and two parking lanes, which are used for traffic during peak hours. Plans for Tacoma Street call for reducing its capacity to encourage additional pedestrian crossings and mixed-use development.
Figure 7  Sellwood Travel Shed
THE STUDY PROCESS

The South Willamette River Crossing Study process has included several levels of screening and analysis with opportunities for public comment at each stage. These stages are illustrated in Table 1. The major stages were identifying the problem and options, screening and evaluating the options.

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-94</td>
<td>Southeast Corridor Study and Regional Transportation Plan identify need for study</td>
</tr>
<tr>
<td>1994</td>
<td>South Willamette River Crossing initiated – public identifies crossing needs and options</td>
</tr>
<tr>
<td>1995-97</td>
<td>Screening process analyzes potential for crossing options to meet travel demand and avoid direct environmental impacts to parks, streams, schools, cemeteries and historic sites</td>
</tr>
<tr>
<td>1997</td>
<td>JPACT/Metro Council adopt options for evaluation</td>
</tr>
<tr>
<td>1998</td>
<td>Evaluation develops travel forecasts and costs of options and assesses potential support for 2040 Growth Concept</td>
</tr>
<tr>
<td>1999</td>
<td>JPACT develops recommendations for public comment</td>
</tr>
<tr>
<td>1999</td>
<td>JPACT/Metro Council adopt recommendations and include recommendations in Regional Transportation Plan (anticipated)</td>
</tr>
</tbody>
</table>

Initial problem and option identification

In 1989, the Metro Council adopted recommendations of the Southeast Corridor Study that called for an examination of travel constraints across the Willamette River and the need for new bridge capacity. The Southeast Corridor Study, led by Metro, analyzed the growth in east/west traffic in lower Southeast Portland and in Milwaukie and evaluated the need for additional arterial capacity between Highway 99 and I-205. During the study, analysis revealed that travel across the river affected arterial congestion levels throughout the southeast corridor.

The Interim Federal Regional Transportation Plan, adopted by the Metro Council in 1995, identified the need for additional study in the southeast corridor to evaluate the adequacy of Willamette River crossings. Metro began the current study of the South Willamette River crossings in September 1994.

Metro initiated the South Willamette River Crossing Study with a series of public meetings and workshops to identify crossing problems and possible solutions. This process identified more than 20 possible options for consideration in the study. Initial review of the options identified those that had potential to meet crossing de-
mands and that avoided directly affecting park lands, a cemetery or national historic site, did not require tunneling or had multi-modal elements. Table 2 and Figure 8 describe these options and their merit for further consideration in the study. A public comment report, released in 1995, summarizes public comments on these initial issues.

Screening process

JPACT and the Metro Council screened the remaining options from the initial outreach effort to select a set of options for evaluation in the study. The screening process considered the potential of the option to meet the river crossing demands in the corridor. Options that had potential to meet travel demand were further evaluated in terms of how well they could meet demand and how well they could support the 2040 Growth Concept in the full evaluation.

The screening process analyzed travel sheds in the corridor. A travel shed identifies the area of the majority of bridge use. Options that had the potential to compete with the Sellwood Bridge travel shed were considered to have potential to help meet crossing demand in the corridor. The analysis showed that the I-205 travel shed had very little overlap with the Sellwood Bridge travel shed, while the Ross Island and Sellwood Bridge travel sheds overlapped to a greater extent. This suggested that many I-205 improvements would serve a different market than the Sellwood Bridge and would have little effect on Sellwood Bridge traffic. The full evaluation of the options confirmed this theory by documenting that options farthest to the north and south of the Sellwood Bridge had little effect on Sellwood Bridge traffic. Figures 9 and 10 illustrate the travel shed, or the areas that predominately use, the different bridges.

The screening process also considered the opportunity for the crossings to connect with regional instead of local streets and to avoid designated parklands or sensitive environmental areas. The National Environmental Policy Act requires all prudent and feasible options be considered before recommending an alternative that impacts parks and other environmental areas. In anticipation of conducting a NEPA analysis on any of the options, options with direct impacts to parklands were set aside. Figure 11 summarizes options JPACT and the Metro Council recommended for further analysis and to be set aside as a result of the screening process (Resolution 97-2529). Public comments on these options and on the issues in the South Willamette River Crossing Study are included in a public comment report published in 1997.

As part of the screening process, JPACT and Metro Council recommended that the I-205 corridor should not be studied in the context of the study. Instead they recommended that I-205 should be studied in the context of supporting Oregon City and West Linn development and access plans and in terms of meeting long-distance state and regional travel needs. In addition, the Metro Council requested that the study consider the effect of adding a southbound lane on I-205 west of the river on the demand for a crossing in the South Willamette River corridor. A sensitivity test revealed that the additional lane on I-205 west of the bridge did not affect demand for crossings farther to the north.

