MEETING: Washington County Coordinating Committee (WCCC)
DATE: Monday, June 18, 2018
TIME: 12:00 – 1:30 p.m.
LOCATION: Beaverton Library Cathy Stanton Conference Room
12375 SW 5th St., Beaverton

AGENDA

1. Visitors Comments (5 min)

2. Introductions (5 min)

✓ 3. Consideration of WCCC Minutes for May 14, 2018 Action (5 min)

4. Future of Port of Portland
   Purpose: Receive an update on the future plans for the Port of Portland, including the Hillsboro Airport Master Plan.
   Presenters: Curtis Robinhold, Executive Director, Port of Portland

✓ 5. Portland Metro Value Pricing Feasibility Analysis
   Purpose: Review and discuss performance evaluation, recommendations and mitigation measures being considered.
   Presenters: Judith Gray, ODOT

✓ 6. MSTIP Opportunity Fund Request
   Purpose: Review and take action on Washington County’s requests for $1.2 million to serve as local match for a USDOT Advanced Transportation & Congestion Management Technologies Deployment (ATCMTD) grant program.
   Presenter: Andrew Singelakis, Washington County
   Stacy Shetler, Washington County

* 7. MPAC Agenda
   Presenter: Mayor Peter Truax, City of Forest Grove

* 8. JPACT Agenda
   Presenter: Mayor Denny Doyle, City of Beaverton

9. Other Business and Agency Updates
   - SMART Program Enhancement Strategy
   - Region 1 ACT
   - ODOT Summer Construction
   - Washington County Summer Construction
   Washington County in partnership with Clean Water Service, Tigard and Willamette Water Supply developed an online tool GetUsThere.org to relay information about current construction projects.

Department of Land Use & Transportation
Office of the Director
155 N First Avenue, Suite 350, MS 16, Hillsboro, OR 97124-3072
phone: 503-846-4530 • fax: 503-846-3588
www.co.washington.or.us/lut • lutdir@co.washington.or.us
# Washington County Coordinating Committee

## 2018 MEETING SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>Monday, July 16</td>
<td>Beaverton Library, Cathy Stanton Conference Room</td>
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<tr>
<td>Monday, August 13</td>
<td>Beaverton Library, Cathy Stanton Conference Room</td>
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<tr>
<td>Monday, September 17</td>
<td>Beaverton Library, Cathy Stanton Conference Room</td>
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<tr>
<td>Monday, October 15</td>
<td>Beaverton City Hall, Council Chambers</td>
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<tr>
<td>Monday, November 5</td>
<td>Beaverton City Hall, Council Chambers</td>
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<tr>
<td>Monday, December 17</td>
<td>Beaverton Library, Cathy Stanton Conference Room</td>
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</tbody>
</table>

- ✓ Material included in packet
- * Material will be distributed at the meeting
- ^ Material available electronically and/or distributed in advance of the meeting
WASHINGTON COUNTY COORDINATING COMMITTEE
POLICY GROUP SUMMARY
MAY 14, 2018

Voting Members
Roy Rogers, Washington County, Chair
Jef Dalin, City of Cornelius
Joyce Barnard, City of Beaverton
Ken Gibson, City of King City
Steve Callaway, City of Hillsboro

Gery Schirado, City of Durham
John Cook, City of Tigard
Keith Mays, City of Sherwood
Peter Truax, City of Forest Grove
Tim Knapp, City of Wilsonville

Non-Voting Members
Kathryn Harrington, Metro

Attendees
Stephen Roberts, Washington County
Andy Shaw, Metro
Chris Ford, Metro
Don Odermott, City of Hillsboro
Dyami Valentine, Washington County
Faye Douangchit, ODOT
Jes Larson, Metro
Julia Hajduk, City of Sherwood
Luke Pelz, City of Beaverton
Marc Soucie, City of Beaverton
Rob Dixon, City of Hillsboro
Teresa Dunham, WEA

Chris Deffebach, Washington County
Bob Terry, Washington County Commissioners
Dave Unsworth, TriMet
Dwight Brashear, SMART/Wilsonville
Erin Wardell, Washington County
Jeff Pazdalski, WTA
Joel Cvetko, Washington County
Ken Rencher, Washington County
Malu Wilkinson, Metro
Mark Ottenad, City of Wilsonville
Steve Kelley, Washington County
Theresa Cherniak, Washington County

Chair Rogers called the Washington County Coordinating Committee (WCCC) meeting to order at 12:05 p.m.

Visitor Comments
None
Consideration of WCCC Minutes for April 16, 2018

Motion: Mayor Cook moved to approve the minutes for the April 16 WCCC meeting. Mayor Mays seconded.

Vote: With all present members voting in favor, the motion passed unanimously.

TIF and TDT Expenditure Requests

City of Beaverton sought approval for expenditure of $971,000 in TIF funds and $3.65 million in TDT funds for three projects on the TDT Project List:

- Western Avenue (5th to Allen): reconstruct existing 4-lane road into a 3-lane multimodal road and upgrade signals at intersections.
- Hocken Avenue (railroad tracks to TV Highway): add a southbound lane, bike lanes, and sidewalks, as well as reconstruct traffic and railroad signals.
- Beaverton Creek Regional Trail (Cedar Hills to Lombard): construct a new 10-foot wide off-street, multi-use pathway from Lombard Ave to Hall Blvd, including installation of sharrows (bike-shared lane markings) along Crescent St, Rose Biggi Ave, and Westgate Dr.

WCCC TAC recommended approval of these requests at their May 3 meeting.

Motion: Ms. Barnard moved to approve the funding requests. Mayor Callaway seconded.

Vote: With all but one present member voting in favor, the motion passed. Mayor Dalin abstained.

SW Corridor Update

Chris Ford of Metro presented an update on the SW Corridor Plan. Dave Unsworth of TriMet was also on-hand to answer member questions.

The plan relies on some underlying assumptions about the corridor: In an area where 255,000 people go to work every day, that expects 70,000 more residents by 2035, the result will be 13-17 hours of congestion a day on I-5 between Portland and Tigard if something isn’t done to relieve traffic volumes.

An initial route proposal is required for evaluation in the Draft Environmental Impact Statement (DEIS). Of the two route options left on the table (through & branched), the through route will be studied as the initial route proposal, because it offers better connectivity between Tigard and Tualatin, better transit service for Downtown Tigard, and has a lower operating cost, along with more cost-effective and reliable operations.

Mr. Ford explained the initial route proposal in greater detail. Through South Portland, the line would straddle Barbur Blvd, offering a shorter connection to Marquam Hill, faster travel times, and fewer property impacts, along with creating an opportunity to address necessary Ross Island Bridgehead improvements. However, there is a modification that suggests avoiding the Barbur
viaducts, in order to reduce construction impacts, avoid historic and park impacts, and reduce cost. The line will continue along Barbur, until it moves directly adjacent to I-5 at the Barbur Transit Center. This will avoid a complex project to reconstruct the Barbur Blvd bridge over I-5. A suggested modification would shorten the I-5 crossings to lower cost and reduce construction impacts. As the line enters the Tigard Triangle, it would straddle Ash Ave, serving the triangle with two stations, and avoiding traffic impacts at Hall & 99W. A suggested modification would follow Elmhurst and place a station downtown east of Hall Blvd, to avoid property impacts and prevent crossing Hall twice. South of downtown Tigard, the route straddles a freight rail line to I-5 at Bridgeport Village, where it terminates.

Capital costs are estimated at $2.6-2.8 billion. Up to half of this will be federal funding through FTA New Starts, with the other half coming from local sources.

The DEIS will be published in June, at which point a comment period will begin and run through the summer. A locally preferred alternative (LPA) will be recommended in August, with hearings to be held in October to consider adding the final route to the 2018 RTP Update. Project development will begin in 2019, with TriMet taking the lead. Voters will decide on a regional funding measure in 2020, and federal funds should be secured by 2022. The line is projected to be open by 2027.

Member comments:
- Inquiry as to how much planning had been done for last-mile transit service connections. Have intersections with WES rail been considered? Have park & ride locations and capacity been studied?
  - Mr. Ford: Connection to WES will likely occur in Tigard. A 1,000-space park & ride is being planned for Bridgeport Village, along with one at 53rd Ave. in Portland.
  - Mr. Unsworth: The new MAX line may accommodate up to 3,600 park & ride spaces. Coordination will integrate the line with bus service, as well as connections with SMART and Uber & Lyft.

