

**C4 Metro Subcommittee** 

Wednesday, February 14, 2018 7:30 AM – 9:00 AM

**Development Service Building** Main Floor Auditorium, Room 401 150 Beavercreek Road, Oregon City, OR 97045

## Agenda

- 7:30 a.m. Welcome & Introductions
- 7:35 a.m. 2018 Active Transportation Project Development Funds
  Will result in recommendation to C4
- 8:10 a.m. Tolling/Value Pricing Update Presenting: Judith Gray - ODOT
- 8:40 a.m. City Caucus re MPAC Other Cities and JPACT Cities seats
- 9:00 a.m. Adjourn

Attachments:JPACT/MPAC Work ProgramsPage 02Memo re Active Transportation Development FundsPage 07Value Pricing MaterialsPage 32Memo re City CaucusPage 39



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# 2018 JPACT Work Program As of 2/6/18

<u>February 15, 2018</u>	<u>March 15, 2018</u>			
• Chair comments TBD (5+ min)	• Chair comments TBD (5+ min)			
• <b>Resolution No. 18-4870,</b> For the Purpose of Adding or Amending Existing Projects to the	<ul> <li>Investment Area Strategy (Elissa Gertler/Malu Wilkinson, Metro; 15 min)</li> </ul>			
2018-21 Metropolitan Transportation Improvement Program Involving Seven Projects Requiring Programming Additions, Corrections, or Cancellations Impacting OPRD,	<ul> <li>Regional Leadership Forum #4 Takeaways and RTP Investment Priorities – Endorsement Requested (Ellis, Metro; 25 min)</li> </ul>			
TriMet, and ODOT (FB18-06-FEB) ( <b>consent</b> )	<ul> <li>ODOT Value Pricing – Information/Discussion (Mandy Putney, ODOT; 25 min)</li> </ul>			
<ul> <li>Opdate on the 2021-24 STIP and ODOT</li> <li>Funding Allocation Process –</li> <li>Information/Discussion (Rian Windsheimer, ODOT; 15 min)</li> </ul>	<ul> <li>Review Draft 2018-19 Unified Planning Work Program (UPWP) – Information/Discussion (John Mermin, 10 min)</li> </ul>			
<ul> <li>Draft RTP Evaluation Findings Discussion Guide and Update on Regional Leadership Forum #4 – Information/Discussion (Kim Ellis, Metro; 30 min)</li> </ul>				
<ul> <li>Draft RTX Policies and Strategies – Information/Discussion (Eliot Rose, Metro; 25 min)</li> </ul>				
<u>March 2:</u> RTP Regional Leadership Forum #4, Oregon Convention Center	<u>March 14 – 16:</u> PBA Trip to Washington D.C.			

Items in italics are tentative

<u>April 19, 2018</u>	May 17, 2018		
• Chair comments TBD (5+ min)	• Chair comments TBD (5+ min)		
<ul> <li>2021-2024 STIP Update – Information/Discussion (Jon Makler, ODOT; 15 min)</li> </ul>	<ul> <li>Draft RTP (Focus on Policies and Implementation) – Information/Discussion (Ellis, Metro; 20 min)</li> </ul>		
<ul> <li>Draft Safety Strategy – Information/Discussion (Lake McTighe, Metro; 20 min)</li> </ul>	<ul> <li>Regional Transit Strategy – Information/Discussion (Snook, Metro; 20 min)</li> </ul>		
<ul> <li>Regional Travel Options Strategy Draft for Adoption – Recommendation to Metro Council (Dan Kaempff, Metro; 30 min)</li> </ul>	<ul> <li>Draft RTX Strategies and Policies – Information/Discussion (Eliot Rose, Metro; 20 min)</li> </ul>		
<ul> <li>MPO-State-Transit Financial Forecasts for FY2021-2024 – Recommendation to Metro Council (TBD; 5 min)</li> </ul>	• Draft Freight Strategy – Information/Discussion (Collins, Metro; 20 min)		
<ul> <li>2018-19 Unified Planning Work Program (UPWP) – Recommendation to Metro Council (John Mermin, 5 min)</li> </ul>			
<u>June 21, 2018</u>	<u>July 19, 2018</u>		
• Chair comments TBD (5+ min)	• Chair comments TBD (5+ min)		
<ul> <li>Burnside Project Information – Information/Discussion (TBD; 15 min)</li> </ul>	<ul> <li>2021-2024 STIP – MPO Comment Letter on 150% Fix-It Lists and Leverage Considerations</li> </ul>		
<ul> <li>RFFA Active Transportation Project Development Funds Allocation (Ted Leybold/Lake McTighe, Metro; 15 min)</li> </ul>	Recommendation to the Metro Council (25 min)		
<ul> <li>HB 2017 Projects of Regional Significance (TBD)</li> </ul>			
<ul> <li>SW Corridor Draft Environmental Impact Study         <ul> <li>Information/Discussion (Chris Ford, Metro; 30 min)</li> </ul> </li> </ul>			
<u>August 16, 2018</u>	<u>September 20, 2018</u>		
• Chair comments TBD (5+ min)	• Chair comments TBD (5+ min)		
	<ul> <li>2021-2024 STIP – MPO Comment Letter on 150% ARTS List and Leverage Considerations – Recommendation to the Metro Council</li> </ul>		
	<ul> <li>Introduce and Discuss TPAC Recommendation on 2018 RTP and Strategies for Freight, Transit, and Safety (Ellis; 60 min)</li> </ul>		