Description of the options evaluated in the study

Options approved by JPACT and the Metro Council for further study included modifications to the Ross Island Bridge, replacement and rehabilitation of the existing Sellwood Bridge, and new crossings in Clackamas County. In addition, JPACT and the Metro Council adopted an option for further study that would reduce the need for crossing improvements by reducing vehicular crossing demand. The study refined the options based on engineering feasibility and the need for connections to Highway 99E on the east and Highway 43 on the west. Figure 12 shows the options evaluated in the study as described below:

(A) Improve approaches to the west end of the Ross Island Bridge. This option reduces the
<table>
<thead>
<tr>
<th>Title and Description</th>
<th>Carry Forward</th>
<th>Set Aside</th>
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<tbody>
<tr>
<td>1. Remove bottlenecks at bridgeheads at existing Ross Island Bridge</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2. Remove bottlenecks at bridgeheads at existing Ross Island Bridge and add auto capacity</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>3. New Caruthers Bridge south of Marquam Bridge</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4. New bridge near Holgate</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5. Replace Sellwood Bridge</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>6. New bridge along Ochoco rail alignment</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7. New bridge between Milwaukie and Riverwood</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>8a. New bridge parallel to (former) Southern Pacific alignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8b. New bridge south of (former) Southern Pacific alignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. New bridge between South Lake Oswego and Oak Grove</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>10a. Add auto capacity and improve bicycle and pedestrian facilities on I-205 bridge</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>10b. Add new capacity to Oregon City Bridge in addition to adding auto capacity and improving bicycle and pedestrian facilities on I-205 bridge</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>11. Expand bicycle, pedestrian and vehicle capacity on Sellwood Bridge, improve westside approaches and connect Sellwood to I-5 north of Terwilliger via tunnel</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>12. New bridge between Highway 43 and the Waverly County Club, then via tunnel to Highway 224</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>13. New bridge between A Avenue in Lake Oswego to River Road in Oak Grove</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>14. New bridge from Highway 43 through George Rogers Park to River Road in Oak Grove and upgrade McVey Avenue to a Parkway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. New bicycle and pedestrian-only bridge from Mary S. Young State Park in West Linn to the Jennings Lodge area</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>16. New road through Tryon Creek State Park from Highway 43 to Boones Ferry Road</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>17. New road between Highway 99E and I-205 along Tideman Johnson Park and Johnson Creek</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Figure 8  Potential River Crossings
Figure 9  Travel Sheds for Sellwood and Ross Island Bridges
Figure 10 Travel Sheds for Sellwood and I-205 Bridges
Multi-modal river crossings recommended for further study

Multi-modal river crossings not recommended for further study

Set aside until evaluation of Option 1-a and Option 2 is complete

Figure 11 JPACT/Metro Council Adopted Screening Recommendations
Figure 12 Study Options

- **A**: Improved Approach to the West End of Ross Island Bridge.
- **B**: Additional Ross Island Bridge Capacity with a New Bridge.
- **C**: Replacing or Rehabilitating the Existing Sellwood Bridge.
- **D**: New Crossing between Hwy 43 and Hwy 99E at Milwaukie.
- **E**: New Crossing North of Lake Oswego between Hwy 43 and Hwy 99E via Courtney.
- **F**: New Crossing Near Marylhurst between Hwy 43 and Hwy 99E via Concord.
- **G**: Transportation Demand Management/Additional Transit Service (not shown).
bottleneck at the west end of the bridge and reroutes traffic around the Corbett/Lair Hill neighborhood.

**B** Improve approaches to the Ross Island Bridge (as in option A) and additional lanes on a new parallel bridge. Ramps from the Ross Island crossing connect to I-405 directly on the west and to Highway 99E on the east.

**C** Replace or rehabilitate the existing Sellwood Bridge. Replacement options include a two-lane and four-lane bridge. On the west, the replacement options shift the interchange with Highway 43 to the north and straighten the ramps. For the four-lane bridge, one variation widens Highway 43 to six lanes between Taylors Ferry Road and the bridge and widens Tacoma Street from the bridge to Highway 99E with on street parking, wider sidewalks, bike lanes, traffic lanes and turn lanes. Another variation does not widen Highway 43 and widens Tacoma Street only at Southeast 17th for a turn lane. Rehabilitation options include: maintain the bridge in its current configuration; maintain to meet today's seismic, vehicle, pedestrian and bicycle standards; and close it to traffic but leave it open as a bicycle and pedestrian-only facility.