Potential Regional Affordable Housing Measure
Metro Councilor Kathryn Harrington introduced this topic. Metro has convened a Stakeholder Advisory Group and Technical Advisory Group to develop a framework for an affordable housing bond measure to be placed on the 2018 ballot. The magnitude of this effort hinges on passage of an amendment to the Oregon Constitution, allowing use of public dollars to construct affordable housing. A significant portion of the bond’s revenue will go to local jurisdictions, with 10% reserved for Metro’s regional land acquisition efforts. This money could be utilized to purchase property along the new SW Corridor light rail to preserve for transit-oriented affordable development. The goal of the measure is to provide housing for those not currently being served by the private market.
Jes Larson of Metro outlined the draft framework in further detail. Metro plans to refer to the region’s voters a general obligation bond for construction of affordable housing in 2018. The draft framework includes the following key components:

- **Core values**
  - Lead with a focus on racial equity
  - Prioritize people not served by the private market
  - Access to opportunities
  - Prevent displacement
  - Create mixed-income communities, with a variety of housing types
  - Make good use of public dollars

- **Overall impact**
  - Total homes & people served: 2,000 homes (about 6,300 people) without constitutional amendment; 3,200 homes (about 10,000) if constitutional amendment is passed.
  - Recommended scope: $516.5 million general obligation bond
  - Average annual cost to Portland-area homeowner: less than $50/year

- **Eligible activities**
  - Acquisition of land for affordable homes
  - Acquisition and rehabilitation of low-cost market rate housing for conversion to permanently regulated affordable homes
  - Construction of new affordable homes
  - Public ownership of affordable homes (pending constitutional amendment)

- **Regional outcomes**
  - 45% of homes below 30% median family income (MFI)
  - At least half of homes sized for families (2+ bedrooms)
  - All homes affordable for households making less than 80% MFI
  - Maximum of 10% of homes at 60-80% MFI

- **Distribution**
  - Funds are anticipated for homes to be distributed throughout the region based on assessed value:
    - Clackamas County = 21%
    - Multnomah County = 45%
    - Washington County = 34%
  - 90% of funds are anticipated to be spent by local partners, with the remaining 10% reserved for a regional land acquisition program headed by Metro

- **Oversight & administration**
  - Administered through intergovernmental agreements, with localized implementation strategies
  - Community oversight committee will audit program and report on progress
  - 7% cap for program administration

Metro Council will vote on a final recommendation for the framework at its June 7 meeting.
Andy Shaw of Metro joined the discussion to address member comments.

**Member comments:**

- Inquiry regarding administrative cap – is spending $36 million to administer the bond very cost-efficient?
  - Mr. Shaw: This would pay for seven full-time equivalent (FTE) staffers positioned across the region over the life of the bond. Metro staff will take on significant additional work not accounted for under the cap. The important message is that the bulk of the bond is going towards construction of affordable housing.
  - Councilor Harrington: We could just use the money to pay for Metro staff, but that would leave local jurisdictions on the hook for their administrative costs.
- Importance of developing effective messaging for voters. While the presentation implies that the private market does not want to build affordable housing, the level of apartment construction in growing cities across the West would seem to suggest otherwise.
  - Ms. Larson: The bond would be focused on deeply-affordable projects that the private market could not build or operate without losing money.
- The cost per home constructed works out to $161,000.
  - Councilor Harrington: We’re developing the bond at this point, not working on a campaign yet.
- The constitutional amendment is hugely critical to the success of the bond. Who is taking the lead in advocating/lobbying for it?
  - Councilor Harrington: After the June recommendation from the Metro Council, the campaign will begin to be developed and funded.
- Inquiry regarding whether a political action committee (PAC) had been formed yet for the purpose of advocating for the bond.
  - Mr. Shaw: Our partners are working on this.
- Concern regarding the underrepresentation of people of color in leadership positions, and how marginalized communities will be engaged in developing and advocating for the bond. Is Metro working to include underrepresented groups?
  - Councilor Harrington: Outlined Metro’s diversity, equity, and inclusion efforts. Equity is a central focus within the agency, with its partners, and in the legislature.
- Importance of messaging to voters the income disparities between communities that drive the affordability problem. The high cost of housing is only one component of the affordability issue – lack of income, especially among underrepresented communities, is also a contributing factor.
- Importance of working towards ways to increase homeownership rates for all communities. City councils should be allowed flexibility to make strategic decisions about allocation of resources that improve affordability.

**RTP Project List Submission**

Chris Deffebach and Dyami Valentine of Washington County presented this item.
Ms. Deffebach introduced the 2018 RTP project list update for Washington County. The purpose of the item was to seek endorsement of the list, to demonstrate how it responds to Metro direction, and to begin a discussion on addressing unmet needs. The County submitted its initial project list with WCCC endorsement in late-2017. Metro conducted a performance evaluation to assess the list’s alignment with RTP goals. Metro directed local jurisdictions to update project lists to better meet goals in equity focus areas and high injury corridors, and to reflect the new financial forecast stemming from passage of House Bill (HB) 2017.

Mr. Valentine provided further details about the project list. Washington County and its cities are forecasted to generate $2.7 billion in transportation funding revenue by 2040 under the fiscally-constrained (FC) scenario. This includes 30% from MSTIP, 27% from TDT, 20% from HB 2017, 18% in local revenue, and 5% from federal and state sources. Key components of the investment scenarios breakdown as follows:

- FC (2018-2027): $1.2 billion – 76% for roads & bridges, 22% for active transportation
- FC (2028-2040): $1.5 billion – 56% for roads & bridges, 33% for active transportation, 7% for transit capital, 2% for throughways
- Strategic: $1.9 billion – 56% for roads & bridges, 30% for active transportation, 8% for transit capital, 3% for throughways

The investment scenarios demonstrate a proactive approach to providing a safe transportation system, by promoting Complete Streets, access management, and context-appropriate design. 61% of projects in the FC 2018-2027 list include a safety benefit, along with 69% on the FC 2028-2040 list and 73% on the strategic list. Of those safety-oriented projects, 66% of funds on the FC 2018-2027 list target safety investments to historically marginalized communities, along with 52% on the FC 2028-2040 list and 49% on the strategic list.

Ms. Deffebach outlined the RTP implementation chapter, which describes an approach to fulfilling needs not addressed by the project lists, primarily through local TSP updates, transit service planning, regional programs and planning activities, corridor refinement planning, and project development priorities for state and federal funding.

**Motion:** Mayor Dalin moved to endorse the 2018 RTP Project List. Mayor Cook seconded.

**Vote:** With all present members voting in favor, the motion passed unanimously.

**MPAC Agenda**

Mayor Truax provided an overview of agenda items for the May 23 MPAC meeting:

- Build Small Coalition ADU Jurisdictional Code Audit Update
- Regional Investment Strategy Update
- Update on 2018 Regional Transportation Plan Policy and Implementation Chapters

**JPACT Agenda**
Mayor Dalin provided an overview of agenda items for the May 17 JPACT meeting:

- 2021-24 MTIP Financial Forecast
- RFFA Active Transportation Project Development Funds Allocation
- 2018 RTP: Draft Transit Strategy
- 2018 RTP: Draft Freight Strategy
- Emerging Technology Strategy Discussion Draft

Other Business and Agency Updates

- Ms. Deffebach spoke about the R1ACT meeting the previous Monday, where members received a presentation on new Safe Routes to School criteria for funding through HB 2017. She also reminded members that the next WCCC meeting would be back at the Beaverton Library on June 18.
- Chair Rogers mentioned that Rob Dixon, Assistant City Manager at Hillsboro, would be retiring shortly. He thanked Mr. Dixon for his service. Mr. Dixon thanked members and invited all in attendance to his retirement party.
- Mayor Truax thanked Jim McCauley of Washington County and Tom Markgraf of TriMet for organizing a lobbying trip to Washington D.C. the previous week. Attendees had important discussions with Housing & Urban Development (HUD) and Department of Transportation (DOT) officials. There was general agreement that reversing the 80% federal / 20% local funding split would not be prudent.

There being no other business, Chair Rogers adjourned the meeting at 1:30 p.m.

Andrew Singelakis, Secretary
Washington County Coordinating Committee
PG 5/14/2018
To: WCCC Transportation Advisory Committee  
From: Andrew Singelakis, Director  
Date: June 11, 2018  
Re: MSTIP Opportunity Fund Request

Action
Consider a request by Washington County to use $1.2 million to serve as local match for a USDOT Advanced Transportation & Congestion Management Technologies Deployment (ATCMTD) grant program. Summary of the request is attached. The WCCC TAC at its May 31 meeting recommended approval of the request.