<u>October 18, 2018</u>	<u>November 15, 2018</u>		
• Chair comments TBD (5+ min)	• Chair comments TBD (5+ min)		
• JPACT Recommendation to Metro Council on Adoption of 2018 RTP and Strategies for Freight, Transit, and Safety (Ellis; 45 min)	• Economic Value Atlas – Information/Discussion (Jeff Frkonja/Malu Wilkinson, Metro; 30 min)		
<ul> <li>Southwest Corridor LPA – Recommendation to Metro Council (TBD; 30 min)</li> </ul>			
December 20, 2018			
• Chair comments TBD (5+ min)			

## **<u>RTP Regional Leadership Forums:</u>**

• March 2, 2018: RTP Regional Leadership Forum #4 (Finalizing Our Shared Plan for the Region)

### Parking Lot:

- Southwest Corridor Plan
- Prioritization of projects/programs
- Westside Freight Study/ITS improvements
- All Roads Safety Program (ODOT)
- Washington County Transportation Futures Study (TBD)
- Transportation Resiliency



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## 2018 MPAC Work Program

as of 2/6/18

Items in italics are tentative; **bold** denotes required items

<u>Wednesday, February 14, 2018</u>	Wednesday, February 28, 2018 – cancelled		
<ul> <li>Age Friendly Housing and Visitability (Alan De La Torre, PSU/Morgan Tracy, City of Portland: 30 min)</li> </ul>			
• Regional Housing Measure (TBD; 30 min)			
<ul> <li>RTP Evaluation Findings Discussion Guide and Update on Regional Leadership Forum #4 – Information/Discussion (Ellis; 30 min)</li> </ul>	<u>March 2:</u> RTP Regional Leadership Forum #4, OCC (Finalizing Our Shared Plan for the Region)		
Wednesday, March 14, 2018	Wednesday, March 28, 2018		
<ul> <li>Urban Growth Management Decision Process Update (Elissa Gertler/Ted Reid; 15 min)</li> </ul>			
<ul> <li>Draft RTX Policies – Information/Discussion (Eliot Rose, Metro; 40 min)</li> </ul>			
<ul> <li>Regional Leadership Forum #4 Takeaways and RTP Investment Priorities – Affirmation Requested (Ellis; 60 min)</li> </ul>			
<u>Wednesday, April 11, 2018</u>	<u>Wednesday, April 25, 2018</u>		
<ul> <li>Regional Housing Measure: Possible Scenarios</li> <li>– Information/Discussion (TBD; 30 min)</li> </ul>	<ul> <li>Draft Freight Strategy – Information/Discussion (Tim Collins, Metro; 20 min)</li> </ul>		
• Trends Behind the Regional Population Forecast: Migration and Demographic Change	<ul> <li>Draft Safety Strategy – Information/Discussion (Lake McTighe, Metro; 30 min)</li> </ul>		
– Information/Discussion (TBD; 60 min)	<ul> <li>Employment Trends: Changes in How and Where People Work – Information/Discussion (panel TBD; 50 min)</li> </ul>		
<u>Wednesday, May 9, 2018</u>	Wednesday, May 23, 2018		
<ul> <li>Food Scraps Policy Update – Information/Discussion (Jennifer Erickson, Metro; 20 min)</li> </ul>	<ul> <li>Regional Housing Measure: Draft Measure and Programs – Information/Discussion (TBD; 60 min)</li> </ul>		
<ul> <li>Regional Transit Strategy – Information/Discussion (Jamie Snook, Metro; 45 min)</li> </ul>	<ul> <li>Draft RTP (Focus on Policies and Implementation) – Information/Discussion (Ellis; 45 min)</li> </ul>		
<ul> <li>Draft RTX Policies and Strategies – Information/Discussion (Eliot Rose, Metro; 40 min)</li> </ul>			