**D** Add a new two or four-lane crossing between Highway 43 on the west and Milwaukie on the east. Variations of this option include direct access to Highway 224 and access to Highway 99E only.

**E** Add a new two- or four-lane crossing north of Lake Oswego between Highway 43 and Highway 99E via Courtney Road. To accommodate demand, cost estimates for the four-lane bridge option include widening Courtney Road to four lanes, grade separating Courtney Road at River Road and an interchange with Courtney Road at Highway 99E.

**F** Add a new two- or four-lane crossing near Marylhurst College between Highway 43 and Highway 99E via Concord Road. To accommodate demand, the four-lane bridge option widens Concord Road from two lanes to four lanes.

**G** Implement transportation demand management programs and additional transit services to reduce river crossing demand. In addition to transit increases that are part of all options, this option includes additional light rail, commuter rail, additional east-west transit service, employer commute reduction programs and other programs to reduce vehicular travel demands.
The evaluation year for the South Willamette River Crossing Study is 2015, a 20-year planning horizon from the initial year of the study. The study made several assumptions about population and employment, the future transportation network and transit services and about factors that affect the potential for bicycling and walking trips for year 2015.

**Population and employment forecasts**

The study used regional population and employment allocations developed for the year 2015.

Within the Portland/Vancouver urbanized area, the population forecast for 2015 is 2.2 million and the employment forecast is 1.5 million. Figure 13 and Table 3 show the population and employment forecasts for areas in the region. The population growth for the corridor, in districts 1 and 4 on the map, average 20 percent between 1994 and 2015, which is lower than the regional average growth of 46 percent. The employment in the corridor increases 60 percent between 1994 and 2015, which is about average for the region.

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</thead>
<tbody>
<tr>
<td>1. Close in Clackamas County (Lake Oswego, West Linn, Milwaukie, Gladstone)</td>
<td>129,850</td>
<td>160,580</td>
<td>23.7%</td>
<td>63,220</td>
<td>120,980</td>
<td>91.4%</td>
</tr>
<tr>
<td>2. Washington County and NW Portland west of 1-405</td>
<td>385,675</td>
<td>639,175</td>
<td>65.7%</td>
<td>269,420</td>
<td>462,805</td>
<td>71.8%</td>
</tr>
<tr>
<td>3. Outer Clackamas County (east of I-205), East Multnomah County (east of I-205 and south of 1-84), Oregon City</td>
<td>290,195</td>
<td>458,455</td>
<td>58.0%</td>
<td>124,915</td>
<td>203,070</td>
<td>64.2%</td>
</tr>
<tr>
<td>4. SW Portland and SE Portland (south of Holgate and west of I-205)</td>
<td>150,410</td>
<td>175,095</td>
<td>16.4%</td>
<td>66,980</td>
<td>86,845</td>
<td>29.7%</td>
</tr>
<tr>
<td>5. N/NE/SE Portland and Clark County (includes N. Portland, Vancouver and SE Portland north of Holgate)</td>
<td>540,035</td>
<td>753,300</td>
<td>39.5%</td>
<td>423,115</td>
<td>621,850</td>
<td>47.0%</td>
</tr>
<tr>
<td>Totals</td>
<td>1,496,165</td>
<td>2,186,605</td>
<td>46.1%</td>
<td>947,650</td>
<td>1,497,550</td>
<td>58.0%</td>
</tr>
</tbody>
</table>
Figure 13  Five Districts for Population and Employment Forecasts
Transportation system

The study assumed transportation system improvements as specified in the Interim Federal Regional Transportation Plan (1995). For the South Willamette River corridor by 2015, these include:

- Turn lanes on Johnson Creek Boulevard as needed from Southeast 45th to Southeast 82nd and traffic management on Johnson Creek Boulevard from Southeast 36th to Southeast 45th
- New traffic signal and intersection improvements at Highway 43 and Terwilliger Boulevard, at A Avenue and at McVey Avenue
- I-5/217 interchange and ramp reconstruction
- New interchange at I-205/Highway 224 as the first part of the Sunrise Corridor
- Additional auxiliary lanes from Southeast Powell to Southeast Foster on I-205
- New Sunnybrook extension road from Southeast 82nd to Sunnyside Road at 108th
- New I-205 frontage road from Sunnyside Road to Southeast 92nd
- New Monterey overpass over I-205 to the frontage road

Transit service levels

For transit, the study assumed an increase in service hours beyond the currently funded level. Consistent with RTP objectives, the study assumed an average annual increase of 2.5 percent service hours compared to a currently funded annual increase of 1.5 percent service hours. Within the corridor, the additional service hours support more east-west service, service in areas currently without service and increases in service frequency on other routes. The study assumed that transit would shift to use the new crossing options. In addition, the study assumed that light-rail transit will extend from Clackamas Town Center in the south to Vancouver, Wash., in the north by 2015. Figure 14 illustrates the regional transit service network that the study assumed as a base for all of the options.