MSTIP Opportunity Fund Guiding Principles
The purpose of the MSTIP Opportunity Fund is to leverage federal, state and other funding opportunities as they arise. The Opportunity Fund is flexible and can be applied to a variety of different projects and activities, including (but not limited to) pedestrian, bicycle, transit and travel demand management projects. The MSTIP Opportunity Fund is available on a continual basis through Fiscal Year 2022-23. The following are the Guiding Principles endorsed by the WCCC and approved by the Board:
1. Allocate no more than $1.5 million per year to keep funds available for future opportunities.
2. Consider opportunities to enhance and/or include innovative design with the intent of constructing a “signature” project.
3. Take into account the amount of local match when considering and soliciting projects.
4. Illustrate the project benefits to the countywide transportation system.
5. Improve transportation mobility.

Opportunity Fund Usage
To date a total of over $5.3 million in Opportunity Funds have leveraged over $34 million in state, federal and private dollars. One measure of the program’s success is that for every $1 in Opportunity Fund, WCCC members are capturing nearly $7 in private, state and federal funding. The current Opportunity Fund balance is approximately $7.1 million.

Attachments
- Washington County Opp. Fund Request
To: Washington County Coordinating Committee  
From: Stacy Shetler PE, Washington County Traffic Engineering Manager  
Date: 06/11/2018  
Subject: WCCC MSTIP Opportunity Fund Request

**USDOT Advanced Transportation & Congestion Management Technologies Deployment (ATCMTD)  
2018 Project**

**Project Description:**
Washington County will play a key role on the Oregon DOT led, regionally-focused ATCMTD grant proposal to deploy cutting-edge treatments. This regional project includes public-partners of Tri-Met, City of Portland, ODOT, Metro, Multnomah County, and Washington County. To seamlessly and successfully deliver these advanced technology solutions, we have formed private industry partnerships with Traffic Technology Services (Beaverton-based), FLIR (Wilsonville-based), Daimler (Portland-based), Wavetronix, and Intelight.

The regional ATCMTD project will deliver treatments from our public partners that include:

- The expansion of the OR-217 style active traffic management via smart sensors/signs on I-205 to improve the safety and reliability of the Portland freeway system,
- Tri-Met’s smart transit signal priority center-to-center technology to prioritize and right-size transit preferential treatment by time of day and congestion level, and
- ODOT’s LiDAR-based UAV (Unmanned Aerial Vehicle) crash mapping to reduce collision investigation and clearance times by 50% or more.
- Dedicated Short Range Communication (DSRC)-based freight and next-generation transit signal priority on Airport Way from 82nd to 158th
- Dedicated Short Range Communication (DSRC)-based freight and next-generation transit signal priority on Oregon Route 212/224
- Variable message signs on Columbia Boulevard

Washington County’s ATCMTD planned treatments are summarized as:

- ITS treatments on Cornelius Pass Road to enhance the reliability & safety of travel between US 26 and US 30 in rural Washington and Multnomah Counties. **Roadside variable message traveler information signs** will be installed with supporting sensors, to communicate current **travel times, road weather information, curve warnings**, along with camera images to **TripCheck**. Approximately **95%** of all Cornelius Pass Road trips have either an origin or destination in Washington County and its incorporated Cities and so there is a County-wide benefit to these solutions.
- Smart cities sensors, communication, and roadside computers along the entirety of Cornelius Pass Road, which includes:
Newest generation Advanced Traffic Controllers (ATCs) for big data computing, automated performance measurement, and connected vehicle applications (21 total ATC controllers)

Connecting the intersections north of US 26 on Cornelius Pass Road into the County’s fiber optic backbone for high speed, high availability communications to support the bandwidth needs of the other proposed, computational intensive treatments.

Red light running crash mitigation system using Wavetronix radar and Intelight roadside computers/controllers to proactively predict and prevent red light running crashes before they happen. 8 high-risk signalized intersections with radar sensors & ATC controllers.

Eco-Counter bike-pedestrian counters for multi-modal data collection and performance measurement monitoring. (6 strategic stations along or near corridor)

Adaptive pedestrian safety system providing next movement to service information & real-time pedestrian call extension/truncation/cancellation through smart infrared camera detection. Treatment will increase intersection efficiency and utilization by reducing delays for pedestrians, cyclists, motorists, and freight. (3 strategic locations)

Emergency battery back-up system to keep ITS and traffic signals running during short and mid-term power outages. to help with emergency response & to keep trade flowing. (7 strategic locations)

Each of these proposed treatments along Cornelius Pass Road develops and utilizes technologies that can be directly transferrable to other locations throughout the County including local jurisdictions. The overall project from all the public partners will greatly increase the “toolbox” of smart, multi-modal traffic solutions to manage congestion for all roadway users. The County’s participation and partnership are key to having a competitive proposal to advance, through technology, regional goals around safety and mobility.

MSTIP Opportunity Funding Request:
Washington County requests $1.2 million from the Washington County MSTIP Opportunity Fund to serve as the 50% required local match for Washington County’s portion of the ATCMTD grant program. The other public agencies are each providing their own 50% match for the program.

The total project costs are outlined in the following table:

<table>
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<tr>
<th>Description</th>
<th>Cost</th>
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<tr>
<td>Total ATCMTD Grant Project</td>
<td>$10 million</td>
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<tr>
<td>ODOT, Portland, TriMet, Metro Portion of ATCMTD Project</td>
<td>$7.6 million</td>
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<tr>
<td>Washington County Portion of ATCMTD Project</td>
<td>$2.4 million</td>
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<tr>
<td>MSTIP Opportunity Fund Match</td>
<td>$1.2 million</td>
</tr>
</tbody>
</table>

Contacts: Stacy Shetler, (503) 846-7947 or stacy_shetler@co.washington.or.us
Chris Deffebach (503) 846-3406 or Christina_Deffebach@co.washington.or.us
Figure 1 – ATCMTD Project Area Map
EXECUTIVE SUMMARY

Project summary

Technical Memorandum 4 presents findings from the round 2 evaluation of five pricing concepts for I-5 and I-205 from the Oregon/ Washington state line south to the I-5/I-205 interchange near Tualatin, Oregon. The purpose of this evaluation is to examine the benefits and impacts of different pricing concepts to inform a recommendation by the study’s Policy Advisory Committee (PAC) to the Oregon Transportation Commission (OTC), based on application of a series of performance measures to the five concepts.

Background

In 2017, the Oregon Legislature authorized substantial funding to improve highways, transit, biking and walking facilities, and use technology to make the state’s transportation system work better. The Legislature also directed the OTC to seek federal approval to implement value pricing on I-5 and I-205 in the Portland metro area to address congestion.

The Oregon Department of Transportation (ODOT) initiated the Portland Metro Area Value Pricing Feasibility Analysis to explore the options available and determine how and where congestion pricing could help improve congestion on I-5 or I-205 during peak travel times.

The feasibility analysis included two rounds of evaluation. The first round of evaluation assessed the opportunities and issues associated with the primary types of highway congestion pricing applications. Following the round 1 evaluation, a total of five round 2 concepts, referred to as Concepts A through E, were developed based on technical evaluation results, input from the PAC and the public on the initial concepts, and project team experience with congestion pricing systems throughout the U.S. These refined concepts allowed for a more detailed assessment of potential impacts and benefits for defined pricing strategies and locations.

- Concept A – Northern I-5 Priced Lanes
- Concept B – I-5 Priced Lanes: Toll all lanes between Going Street/Alberta Street and Multnomah Boulevard
- Concept C – I-5 and I-205 Priced Roadway: Toll all lanes
- Concept D – I-205 Priced Lane – OR99E to Stafford Road
- Concept E – Abernethy Bridge Priced Roadway

Equity and diversion mitigation strategies

The Oregon Transportation Commission has established that considerations of equity and diversion to surrounding communities are priorities in evaluating potential congestion pricing concepts. The PAC Charter includes both equity impacts and diversion of traffic as factors to be considered in the evaluation of congestion pricing options. The Charter also requests that the PAC identify potential mitigation strategies with a potential to reduce the impact on Title VI and/or Environmental Justice communities and adjacent communities.