Wednesday, June 13, 2018	Wednesday, June 27, 2018		
<ul> <li>City Proposals for UGB Expansions – Information/Discussion (Representatives from 2-3 Cities; 90 min)</li> </ul>	<ul> <li>City Proposals for UGB Expansions – Information/Discussion (Representatives from 2-3 Cities; 90 min)</li> </ul>		
<ul> <li>Regional Housing Measure Ballot Discussion – Recommendation (TBD: 20 min)</li> </ul>			
Wednesday, July 11, 2018	Wednesday, July 25, 2018		
<ul> <li>Overview of Draft 2018 Urban Growth Report         <ul> <li>Information/Discussion (Ted Reid, Metro; 45 min)</li> </ul> </li> </ul>	<ul> <li>Merits of City Proposals for UGB Expansions – Information/Discussion (TBD; 60 min)</li> </ul>		
Wednesday, September 12, 2018	Wednesday, September 26, 2018		
<ul> <li>Metro Chief Operating Officer Recommendation on 2018 Urban Growth Management Decision – Information/Discussion (Martha Bennett, Metro; 60 min)</li> </ul>	<ul> <li>Introduce and Discuss MTAC Recommendation on 2018 RTP and Strategies for Freight, Transit, and Safety (Ellis; 90 min)</li> </ul>		
<ul> <li>MPAC Recommendation to Metro Council on Urban Growth Management Decision – Recommendation to the Metro Council (Ted Reid, Metro; 30 min)</li> </ul>			
Wednesday, October 10, 2018	Wednesday, October 24, 2018		
• MPAC Recommendation to Metro Council on Adoption of 2018 RTP and Strategies for Freight, Transit, and Safety (Ellis; 60 min)			

#### MEMORANDUM

TO:	C4 Metro Subcommittee
FROM:	Karen Buehrig, Transportation Planning Manager; Stephen Williams, Principal Transportation Planner
DATE:	February 7, 2018
SUBJECT:	Proposals for discussion for Metro Active Transportation Project Development funding

#### Introduction

In November 2017 and January 2018, the C4 Metro Subcommittee received updates on the Metro Active Transportation Project Development funding program. There is \$2 million that has been set-aside to help create a pipeline of active transportation projects that can be moved forward for construction funding through programs like the ODOT STIP, ODOT Safe Routes to School, Metro Regional Flexible Funds, federal grants or even a future regional transportation funding measure. The Clackamas County sub region has been allocated \$306,000 for projects based on population within the urban area. Each county coordinating committees is being asked to forward the proposals that should receive the funding within their sub region. The proposals recommended by each coordinating committee will be submitted for approval to JPACT at their May meeting.

#### **Projects Reviewed by CTAC**

Staff members from all of the jurisdictions within the urban growth boundary were notified of the opportunity to submit proposals for review and consideration by the Clackamas County Technical Advisory Committee (CTAC). Five proposals were brought forward to CTAC, which included:

1)	Oak Grove Safe Poutes to Schools	Clackamas County
1)	Oak Grove Sale Roules to Schools	, Clackallias Coulity.

- 2) Willamette River Ped-Bike Bridge Feasibility Study, Clackamas County.
- 3) Scouters Mountain Trail Development, Happy Valley.
- 4) Main Street Access to Transit, Oregon City.
- 5) Hwy 43 Multi-modal Preliminary Design, West Linn.

Requested amount \$215,350 Requested amount \$306,000 Requested amount \$306,000 Requested amount \$30,000 Requested amount \$306,000

CTAC members reviewed and scored those proposals at their meeting on January 23, 2018. The discussion at CTAC focused on safety, likelihood of securing funding, inclusion in regional bond, regional active transportation benefit, inclusion in the 10 yr Active Transportation Strategy, improvement to connectivity, and leverage of other resources. Based on their scoring and discussion, the CTAC members recommended forwarding two of the proposals for consideration by the C4 Metro subcommittee.