Mixed-use and intersection density factors

Metro's regional travel forecasting model projects the number of walking and bicycling trips based on the type and density of land uses and intersection density. Based on policy direction in adopted plans, this study assumed mixed-use development as proposed in the 2040 Growth Concept and a greater level of intersection densities than currently exist. As a result, this study assumed a greater share of bicycling and walking trips than currently exist.
LEGEND

- 2015 Base transit routes (includes new routes across river)
- New transit service in the 2015 Base (in areas currently without transit service)
- Existing light rail transit
- Future (2015) light rail transit to the Portland airport and between Vancouver, Wash., and Clackamas Town Center

* The 2015 Base Transit Network includes a 2.5% annual increase in transit service hours over 1994 levels.

Figure 14 Base Transit Assumptions
In the evaluation, the study considered travel demand forecasts, engineering feasibility and cost estimates, and the effect of the crossing and its impacts on the 2040 Growth Concept. This section describes the evaluation measures that JPACT considered in developing its recommendation and the methodology for forecasting travel demand, impacts and costs for the options.

Evaluation measures

The evaluation considered how well the crossing options would meet demand for travel across the river and how well they would support land-use plans and policies. Measures that JPACT considered in developing recommendations include:

- **The effect on daily river crossings for all modes.** This measure illustrates the effect that the crossing option would have on meeting the demand for crossing the river. It is a measure of daily crossings on all bridges from the St. Johns Bridge to the Oregon City Bridge and includes all modes.

- **The effect on vehicle miles traveled (VMT) per capita.** This measure illustrates how bridge options would result in more or less personal travel.

- **Access to 2040 Growth Concept areas targeted for growth.** Improving vehicular access could support development in areas that are or are not targeted for growth in the 2040 Growth Concept. This measure considers the potential for the options to serve the 2040 Growth Concept areas in the corridor based on their effect on vehicular access.

- **Effect on community and development plans.** This measure considers the effect of the crossing option on community and development plans. The measure considers the effects of the crossing structure itself and the additional traffic volumes on existing neighborhoods and planned development. This measure shows that options that improve vehicular access, even to areas targeted for growth, may conflict with specific community and development plans by increasing traffic volumes.

- **Effect on Sellwood and other bridge traffic.** This measure considers how effective the options would be on reducing the demands on the existing Sellwood Bridge and directly serving the crossing needs in the corridor. The evaluation also considered the effect on other bridges in the region.

- **Other traffic impacts.** This measure identifies the potential changes in traffic volumes on other roads in the corridor and identifies impacts that would require mitigation if the option were eventually constructed. The evaluation identified traffic volume and levels of service changes on Highway 43 and Highway 99E and on east and west roads leading to each crossing. This study did not identify modifications needed to meet additional traffic demand on these roads. Such analysis would be needed in the next stage of study for the recommended options.

- **Costs.** This measure includes capital costs for different bridge types and approaches for those options that add capacity and preservation or replacement costs for those options that do not add new capacity. Costs are presented in 1998 dollars.

Travel forecasting methods

The study used Metro's regional travel forecasting model to estimate the changes in travel demand and travel patterns with the options. The travel forecasting model forecasts trip generation based on the population and employment forecasts and estimates a mode share for each trip. The model assigns vehicle trips to the transportation network based on the shortest travel times. The assignment reflects the availability of cross-
ings and congestion on the system. The model reflects the shifts in travel patterns that people would make if new capacity were available. More people would cross the river if a crossing were available. Similarly, the model estimates a greater share of travel on transit in corridors with improved service, thereby reflecting a reduction in traffic.

In the 1990s, Metro conducted a regional travel behavior survey and used the information to update the model. This information helps Metro forecast how people link different trip purposes together into one trip and shift travel patterns due to changes in congestion, parking prices and other factors. Travel forecasts for the South Willamette River Crossing Study used this updated travel behavior information.