Some mitigation strategies that were identified by the project team, the PAC and solicited from the public during outreach events include the following:
Many diversion impacts can be addressed through design of the system and rate structure. Appropriate rate setting through dynamic pricing could maximize flow on the priced portion of the facility and reduce the incidence of diversion; it should be noted that for Concept E, this could reduce revenue substantially.

A strategy that combines pricing concepts on I-5 and I-205 could improve overall flow and help to manage diversion between the two freeways.

Transit, bicycle, and pedestrian improvements or introduction of transit service as well as traffic calming strategies could address local diversion concerns.

Where diversion increases traffic on surface streets, improvements to walking and bicycling facilities may be needed to mitigate potential safety impacts.

Discounting programs, such as free, reduced or pre-paid toll tags for Title VI and Environmental Justice communities may be considered. Such programs may also be considered for area residents who do not have viable, toll free alternatives. For example, the residents of Hayden Island must use I-5 to get off the island and may therefore require such mitigation programs if I-5 is to be tolled in the future.

Lane pricing, as opposed to roadway pricing may result in relatively higher tolls for use of the priced lanes. As such, additional consideration of toll discounting policies for low income users may be needed for approaches where only certain lanes are to be priced.

Freight vehicles are restricted by Oregon statute from using the left inside lane of highways. In general, when a lane pricing (as opposed to roadway pricing) approach is adopted, it is the inside left lane(s) that is priced. If such an approach were used in Portland, freight vehicles would therefore be restricted from using the facility and thus would not benefit from pricing. As such, revisiting and refining Oregon statutes in relation to tolling on the use of the inside left lane by freight vehicles might be considered as a freight-oriented mitigation measure if lane pricing is implemented.

A monitoring program with key performance measures could be established to evaluate effectiveness at addressing regional goals.

**Round 2 evaluation measures**

The round 2 pricing concepts were evaluated using performance measures to demonstrate the range of positive and negative impacts of pricing. This evaluation will inform a project team recommendation for the PAC so it can in turn develop a recommendation for the OTC. Performance metrics were organized based on the following policy considerations, which are identified in the PAC Charter:

- Traffic operations improvement on I-5 and I-205
- Diversion of traffic
- Transit service and active transportation
- Equity benefits and impacts
- Benefits and impacts for the community, economy and environment
- Revenue and costs
- Implementation
  - Consistency with state and regional law and policy
  - Federal feasibility
  - Project delivery schedule
Concepts were assessed as to how they generally performed against each performance metric, with concepts that provide positive impacts or reduce negative impacts performing “well” and concepts that reduce positive benefits or increase negative impacts performing “poorly.”

**Round 2 evaluation results**

Table 1.1-1 is the performance evaluation summary of Concepts A through D, which were developed with the primary intent to minimize congestion. Results are explained in greater detail in the next section. Concept E results are included separately in the next section because the intent of the Concept E analysis was to evaluate its revenue generation potential as opposed to minimizing congestion.

**Table 1.1-1. Concepts A through D: performance evaluation summary**

<table>
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<th>Policy consideration</th>
<th>Metric</th>
<th>Concept A</th>
<th>Concept B</th>
<th>Concept C</th>
<th>Concept D</th>
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<td>Passenger vehicle travel time on I-5 and I-205</td>
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<td>Assessment of change in duration of peak vehicle traffic conditions</td>
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## Executive Summary

### Policy Consideration

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<tr>
<th>Metric</th>
<th>Concept A</th>
<th>Concept B</th>
<th>Concept C</th>
<th>Concept D</th>
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<td>Project delivery schedule</td>
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### Legend

- Performs well
- Performs moderately
- Performs poorly
Concept A: Northern I-5 Priced Lanes

In Concept A, a single lane in each direction would be converted to a tolled managed lane. The concept would convert an existing general purpose lane in the southbound direction, and the existing HOV lane in the northbound direction.

Concept A has limited congestion relief benefits, which are generally restricted to the tolled lanes during peak hour. Conditions on the unpriced lanes are mostly unchanged, and diversion would be limited. Both revenue and capital costs would be relatively low. This concept would likely cover its own tolling infrastructure operating costs but would not offset all roadway rehabilitation and reconstruction costs. Tolling authority for the southbound segment could come under FHWA’s Value Pricing Pilot Program and the northbound segment would qualify under FHWA’s HOV/High-Occupancy Toll (HOT) Lane Program.
Concept B: I-5 Toll All Lanes between Going St./Alberta St. and Multnomah Blvd.

Concept B converts all lanes between NE Going Street/Alberta Street and SW Multnomah Boulevard to a priced roadway. Concept B has strong potential to reduce congestion along I-5 with modest diversion to I-205 and adjacent facilities. This concept also has a much denser network of transit and multi-modal facilities that can serve as a toll-free travel alternative to minimize impacts. This concept generates more revenue than single-lane concepts and would cover all toll collection and operating costs, as well as routine and periodic roadway operations and maintenance. The beginning and end points of the corridor segments where this concept would be implemented would need to be examined as part of the future environmental analysis process. Tolling authority for this concept could come under FHWA’s Value Pricing Pilot Program.
Concept C: Priced Roadway – Toll All Lanes

Concept C would implement pricing on all lanes of I-5 and I-205 from the Washington/Oregon state line to the I-5/I205 interchange near Tualatin. Concept C has the greatest potential for reducing congestion and generating travel time savings for the widest possible range of users. Because of the scale of this concept, it could be considered as part of a broader regional pricing application in the future, pending success of a pilot pricing program. While diversion can be expected, it could be minimized through dynamic tolling. This concept would by far generate the largest amount of revenue compared to the other concepts. Tolling authority for this concept could come under FHWA’s Value Pricing Pilot Program.
Concept D: I-205 Priced Lane – OR99E to Stafford Rd.

Concept D would price the third lane in each direction, currently planned on I-205 from OR99E to Stafford Road, including widening of the Abernethy Bridge. Existing general purpose lanes in each direction would remain unpriced. The future planned project was considered part of the 2027 baseline for all concepts in the evaluation.

Concept D shows some congestion relief benefit with minimal traffic diversion and provides some benefit to I-205. The pricing concept is not expected to generate significant revenue to contribute toward the construction of the planned lanes and bridge widening project. Concept D would qualify for implementation under Section 129 of U.S. Title 23 if the planned additional lanes were constructed as priced lanes.
Concept E: Abernethy Bridge Priced Roadway

Concept E applies pricing on all existing lanes of the Abernethy Bridge as well as additional lanes to be constructed as part of the planned bridge widening. While this Concept assumes a variable rate structure, with highest rates during peak hours, it was evaluated to determine its potential to help fund the planned addition of a lane on I-205 from OR99E to Stafford Road and reconstruction of the Abernethy Bridge.

Concept E shows promise to raise revenue and reduce congestion on I-205. This concept, or a variant, could pair with a pilot program to balance the travel choice between the I-5 and I-205 corridors. Mitigation strategies would likely be needed to address potential diversion to OR99E and the Arch Bridge. The beginning and end points of the corridor segments where this concept would be implemented would need to be examined as part of the future environmental analysis process.
Key findings

The evaluation of the five round 2 concepts has shown that congestion pricing on I-5 and I-205 has potential benefits to people living and traveling through the Portland metro area and would be effective in addressing traffic congestion on these facilities. Key findings to help support the recommendation are provided on the following pages. Additionally, general findings and considerations include:

- Any concepts considered further should be paired with policies or programs that address potential impact on lower-income and adjacent communities.
- The analysis indicates that all five concepts would likely generate sufficient revenue to pay for tolling operations. However, there is less certainty regarding whether revenue from Concepts A and D (both single-lane concepts) would also cover capital costs of tolling implementation.
- Concepts B, C and E all indicate they would provide revenue to support mitigation and/or planned transportation projects in the Portland metro area.
- A phased approach—implementing a smaller-scale application as a pilot program and following up with monitoring and scheduled reporting—may ensure that the pricing application meets state and regional goals, and may also lay the foundation for a more comprehensive pricing approach for the Portland metro area.
- Key performance measures could be established to gauge success during future monitoring.

Consultant team recommendation

Based on the key findings from the evaluation, the consultant team recommends a phased approach to implementation of congestion pricing on I-5 and I-205:

- Initial implementation of Concept B as a pilot pricing program, coupled with a sunset or trigger to evaluate success.
  - Rationale: Strong potential at congestion reduction along I-5 with minimal diversion to I-205 and adjacent facilities; has a much denser network of transit and multi-modal facilities that can serve as a toll free alternative; significant improvements in facility efficiency and vehicular throughput, meaning that more vehicles can be moved and diversion to free facilities can be managed.