The travel forecasts were used to assess how well the option would meet the crossing demand and support land-use plans and policies. The Travel Forecast Results Report is available that summarizes, for each option, the effect of the options on:

- person trips crossing the river
- mode share
- transit ridership
- bridge traffic volumes
- trip distribution for people using the bridges and other streets
- vehicle miles traveled per capita
- vehicle hours of delay on the bridges and other facilities
- traffic levels of service on bridges and other facilities
- travel demand across screenlines to the east and west of the river and on Highways 43 and 99E
- accessibility

The travel forecasts assumed that a two-lane Sellwood Bridge would exist in combination with all other options except for the option that converts the Sellwood Bridge to bicycle and pedestrian access only and that replaces the existing bridge with a four-lane bridge. The crossing recommendation could include any combination of the options for further study.

Costing estimates

Engineers from David Evans and Associates, on contract for this study, assessed the feasibility of and developed costs for the crossing options. Feasible crossing locations were defined as those that would meet design standards, including grades for the crossing and ramp connections at bridge ends. The analysis assumed the minimum amount of street closures and property acquisitions for each crossing while still avoiding environmentally sensitive properties, including schools, parks, historic sites and cemeteries. The cost estimates reflect a range of widths and ramp design on crossing approaches and different bridge construction styles. Cost estimates were developed for a cable-stayed bridge on the high end of costs and a post-tensioned segmental concrete box girder bridge at the low end. Figures 15 and 16 illustrate standard cross sections and the different bridge construction styles used in the cost estimates. For more information on cost estimates, the Engineering Summary Report prepared by Evans and Associated, is available for the South Willamette River Crossing Study.

The capital cost estimates include the crossing itself and the approaches and connections at either end from the bridge structure west to Highway 43 and east to Highway 99E. The cost estimates also include pedestrian and bicycle facilities on the crossing and connections with these facilities onto the highways. The cost estimates do not include improvements on other roads that would be needed to accommodate additional traffic due to the crossing. Measures to mitigate impacts from additional traffic would be developed if the crossing were recommended for further study.

For the options that preserve the existing Sellwood Bridge, the estimated life-cycle costs include non-routine costs associated with older steel truss bridges. Routine costs, which would be common to any bridge new or old, such as deck cleaning, bridge inspections and similar work, are not included. The 100-year period reflects the expected life span of modern concrete bridges. The costs were developed with the assistance of
the Multnomah County Bridge Division and reflect available bridge condition records.

The cost to preserve the existing bridge in its current condition includes maintenance of repairs from vehicle collisions, structural deck overlays, bridge bearing replacements, bridge painting, and a Phase 1 seismic upgrade that ties the superstructure to its supports to prevent dropping the bridge during an earthquake. Major rehabilitation projects in the cost estimate include new ramps for the west approach, new illumination, retrofit of the sliding foundations on the west end of the bridge, repair of concrete on the east approach structure, replacement of the timber inspection walkway, replacement of bridge rails and installation of a deck drainage system to prevent discharge into the river.

The cost to rehabilitate the existing bridge to meet current standards includes the costs of preserving the bridge in its current condition plus the cost to widen the bridge in addition to the cost to replace the east approach spans. The bridge would have the same cross-section as the other two-lane crossings studied, including two 14-foot traffic lanes, two 6-foot bicycle lanes and two 6-foot sidewalks. The full rehabilitation costs also assume Phase 2 seismic upgrade, which strengthens the footings and columns to prevent failure of the supports in a major earthquake. The full rehabilitation would allow trucks to use the bridge.

The cost estimate to preserve the bridge as a bicycle- and pedestrian-only facility does not include any seismic work on the bridge or major rehabilitation items and would involve closing the bridge to motor vehicle traffic.

**Figure 15** Typical Structures and Roadways Assumed for Cost Estimates

Source: David Evans and Associates
Figure 16  Bridge Construction Styles Assumed for the Cost Estimates

Cable-stayed bridge

Post-tensioned segmental concrete box girder bridge
This section presents the South Willamette River Crossing Study findings for options that offer no new river crossing capacity and options that add river crossing capacity. This section also presents the findings for the transportation demand management strategies and additional transit service option. The section analyzes how the options support land-use and transportation goals using the travel forecasts and engineering feasibility study. More information on the travel forecast results and the engineering feasibility is available in separate reports. All comparisons are to a 2015 “no-build” condition. The “no-build” assumes only projects identified in the 1995 RTP as previously described.

Findings for no new river crossing capacity options

Options that offer no additional river crossing capacity include the preservation options for the existing Sellwood Bridge, replacement of the Sellwood Bridge as two-lane bridge and modifications to the west ramps of the existing Ross Island Bridge. Key findings for these options are summarized in Table 4 and are:

Daily river crossings (St. Johns to I-205)

• Use of the Sellwood Bridge for bicycles and pedestrians only would not help meet the vehicular crossing demand in the corridor. The lack of a crossing would result in 5 percent fewer trips across the river daily. The other options that do not add capacity would not affect the number of people crossing the river daily in the region.