- Consider implementation of Concept E concurrent with implementation of Concept B.
  - Rationale: Provides the benefits of Concept B while generating funding to advance the addition of new lanes on I-205 where only two lanes in each direction currently exist as well as retrofitting and adding a lane in each direction to the Abernethy Bridge.

- After assessment of the performance of the initial pricing project, and assuming successful evaluation, implementation of Concept C in phases with more comprehensive system analysis.
  - Rationale: Greatest potential for reducing congestion and generating travel time savings for the widest possible range of users; significant improvements in
facility efficiency and vehicular throughput, meaning that more vehicles can be moved and diversion to free facilities can be managed.

- Do not implement Concept A or D.
  - Rationale: Little congestion relief benefit; would not provide a reasonable test for the potential for pricing to provide congestion relief.

**Next steps**

At the fifth PAC meeting on May 14, 2018, the PAC will review and consider the evaluation presented in this technical memorandum as well as the public comment received over the past six months. In May and June 2018, the PAC will develop a recommendation(s) to advise the OTC. The OTC will submit a report to FHWA by December 2018. After coordination with FHWA, the OTC will provide direction about next steps such as an environmental analysis, which would include additional public involvement, Title VI and Environmental Justice analysis, traffic analysis, and other analysis of potential benefits and impacts.
<table>
<thead>
<tr>
<th>Policy consideration</th>
<th>Metric</th>
<th>Concept A Northern I-5 Priced Lanes</th>
<th>Concept B Toll All Lanes between Going St/Alberta St. and Multnomah Blvd.</th>
<th>Concept C I-5 and I-205 Priced Roadway - Toll All Lanes</th>
<th>Concept D I-205 Priced Lane - OR99E to Stafford Rd.</th>
<th>Concept E* Abernethy Bridge Priced Roadway (tested for revenue potential)</th>
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*While the primary objective of Concept E is revenue generation in support of combating congestion relief projects, the use of variable toll rates that are highest during peak conditions on the bridge would also provide some congestion relief on I-205. The evaluation of Concept E focused on key performance measures to help understand the effect of this concept, including traffic operations, diversion, revenue and cost, and implementation.**

**Project team judgment was applied based on considering results from Concepts A-D and Concept E performance for other measures. Performance measure was not modeled or evaluated explicitly for Concept E.


1 PROJECT CONTEXT

The Portland Metro Area Value Pricing Feasibility Analysis identified the need to obtain informed input from members of the public and transportation stakeholders about issues and concerns that must be addressed when considering congestion pricing applications. The study’s Policy Advisory Committee (PAC) charter specifies the need for identifying and considering mitigation strategies for detrimental impacts upon Title IV and environmental justice communities and other stakeholders within the affected corridors.

In discussions of freeway congestion pricing applications, PAC members and other stakeholders have discussed some of the negative impacts that could affect those who currently depend on the freeways, as well as potential impacts on the surrounding area and roadway network. PAC discussions have been informed by experience from other congestion pricing projects, as shared by members of the consultant team and documented in reports provided in January 2018 and again in April 2018. At the fourth meeting of the PAC (April 11, 2018), the majority of the time was used in a facilitated small-group work session among PAC members to focus on key concerns and to identify mitigation strategies. Facilitators for each of the small groups documented the discussions. A written summary of the workshop is provided in Attachment A. The attachment also provides written input from two PAC members who were not able to attend.

In addition to the PAC process, the project team incorporated the mitigation strategies theme into spring 2018 public outreach. Public engagement during this phase included five open houses held at locations throughout the region between April 12 and April 30; an on-line open house available from April 5 through 30; and, presentations were given to community groups throughout the region, including business, civic, and other interest groups. In addition to providing general information about congestion pricing and the current feasibility analysis, these efforts introduced the topic of mitigations and sought input on priority concerns and suggestions about potential mitigation strategies.

2 WHAT WE’VE HEARD

Discussions with PAC members and members of the public reveal a wide range of perspectives on congestion pricing and the potential benefits and negative impacts. The most common concerns heard throughout the process are consistent with the issues identified in the PAC Charter and helped to shape the discussions at the April 2018 PAC mitigation workshop and spring 2018 public outreach. These themes included:

- Impacts to environmental justice communities, with an emphasis on low-income populations.
- Impacts to communities that are highly dependent on the freeway system, due to a lack of choices (other modes, other routes, or flexible travel times).
- Diversion into adjacent communities and also onto arterials and other freeways.
- Questions and suggestions about how tolling revenue would be used.
• Skepticism about whether congestion pricing can effectively reduce traffic congestion.

3 MITIGATION STRATEGIES & OTHER CONSIDERATIONS

Input from the PAC and stakeholder outreach to affected communities concentrated on the following themes for strategy development.

3.1 Performance monitoring

Congestion pricing is new to the state of Oregon and the public has expressed skepticism about whether it would have the desired effects. Any pricing program must have in-depth performance monitoring and reporting to meet Federal law requirements. The specific level of reporting will depend on the concept(s) recommended and the specific federal authorization program that will be employed. Conversion of any existing general purpose or high-occupancy vehicle (HOV) lane to congestion pricing (Concepts A, B, and C) would have the highest requirements for setting performance metrics and regular monitoring to ensure that improvements in traffic congestion are being achieved. By comparison, the requirements for Concepts D and E are not subject to more stringent requirements, as they would be authorized under Section 129 of Title 23 of the US Code, but the state could develop performance measures and monitoring program in a similar manner.

Overall, the intent of the program is to encourage changes in mode and time of travel to maximize the use of capacity and improve average travel times and set the stage for broad implementation of a sustainable transportation system. In so doing, it has further intent to avoid disproportionate changes in route patterns that create new problems elsewhere in the system, and to avoid degrading the system from current levels.

Supporting these considerations, specific strategies that could be evaluated for inclusion are:

- **Trial / pilot system.** A pilot / trial approach has proven successful with other communities when they first considered pricing, including Washington and California. If Concept A or B move forward for development, they could be implemented as trial facilities, subject to review, revision, and (if necessary) termination.

- **Tolling sunsets with explicit re-authorization.** This strategy further extends the trial / pilot concept by requiring explicit legislative or potentially voter approval of the continuation of the program. In Stockholm, Sweden, the regional transportation authority did exactly this. In 2006, a 6-month trial of congestion pricing for the city was conducted. Following the trial, the pricing system was turned off, and voters were asked for approval to turn the system back on again. 2007 voter affirmation made the system permanent, with revenues dedicated to funding regional priorities identified in the voter package.
- **Partner coordination.** This strategy would provide the opportunity for regional collaboration in performance monitoring by forming a partnership with area agencies to review the effectiveness of the tolling system. This approach has been used in Washington where an executive advisory group was established to monitor and make decisions impacting the I-405/SR 167 tolling corridor. This group is made up of city, county and agency representatives. The SR 16 Tacoma Narrows Bridge has a Citizen Advisory Committee made up of nine members appointed by the Governor to advise on toll rates and discounts for certain users.

### 3.2 Improved transit access and availability

The PAC and other stakeholders emphasized the need to improve transit access and availability in conjunction with congestion pricing to provide travel choice and options. The provision of additional transit services, incentives, and facilities is identified as a strategy to address impacts to low-income communities, but it is also effective at reducing diversion to alternative routes and improving system effectiveness by increasing average vehicle occupancy and diversion to transit modes.

Specific policies that could be deployed include:

- New transit routes / services on priced roads
- New / expanded park & ride locations
- First / last mile transit connections
- Free HOV2+ or 3+ use
- More frequent bus service
- Transit rewards incentive program
- Benchmark peak period tolls with transit fares
- Universal pass linking toll accounts with TriMet accounts

Transit programs have been successful at mitigating concerns with pricing as it applies to lower-income communities. For example, the Los Angeles Metro ExpressLanes Transit Rewards Program was a key component toward obtaining public support for congestion pricing on I-10 and I-110. This program increased monthly transit boardings by 27 percent, improved travel times for 48 percent of bus riders, converted 37 percent of previously single-occupancy vehicle (SOV) travelers to bus riders, activated 10,000 transit rewards accounts (combined FasTrak and transit access pass (TAP) card accounts) in the first two years, and issued over $45,000 in toll credits to transit users in the first two years.

### 3.3 Special provisions for low-income populations

As discussed above, the PAC expressed a key concern about disproportionate impacts of tolls on lower-income populations. Although the provision of transit and other travel options is among the most important mitigations to ensure that improved mobility is an overall outcome, other strategies are available to enhance the benefits of congestion management for the broadest possible cross-section of the public. Some specific strategies for consideration include:
- Implement toll discounts, credits, subsidies, or rebates. Preferential toll rates can be applied for various income classes (such as lifeline tolling registration like TriMet’s low-income program), user classes, or even locations (such as landlocked locations such as Hayden Island).
- Implement a Universal Pass, which transfers benefits between modes for low-income households.
- Establish cash-based account options (while still using electronic and/or license plate toll systems) with an emphasis on ease of access and understanding.
- Operate toll-free when congestion is not present on the system.

As one of the few facilities operating in an environmental justice community, Los Angeles Metro's Low-Income Assistance Program complements the region’s congestion pricing program. There, households meeting income thresholds ($49,200 for a 4-person household in 2017) may obtain $25 toll credits, no account maintenance fees, and no-fee access to transponder accounts. This eliminates the issue of lane access for low-income households. Surveys have reported that over 70 percent of low-income travelers experienced substantial travel time benefits because of the program.

### 3.4 Diversion

Although not explicitly an issue of Title IV and environmental justice, route diversion from tolled highways onto adjacent surface arterials is one of the priority mitigation topics identified in the charter. This concern was shared by PAC members and members of the public who participated in the Feasibility Analysis’s engagement process. As noted by the technical analysis and confirmed by members of the public, there is already diversion onto surface streets as drivers try to avoid freeway congestion, so the specific impacts may be more limited – especially as congestion pricing recaptures functional capacity on saturated highways. An additional issue to study in future planning phases is the distribution of diversion: is diverted traffic moving to other freeways or to local facilities? If it is moving to other freeways, system balancing through tolling or other means could be pursued. Some specific strategies identified to minimize and mitigate unwanted route diversion include:

- Design and price structure factors that can minimize diversion, including avoidance of creating natural “jumping off” points on exit ramps to avoid tolls.
- Traffic calming, ramp meters, and other flow controls on entrance / exit ramps as well as on neighborhood streets.
- Restrictions of freight travel on local streets.

### 3.5 Other considerations

Finally, there are additional themes that were expressed by PAC members and in other community engagement which may support improved system effectiveness and public acceptance.
3.5.1 Connect revenue with congestion relief and transportation system improvements

Congestion pricing is often viewed negatively by the public until opening of the pricing program; after opening, demonstrated reduction in congestion levels yield positive findings in public opinion surveys from across the country. Until opening of a pricing program, public acceptance of congestion pricing may be tied to views on how net revenue from tolling is to be used. Although the specific uses of revenue may not be known for years (until the program has continued through the project development and approvals process) the PAC may wish to suggest appropriate uses of net revenues from tolling as priorities and principles to inform the OTC. Some of the themes heard from the public and the PAC include:

- Revenue should be used to mitigate congestion.
- Revenue should be used to plan for and accommodate growth by increasing roadway and transit capacity.
- Revenue should be used to improve transportation within the corridor where the revenue is collected.
- Consider identifying specific projects.

3.5.2 Regional congestion pricing analysis

Although HB 2017 directs ODOT to consider pricing on I-5 and I-205 first, it does not preclude examining pricing other freeways. Several PAC members and members of the community have indicated the need to see a more holistic analysis, including the rest of the freeway system. Such an analysis could be conducted as part of further consideration of Concept C in future steps of regional and statewide planning. For example, a broader congestion pricing feasibility analysis could be conducted, including potential pricing implementation of I-84, I-405, US 26, and/or Hwy 217 in addition to deployment on I-5 and I-205.

3.5.3 Planning for growth: capacity

There are strong views about the need to plan for growth, including potentially increasing freeway and transit capacity. Analysis of the five round 2 concepts included the planned third lane on I-205 between Stafford Road and the Abernethy Bridge. The results of this feasibility analysis could lay the foundation to develop a policy framework for expanding freeway capacity in the context of a congestion pricing environment. Similarly, expanding transit capacity has been urged through public comment and could be folded into a capacity policy framework.

4 CONCLUSIONS

Policy and strategy mitigations may be helpful to resolving issues of public acceptance and specific impacts upon Title IV and environmental justice communities. As the Feasibility Analysis is only the beginning of the process, additional opportunities are forthcoming for further refining, prioritizing, and determining a preferred package of mitigations. These processes will establish performance measures, monitor, and
evaluate system performance; plan, design, and implement facilities for use by the broadest definition of system users; apply mitigations fairly across populations; gather more information on diversion effects and potential mitigations; demonstrate the value of implementing congestion pricing in the Portland metro area; and provide greater understanding of the interaction between mitigations and system effectiveness.
### Portland Metro Area Value Pricing Feasibility Analysis
### MEETING SUMMARY

#### Appendix: PAC Work Session Output

<table>
<thead>
<tr>
<th>WHAT WE’VE HEARD</th>
<th>STRATEGIES</th>
<th>CONSIDERATIONS</th>
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<tbody>
<tr>
<td>Pricing will have disproportionate impacts on people with low incomes or otherwise disadvantaged groups:</td>
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<tr>
<td>Toll discounts, subsidize rates and programming:</td>
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<td></td>
</tr>
<tr>
<td>• For low income groups</td>
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<td></td>
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<tr>
<td>• For Environmental Justice groups</td>
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<tr>
<td>• Carpool and a greater discount for more people in cars</td>
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<tr>
<td>• Disabled and seniors should have access to free credit van programs</td>
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<tr>
<td>• Enhanced ridesharing and vanpool programs especially in areas without good transit</td>
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<tr>
<td>• Discount rates for carpools, and perhaps greater discount for more people in car</td>
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<td>• Improve arterials so people have a non-tolled option</td>
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<tr>
<td>• Employer incentives for carpools and tolls</td>
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<tr>
<td>• Credits for transit use</td>
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<tr>
<td>Toll discounts, subsidize rates and programming:</td>
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<tr>
<td>• Use existing programs to identify low income qualification</td>
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<tr>
<td>• Low income to pay less if already in a qualifying program for low income people eg: SNAP program (food stamp program)</td>
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<tr>
<td>• Environmental Justice communities are located along corridors</td>
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<tr>
<td>• Unfair policing of transit fares</td>
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<tr>
<td>• Connect decisions with demographic and job data</td>
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<tr>
<td>• Some van programs for disabled and seniors should be free or have credits</td>
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#### Supporting unbanked populations:

| Supporting unbanked populations:  |
| • Cash discounts  |
| • Cash-based system such as what is used in the LA system  |
| • Pass system for transit  |

#### Supporting unbanked populations:

| Supporting unbanked populations:  |
| • 16% of nonwhite don’t have access to banks  |
| • 5% white people don’t access bank  |
| • Bills and payment by mail may not work because unbanked  |

| Toll discounts, subsidize rates and programming:  |
| • All concepts  |
| • Concept A: Northern I-5 Priced Lanes  |
| • Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.  |
| • Concept C: Priced Roadway – Toll All Lanes  |
| • Concept D: I-205 Priced Lane – OR99E to Stafford Rd.  |
| • Concept E: Abemethy Bridge Priced Roadway  |

| Toll discounts, subsidize rates and programming:  |
| • All concepts  |
| • Concept A: Northerm I-5 Priced Lanes  |

#### Supporting unbanked populations:

| Supporting unbanked populations:  |
| • All concepts  |
| • Concept A: Northern I-5 Priced Lanes  |

**Supporting unbanked populations:**

- 16% of nonwhite don’t have access to banks
- 5% of white people don’t access bank
- Bills and payment by mail may not work because unbanked

**Supporting unbanked populations:**

- All concepts
- Concept A: Northern I-5 Priced Lanes
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<tr>
<td></td>
<td></td>
<td>populations may move more often</td>
<td>☐ Concept A: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.</td>
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<td></td>
<td></td>
<td>• Trouble accessing the systems</td>
<td>☐ Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.</td>
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<td></td>
<td></td>
<td>• Need cash accessible options</td>
<td>☐ Concept C: Priced Roadway – Toll All Lanes</td>
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<td>☐ Concept D: I-205 Priced Lane – OR99E to Stafford Rd.</td>
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<td>☐ Concept E: Abernethy Bridge Priced Roadway</td>
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**Bi-state low income strategy:**
- Must apply to both sides of the river.
- Consider a Federal Program
- Revenue sharing between states for low income strategies
- Need reasonable choices as low income is a geographic issue too

**Bi-state low income strategy:**
- Will also have disproportionate impact on specific geographies, and this is linked to the concern that some communities and locations don’t have another option to driving on the freeway
- Revenue generated in Oregon also be used in Washington to support low-income drivers
- These strategies need to be applicable to residents of Washington not just Oregon
- HB 2017, 217/Rose Quarter/funded.