Vehicle miles traveled (VMT) per capita

• Use of the Sellwood Bridge for bicycles and pedestrians only would slightly increase the vehicle miles traveled per capita. The longer trip lengths that would result from the loss of the Sellwood Bridge to vehicular traffic would slightly increase VMT per capita. The other options that do not add capacity would not affect VMT.

Access to 2040 Growth Concept areas targeted for growth

• Options that do not add capacity would not increase vehicular access to 2040 Growth Concept areas targeted for growth. Without additional capacity, relative vehicular access to 2040 growth concept areas would not change. Closing the Sellwood Bridge to vehicle traffic would reduce relative access to targeted areas.

Effect on community and development plans

• The two-lane Sellwood Bridge, either replaced or rehabilitated, would better support plans for mixed-use development and pedestrian-friendly environment on Tacoma Street than a four-lane bridge. Even with a two-lane bridge, forecast traffic volume increases on Tacoma Street will conflict with community and development plans for the Sellwood area. A four-lane bridge would attract even more traffic. Because of this, the two-lane crossing would be more compatible with Tacoma Street plans than a four-lane crossing.

• The replacement of the existing Sellwood Bridge would require additional right-of-way, primarily west of the bridge. The engineering analysis assumed that if the bridge were replaced, the west ramps would be realigned. If the recommendation is to replace the bridge, additional analysis of community and environmental impacts would be required.

• Use of the Sellwood Bridge for bicycles and pedestrians only would not help meet goals for increasing mixed-use development on Tacoma Street. Without vehicular access on the bridge, traffic volumes would decrease by 80 percent on Tacoma Street, reducing the access this area
<table>
<thead>
<tr>
<th>Option</th>
<th>Effect on daily river crossings (St. Johns to I-205)</th>
<th>Effect on VMT per capita</th>
<th>Auto access to 2040 Growth Concept areas targeted for growth</th>
<th>Effect on community and development plans</th>
<th>Effect on Sellwood Bridge traffic</th>
<th>Other traffic impacts</th>
<th>Preservation or replacement costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sellwood Bridge for bike/pedestrian use only</td>
<td>Reduces river crossings by 5 percent</td>
<td>Increases VMT/capitaby .48 percent</td>
<td>Reduces access to Tacoma St. and Macadam area main streets</td>
<td>Lower traffic levels may affect Sellwood development</td>
<td>No cars on bridge, reduces traffic on Tacoma Street to 82 percent of existing traffic. Improves bike/pedestrian access</td>
<td>Increases traffic at other crossings</td>
<td>$23 million</td>
</tr>
<tr>
<td>Preserve Sellwood Bridge to maintain current use</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>$40 million</td>
</tr>
<tr>
<td>Improve Sellwood Bridge to current standards</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>Allows truck use, improves bike/pedestrian access</td>
<td>No change</td>
<td>$72 million</td>
</tr>
<tr>
<td>Replace Sellwood Bridge with 2-lane bridge</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>Affects community at east and west bridge ends; no change on Tacoma main street</td>
<td>Allows truck use, improves bike/pedestrian access</td>
<td>No change</td>
<td>$45-59 million</td>
</tr>
<tr>
<td>Modify West-end Ramps at Ross Island Bridge (No Sellwood Bridge changes)</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
<td>Supports plan for Corbett/Lair Hill/Terwilliger neighborhood; no change on Tacoma main street</td>
<td>No change</td>
<td>No change</td>
<td>$11 million</td>
</tr>
</tbody>
</table>

*Comparisons are to the “no-build” condition with a 2-lane Sellwood Bridge*
needs to maintain business and provide for desired development. Businesses in the Sellwood area indicate a severe drop in business would likely result from closure to traffic.

- Modifying the west approach to the Ross Island Bridge would support community development plans in the Corbett and Lair Hill neighborhoods. The option would redirect traffic west of the bridge away from the Corbett and Lair Hill neighborhood and support land-use plans for this area. The city of Portland is evaluating the costs and benefits of various design options for these modifications.

**Effect on Sellwood and other bridge traffic**

- Modifying the west approach to the Ross Island Bridge would have little effect on meeting river crossing demand in the corridor. The traffic flow improvements, though helpful in reducing delay at the Ross Island Bridge, would not shorten travel times enough to shift traffic from the Sellwood Bridge to the Ross Island Bridge.

- Use of the Sellwood Bridge for bicycles and pedestrians only would increase demand on other crossings. Without the Sellwood Bridge, other Willamette River bridges would carry slightly more traffic, adding to congestion elsewhere.

**Other traffic impacts**

- These options will not improve roadway levels of service on the crossings or on other roads leading to the crossings. Forecasts show that congestion on roadways in the corridor will increase over time.

**Costs (in 1998 dollars)**

- The cost to preserve the existing Sellwood Bridge in its current condition during the next 100 years would be comparable to the costs of replacing it as a two-lane bridge. The cost estimate is $40 million to preserve the bridge in its current condition and $45 to $59 million to replace it as a two-lane bridge. Replacement of the existing Sellwood Bridge would bring the pedestrian and bicycle facilities up to current standards and allow trucks to use the bridge while preserving the bridge would not. Improving the bicycle and pedestrian facilities on the existing bridge may be possible but it would add to the cost. Previous analyses have not identified any easy low-cost bicycle/pedestrian improvements.

- The cost to preserve the existing Sellwood Bridge to meet current standards would be greater than replacement costs. The cost would be $72 million to rehabilitate the Sellwood Bridge to meet current standards. Full rehabilitation of the existing bridge would bring the pedestrian and bicycle facilities up to current standards and allow trucks to use the bridge.

- Using the Sellwood Bridge for bicycles and pedestrians would cost less than other options. The cost to retain the Sellwood Bridge for 100 years as a bicycle- and pedestrian-only facility is estimated at $23 million. As noted, vehicular crossing demands however, would not be met.

**Findings for new river crossing capacity options**

Options that would add river crossing capacity include addition of two lanes on the existing Ross Island Bridge, replacement of the Sellwood Bridge as a four-lane bridge and new crossings in Clackamas County. Key findings for these options are summarized in Table 5 and are:

**Daily river crossings (St. Johns to I-205)**

- All crossings with additional capacity would increase travel across the river and help meet crossing demand in the corridor. New crossings in Clackamas County would attract more new trips across the river than options that add capacity to existing crossings. The crossing at North Lake Oswego would attract the most new daily crossings with an increase of 5 percent. The crossings at Marylhurst and Milwaukie would attract 3 percent more new crossings daily. Adding capacity at Ross Island
help Lake Oswego meet its growth targets. The Marylhurst crossing option near the development site would conflict with the project's feasibility.

• In areas not targeted for growth, the added capacity options would conflict with the character of existing neighborhoods. For example, the new crossings in Clackamas County would conflict with the existing neighborhoods to the west and east of the river. Bridge and ramp structures and increased traffic on Concord, Courtney, River Road and other roads leading to the new crossing would affect the character of these residential neighborhoods.

Effect on Sellwood and other bridge traffic

• The Milwaukie crossing would reduce traffic volumes on the Sellwood Bridge and improve the level of service on the bridge. The Milwaukie crossing would reduce demand for the Sellwood Bridge by 44 percent and reduce congestion levels on the Sellwood Bridge and Tacoma Street from grossly unacceptable to preferred. Other crossing options to the north and south would have less effect on the Sellwood Bridge. The North Lake Oswego crossing would reduce demand on the Sellwood Bridge by 16 percent and improve the level of service on Sellwood Bridge in the off-peak direction only. The Marylhurst crossing would reduce demand on the bridge by 6 percent and the Ross Island Bridge option would reduce it by 2 percent. Neither would improve level of service on the Sellwood Bridge.

• The Marylhurst and Ross Island crossings would reduce traffic demand on other bridges. The Marylhurst crossing would reduce demand on the I-205 Bridge by 6 percent to 8 percent and the Ross Island crossing option would reduce demand on other crossings in downtown Portland by less 1 percent.

• The two-lane crossings in Clackamas County would operate at unacceptable levels of service. Demand for a new crossing is strong enough that a new two-lane crossing in Clackamas County would operate at unacceptable levels of service in the peak hours in 2015. This forecast assumes a new two-lane crossing in addition to the existing two-lane Sellwood Bridge.

• The four-lane Sellwood Bridge would reduce delay for vehicles on the bridge but would increase delay on Highway 43, Tacoma Street and other roads leading to the bridge. With the added Sellwood Bridge capacity, the percent of bridge vehicle hours of delay would drop from 44 percent to 6 percent of vehicle hours during the afternoon peak two hours on the bridge. The option would increase traffic by 15 percent on the bridge, which would increase delay on other roads.

• The new crossings in Clackamas County would serve Clackamas County trips, primarily west of I-205. For the Milwaukie crossing, peak hour trips that start and end in Clackamas County would be 17 percent of the total crossing traffic. For the crossings to the south, for the crossing near Marylhurst, 55 percent of the peak trips would start and end in Clackamas County west of I-205.