**Bi-state low income strategy:**
- ☐ All concepts
- ☐ Concept A: Northern I-5 Priced Lanes
- ☐ Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.
- ☐ Concept C: Priced Roadway – Toll All Lanes
- ☐ Concept D: I-205 Priced Lane – OR99E to Stafford Rd.
- ☐ Concept E: Abernethy Bridge Priced Roadway

**Affordable housing:**
- Housing near transit and near jobs
- Priority for low income
- Develop jobs in areas where people already live
- Priority job access program for lower income

**Affordable housing:**
- Key groups, including low-income groups, may be pushed farther out of the metro area, which compounds low income effect.
- Example of urban renewal impact tradeoff

**Affordable housing:**
- ☐ All concepts
- ☐ Concept A: Northern I-5 Priced Lanes
- ☐ Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.
## WHAT WE’VE HEARD

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<tbody>
<tr>
<td>Make reasonable choices for pricing, knowing what we are buying.</td>
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<td>☐ Concept C: Priced Roadway - Toll All Lanes ☐ Concept D: I-205 Priced Lane – OR99E to Stafford Rd. ☐ Concept E: Abernethy Bridge Priced Roadway</td>
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### Transit and transit incentives:
- Shoulder conversion for transit
- C-Tran services exempt from tolls
- Tri-Met services exempt from tolls
- Credits for transit use
- Transit credits
- Grow and expand transit options
- Employer strategies
- Mechanisms and models to make alternatives, such as the Hop Pass, transit, bike, C-Tran, seamless.
- Low-income fares for transit affordability
- Better transit options, more transit and more transit infrastructure

### Dynamic variable pricing:
- Only apply tolls when congested
- A new priced lane and a new general-purpose lane

## Dynamic variable pricing:

- Difficult to budget with variable public toll rate

### Transit and transit incentives:

- Constitution: funds must be used back on the corridor itself for infrastructure improvements on the roadway
- Is there eligibility for funds to be spent on transit on parallel facilities?
- Can transit funding go to C-Tran and consider incentives for C-Tran use?
- Creates unfair stress on low income

### Transit and transit incentives:

- All concepts
- Concept A: Northern I-5 Priced Lanes
- Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.
- Concept C: Priced Roadway - Toll All Lanes
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|                 | • No tolls at certain times, and only apply toll when congested  
                   • Variable price when roads are congested (dynamic) |               | □ Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.  
                   □ Concept C: Priced Roadway – Toll All Lanes  
                   □ Concept D: I-205 Priced Lane – OR99E to Stafford Rd.  
                   □ Concept E: Abernethy Bridge Priced Roadway |

**System technology:**  
• Cash-based payment system for unbanked populations to access  
• Mechanisms to make alternatives seamless such as the Hop Pass (transit, bike, C-Tran)  
• Universal card

**Behavior change:**  
• Pricing a free resource may assist in changing behavior  
• Changing behavior might not work if there are no other options eg. transit, bike, walk  
• Many trips are discretionary

How do we know pricing will be effective?  
➢ Behavior change  
➢ Information and long term planning

**System technology:**  
• Refunds and discounts  
• Mechanisms for delivery such as the Tri-Met Hop fast pass  
• Need data on the timing and use by Environmental Justice communities  
• What are existing programs to identify low income qualification  
• Data-based decision-making using demographic and job data

**Behavior change:**  
• Need better data to know if discretionary trips are reduced. This drives the capacity question  
• Need to measure freeway impacts and drivers on routes parallel to the system  
• Adjust based on performance measures and metrics

**System technology:**  
➢ All concepts  
➢ Concept A: Northern I-5 Priced Lanes  
➢ Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.  
➢ Concept C: Priced Roadway – Toll All Lanes  
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**Behavior change:**  
➢ All concepts  
➢ Concept A: Northern I-5 Priced Lanes  
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|                  |            | Need to balance between revenue raising and pricing congestion, as what is the goal, to reduce congestion or to raise revenue | ☐ Concept D: I-205 Priced Lane – OR99E to Stafford Rd.  
☐ Concept E: Abernethy Bridge Priced Roadway |
<p>| <strong>Information and long-term planning:</strong> | | | |
| • Need comprehensive long-term transportation plan that defines short and long-term tools | | | |
| • Congestion pricing to optimize existing resource | | | |
| • Goal is to reduce congestion | | | |
| <strong>Information and planning:</strong> | | | |
| • Long-term planning and what is the next tool | | | |
| • What are the short-term plan/goals? | | | |
| • Monitoring and measuring plan | | | |
| • Data is old, and this drives the capacity question; more information is needed | | | |
| • Freight movement monitoring plan | | | |
| • Consider how effectiveness is defined | | | |
| • How will this system respond to growth? | | | |
| <strong>Impact on freight:</strong> | | | |
| • Freight movement monitoring plan | | | |
| • Need to account for system-wide impact analysis | | | |
| <strong>Impact on freight:</strong> | | | |
| • Performance measures and metrics are required to understand how to improve throughput of freight | | | |
| • Understand system response to growth | | | |
| • Metrics and monitoring needed | | | |
| <strong>Impact on freight:</strong> | | | |
| • All concepts | | | |
| ☐ Concept A: Northern I-5 Priced Lanes | | | |
| ☐ Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd. | | | |
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| Traffic will divert onto local streets and into neighborhoods | Neighborhood strategies:  
- Traffic calming to discourage diversion  
- Maintain neighborhood streets  
- Advanced traffic management on local streets  
- Dynamic pricing  
- Limitations on Google maps alternative routes and Waze for where people are diverted  
- No heavy vehicles on some streets, specifically local streets  
- Education needed about diversion problems and impact  
- Leaving some lanes unpriced to give people choice | Neighborhood strategies:  
- People are already diverting  
- Lots of success elsewhere to learn from  
- Safety and air quality issues in neighborhoods where diversion may occur  
- Air quality around I-5  
- Diversion issues where pronounced in Portland on connected streets  
- Understand what would price sensitivity be to diversion more study  
- Traffic calming could strain Portland’s existing under-capacity transportation infrastructure | Neighborhood strategies:  
- All concepts | □ Concept E: Abernethy Bridge Priced Roadway |
| System capacity and quality: | System capacity and quality:  
- Diversion onto other state routes including SR-14 and 217, not just local streets  
- Supply strategy to address road and transit capacity to minimize diversion  
- Improve arterials specifically where people want to be  
- Improve arterials so people have a non-tolled option  
- Address road and transit capacity to minimize diversion | System capacity and quality:  
- Maintaining unpriced lanes  
- Impact depends on which RTP projects are finished and when  
- Address road and transit capacity to minimize diversion  
- Diversion impacts need to be looked at as part of the tolling process, an integrated study | System capacity and quality:  
- All concepts | □ Concept A: Northern I-5 Priced Lanes  
□ Concept B: Priced Roadway between Going St./Alberta St. and Multnomah Blvd.  
□ Concept C: Priced Roadway – Toll All Lanes  
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| Faster transit service  
Swifter transit and increased speed of transit. | Geographic constraints:  
- Reducing income tax to compensate for cost of tolls for low income or for all (differing preferences)  
- Provide geographic incentives for people who are more limited non-freeway options  
- Enhance transit capacity  
- Transit where limited options  
- Transit potentiality, even on freeway  
- If there is an isolated community, lessen the impact  
- Improve non-tolled arterial options  
- Use revenue from tolling to pay for new lanes, capacity and transit supply. | Concept E: Abernethy Bridge Priced Roadway |

#### Some communities and locations don’t have another option to driving on the freeway

- Geographic constraints:

#### No alternative transit, bike or walking options exist

- Capacity of alternatives modes:

#### Capacity of alternatives modes:

- Improved transit access due to lack of transit alternatives  
- Increase availability and frequency of transit services, carpool and vanpool including BRT, LRT and Express busses  
- Add transit where no options

#### Capacity of alternatives modes:

- Other examples in other states  
- What most effective alternatives will be  
- On I-205 there are a lot of miles with no other options (12, 13 miles) and need to expand options  
- Consider Clark County

#### Capacity of alternatives modes:

- All concepts  
- Concept A: Northern I-5 Priced Lanes  
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### WHAT WE’VE HEARD

- Create partnerships between ODOT, TriMet, BARD (or another source) to pair these methods CTRAN on shoulders for reliability benefit
- More options for I-205
- Build capacity
- Linked to how toll revenue will be used.