Other traffic impacts

• The added capacity options would increase traffic volumes on roads leading to the crossing in proportion to the amount of new crossing trips they would attract. Because adding river crossing capacity would shift use of other bridges, not all trips on the new bridge would be new trips. Travel demand would be greatest for roads leading to the crossings for the crossings that add the most new trips. At the high end, in the afternoon peak two hours, the four-lane North Lake Oswego crossing would add about 2,800 new vehicles eastbound on roads leading to Highway 43, or about a 33 percent increase on these roads. East of Highway 99E and River Road, this option would add 3,500 new vehicles in the peak two hours or an increase of 23 percent. At the low end, the
four-lane Sellwood Bridge would add about 1 percent to the existing volumes both east of Highway 99E and west of the Highway 43. With the exception of Highway 224, these roads are not designated for increasing traffic capacity and if any of the options that add capacity were carried forward for further study, these traffic impacts would need to be addressed.

- The added capacity options would increase traffic volumes and shift congested locations on Highway 43 and Highway 99E. For example, the Milwaukie crossing would increase southbound traffic on McLoughlin Boulevard in Milwaukie by 7 percent but reduce volumes on Highway 99E south of Tacoma Street by 16 percent. Likewise, the North Lake Oswego crossing would increase traffic on Highway 43 near Terwilliger by 75 percent but decrease southbound traffic on Highway 43 further to the south.

Costs (in 1998 dollars)

- The four-lane Sellwood Bridge cost would range from a low of $59 million to a high of $106 million. The lower cost reflects the least expensive bridge style and addition of a turn lane on Tacoma Street at Southeast 17th to accommodate increased turning movements. The higher cost reflects the more aesthetic bridge style and widening on both Highway 43 between the bridge and Taylors Ferry and on Tacoma Street between the bridge and Highway 99E.

- The four-lane Clackamas County crossings would range from $114 million to $157 million. In addition, funding would be needed to preserve or replace the existing Sellwood Bridge. The costs reflect a full interchange with the crossing at Highway 43. The range reflects various ramp connections to Highway 224 in the Milwaukie crossing, widening of Courtney Road and an interchange with Courtney Road at Highway 99E in the north Lake Oswego crossing and widening Concord Road with the Marylhurst crossing. The ranges also reflect the two bridge styles.

- The Ross Island Bridge with added capacity option would range from $113 million to $131 million. The cost includes ramp connections between the crossing and Highway 99E on the east and connections between the crossing and I-405/US 26 on the west. In addition, funding would be needed to preserve or replace the existing Sellwood Bridge.

**Transportation demand management and additional transit services**

This option was developed to determine how much of the river crossing demand could be met by increasing efforts to reduce vehicular demand. This option assumed increased transit services and other programs that reduce vehicular use beyond that which was included with the other options. These assumptions included:

- Additional transit service hours that would result in a 3.8 percent annual increase in service hours or about two and one-half times the level currently funded.

- Higher parking prices throughout the region to encourage transit use.

- Lower transit fares through employer-sponsored transit pass programs.

- Additional east-west transit services and more frequent service on other routes.

- Passenger rail service on the existing freight rail bridge between Lake Oswego and Milwaukie and along the Lake Oswego trolley line.

- Extension of the South/North light-rail line from Clackamas Town Center to Oregon City.

- Success in the ECO rule resulting in reduction of trips in the peak hours.
Key findings from this option are:

- The option would increase transit ridership by 10 percent, including a 10 percent increase for trips across the river. This would increase the daily transit use for trips across the river from 91,000 to 99,500 from the Fremont to I-205 bridges. In the afternoon peak two hours, this would add about 370 transit riders westbound and 1,730 riders eastbound across the river.

- The increase in transit use would reduce the auto mode share by less than 1 percent and would not change the level of service at the river crossings. Though important in increasing the number of trips across the river without the cost of a new crossing, the shift would be less than 1 percent of the total of the single-occupant vehicle mode share. The increase in transit use would occur over all crossings and not reduce the vehicle demand at any one crossing enough to affect level of service measures.

- The demand management efforts and additional transit services alone would not improve crossing facilities for bicycle and pedestrian use. This study did not assess the feasibility or cost of a stand-alone pedestrian and bicycle structure. It is possible that a bicycle- and pedestrian-only facility could be developed in conjunction with other options.

The demand management efforts and additional transit services option would contribute to meeting the crossing demand and support the 2040 Growth Concept. It would not require new structures or generate new traffic demand. The crossing recommendation combines elements of this option with other options.