### STRATEGIES

- All transit options should be considered including bus, light rail, walking, bike, ferry
- This should be a decision-making criterion -- current transit access.

### CONSIDERATIONS

- How will the revenue be used?
- Revenue proposals:
  - Capacity
  - Columbia River Crossing I-5 bridge replacement
  - Expanding BRT, LRT, Express buses
  - Clarify projects listed, can’t be hidden, remove disconnect in understanding
  - Improve safety and fix infrastructure
  - I-5 bridge operation
  - Need clarity
  - Use the income where collected
  - User-fee based model
  - Congestion mitigation
  - Low-income mitigation strategies such as cash discounts and free passes

- Revenue proposals:
  - There is a current disconnect in understanding
  - Need projects listed – can’t be hidden, needs to be clarified.
  - Need clarity on how to interpret the statute consistent with HB2017 and the “State Line”
  - Look bigger picture and look at L.A. for examples
  - Round One Concept 4 previously not being considered due to cost; but why when we are still deciding where to spend the revenue.
  - OTC decides where revenue will be spent
  - Revenue should be used for roadway infrastructure improvements and back into the corridor itself
  - Is there eligibility for funds to be spent on transit on parallel facilities

### CONCEPTS

- Revenue proposals:
  - All concepts
  - Concept A: Northern I-5 Priced Lanes
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|                                  |            | • I-5 and 217 are earmarked  
• Linked to no alternative transit, bike or walking options exist | No strategies listed.  |
| A priced lane may be confusing and hard to understand for some drivers | No strategies listed. | No strategies listed.               | No strategies listed.  |
April 9, 2018

Dear fellow ODOT Value Pricing Policy Advisory Committee (PAC) members,

I regret that pre-arranged travel on behalf of OPAL Environmental Justice Oregon means that I will be unable to be in attendance at the PAC meeting this week. The agenda and topics of discussion are of great interest to OPAL and our constituents and I appreciate the opportunity to share some of our thoughts and goals for building a successful program.

Value pricing can provide a progressive funding source for aging transportation infrastructure and public transit alternatives and reduce congestion. The question about who benefits the most and to whom and where the burdens are placed needs robust equity analysis during planning, design, implementation and review to address any potential unintended consequences and impacts to Environmental Justice communities. I am concerned that the impacts of a program will be studied after a recommendation has been put forward; while I trust that a robust NEPA and Title VI analysis will be undertaken, the impact that any value pricing program will have on EJ communities is concerning enough that I urge the analysis to be done early, often and in shaping any and all potential mitigation strategies.

In the group discussions at the PAC meeting #4, please consider the following:

**Affordability**

The *Income-Based Equity Impacts of Congestion Pricing* primer from the FHWA which was distribute via e-mail by our facilitator addresses income equity by asking, are low-income groups negatively affected? Is a system that places the burden of travel-behavior change disproportionately on low income individuals fair?

Low income individuals may not be able to afford tolling and higher income users are more likely to remain on the highway, pay the congestion fee, and benefit from a faster trip. Low-income users may be worse off if they must choose other less-expensive times, routes, or modes (for example, if their employment schedules cannot accommodate a shift in travel times). As found in ODOT’s own engagement and outreach, rising housing prices and gentrification are pushing low income people further away from the city center, greatly increasing travel times to work, school and other vital destinations. A value pricing program must not be an additional cost burden to households that are already cost-burdened in our region.

**Design and the Underbanked**

When congestion pricing relies on an electronic cashless technology, households that do not have credit cards, bank accounts, or cannot afford the upfront cost of deposits may be unable to set up toll accounts, which may limit their use of these facilities. In a 2017 mobility needs assessment that OPAL conducted in EJ communities in partnership with Portland State University utilizing focus groups and quantitative surveys, we found that respondents that identified as a person of color are less likely to have access to a checking account - 16.3% without, compared to 5.1% for respondents that identified as non-Hispanic White.

Low-income people without a debit or credit card may not be able to open an account for an electronic transponder, or they may not have enough cash to establish an account. Privacy concerns of the public should also be taken into consideration when designing a program to ensure that individuals can trust that their data (travel patterns, personal information, etc.) is not vulnerable and is not used for purposes outside of collecting toll payments.

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1 “Community-based Assessment of Transportation Needs” authored by Golub, Serritella (Portland State University) and Satterfield (OPAL Environmental Justice Oregon) to be published Spring 2018
Availability and Accessibility
For limited-English proficient (LEP) individuals, it may be very difficult to understand how to obtain a transponder or use the system. We hope that the initial engagement in language-specific focus groups will continue through the planning, design, implementation and review of any congestion pricing program to ensure that LEP populations will continue to receive education and meaningful engagement.

The Need for Increased Transit
In many communities, untolled options, such as riding transit or taking an alternate route may add too much travel time and distance to be a viable alternative. Currently, there aren’t enough alternative and accessible forms of transportation and a lack of north-south service provided by transit in the corridor. Increased transit service, and its impact on communities living alongside and travelling along the potentially priced corridor, is critical to the success of any potential pricing operation. We cannot understand the viability of potential programs or corridors without factoring in the way that increased transit can mitigate inequitable impacts and potential congestion issues.

In order to experience the environmental and equity benefits of pricing a corridor, transit must be a reliable, affordable, and efficient alternative to a priced roadway, which means it must be incorporated into the project scope from the beginning.

We are concerned that, to this point, the process has treated increased transit service and access as something that is separate from the pricing operation and study. We cannot support an outcome where transit service is treated as something that will be figured out during implementation, or that is outside the scope of any pricing study.

We must also address and fund mitigation to address cut-through traffic; we are especially concerned in areas with documented high crash corridors in East Portland which result in serious injuries and even loss of life of our community members. How will any value pricing program complement the stated goals of Vision Zero (adopted by City of Portland) that one death on our streets is too many and that everyone deserves safe streets to walk, bike, operate mobility devices, access transit, and drive?

Thank you for your leadership throughout this process. With a more complete understanding of the impacts of pricing and the importance of engaging a holistic view of potential solutions, including integration of transit, our region will be in a much stronger position to design a successful approach to reducing congestion.

Sincerely,

Vivian Satterfield
Deputy Director
OPAL Environmental Justice Oregon
April 24, 2018

Commissioner Sean O’Hollaren  
Commissioner Alando Simpson  
Oregon Transportation Commission  
355 Capitol Street NW, MS #11  
Salem, OR 97301-3871

Re: Value Pricing Mitigation Measures

Dear Commissioners:

I want to thank you both for your time and commitment to the Value Pricing Policy Advisory Committee. I am sorry I was unable to join you in your discussion of mitigation measures at our last meeting due to other commitments. Policies that mitigate the adverse impacts of value pricing are a key factor in the acceptance of a tolling approach and I would like to take this opportunity to share my comments. Please consider these comments along with the other mitigation ideas that were raised at the meeting.

The data we have seen at the PAC coupled with everyday experience demonstrates both I-5 and I-205 do not have enough capacity to meet travel demand. Traffic diverts onto other arterials where it contributes to additional congestion and safety problems. The impact this has on travel region-wide and state-wide is clear.

Value pricing has the potential to shift trips to transit or to other times of day. Without additional transit or road capacity added to the system however, value pricing has the potential to greatly impact adjacent facilities and not provide additional capacity for those who pay the tolls.

To mitigate this, I would like to see the evaluation consider mitigation measures that focus the tolling revenue on adding capacity to the system.

I look forward to learning more from the study about the potential for pricing to improve traffic flow on I-5 and I-205 and shift traffic to other times of day, modes or facilities. When our adjacent facilities are already congested, safety is a key concern and transit options are limited, tolling could have adverse impacts and needs to be carefully understood and mitigated.

Please share my comments with fellow members of the ODOT Value Pricing Policy Advisory Committee.

Sincerely,

Roy Rogers, Commissioner  
Washington County Board

RR/cd/cj

cc: Matt Garrett, Director, Oregon Department of Transportation