#### Recommendation

#### The two proposals recommended for consideration are:

- West Linn Highway 43 Multimodal Improvements Holly St. to Mary S. Young Park
- <u>Clackamas County Willamette River Ped-Bike Bridge Feasibility Study</u>

Each of the projects are requesting the full amount of funds allocated by Metro: \$306,000.

The proposals and supporting materials are attached. Project sponsors for the two projects will attend the C4 Metro Subcommittee meeting to respond to questions from the members of the subcommittee.

The C4 Metro Subcommittee should review the proposals and select <u>one</u> of the projects to recommend to C4, for consideration at their March meeting, as the project that should be submitted to Metro for funding.



## **Project Development Scope of Work Form**

Complete this form for projects proposed to receive 2019-2021 RFFA bond proceeds for project development of active transportation projects.

Project requirement checklist – project must:

- x Help complete the regional bicycle and/or pedestrian network (<u>https://gis.oregonmetro.gov/rtp/</u>)
- x Be in a local Transportation System Plan
- x Be in the 2014 Regional Transportation Plan or the draft 2018 Regional Transportation Plan

#### Name of Project: Highway 43 Multimodal Improvements – Holly St. to Mary S. Young Park

Total project cost (start to finish): \$22,000,000 Amount requested for project development: \$306,000

#### **Project Contact**

Name, title, phone & email for:

- 1. Project Lead: Lance Calvert, <a href="https://lcalvert@westlinnoregon.gov">lcalvert@westlinnoregon.gov</a>, 503-722-3424
- 2. Project Manager: Lance Calvert, <a href="https://www.lcalvert@westlinnoregon.gov">lcalvert@westlinnoregon.gov</a>, 503-722-3424
- 3. Project Engineer: Lance Calvert, <a href="licalvert@westlinnoregon.gov">licalvert@westlinnoregon.gov</a>, 503-722-3424

#### **Project Information**

- 1. City (ies) where project is located: West Linn
- 2. County(ies) where project is located: Clackamas
- 3. Start location: Intersection of OR 43 / Willamette Dr. and Hidden Springs Rd. End location: Intersection of OR 43 / Willamette Drive and Holly St.
- Corresponding TSP project number(s) for the nominated project: M27, M28, M29, M30, M31, M32
- 5. Corresponding RTP project number(s) for the nominated project: 10127

#### **Current Project Description**

1. Briefly describe the project purpose (what issue or need will the project address) (*Example: A new buffered regional bikeway will provide safe and comfortable access along a high injury corridor to three major transit stations, two elementary schools and a town center*):

Oregon State Highway 43 (OR 43) connects multiple jurisdictions and communities such as Oregon City, West Linn, Lake Oswego, and Portland. The intent of this multimodal transportation project is to greatly enhance bike, pedestrian, transit, and vehicular mobility along OR 43 from Hidden Springs Rd. /Mary S. Young Park to Holly St. in West Linn. Installation of innovative bike protective

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intersections, traffic signal upgrades with timing enhancements, and transit prioritization will further improve multimodal safety and traffic efficiency. The project will create engineered design plans to infill key missing sidewalk sections between residential, school, commercial, park and transit areas; add ADA accessibility; add improved transit stops; improve intersection lighting; provide safe routes to schools; and create innovative grade separated bike lanes (cycle tracks). Current pedestrian and bike facilities in the project area are defined as substandard or completely lacking in the ODOT Active Transportation Needs Inventory as well as the Metro Regional Transportation Plan. This Active Transportation Project will connect and build upon currently planned and funded multimodal improvements along OR 43 from Hidden Springs Rd. /Mary S. Young Park to the north City limits/Arbor Drive. Project funding for this application will be used to secure 30% engineered design plans for the remainder of the corridor (Hidden Springs Rd. /Mary S. Young Park to Holly St.) which will also allow the City to require any future private redevelopment of the corridor to match the 30% design plan until local, regional, and/or federal funds are available to complete construction.

2. Summarize the planning and project development process for this project to date (identify plans, studies, or documents that have led to the current project definition):

<u>March 2016</u> - City of West Linn Transportation System Plan was adopted which includes multimodal project recommendation for the OR 43 corridor.

<u>October 2016</u> – West Linn OR 43 2016 Concept Plan was adopted as an addendum to the City's Transportation System Plan. This plan includes multimodal improvements focusing on innovative designs including cycle tracks and protected intersections.

<u>February 2017</u> – City of West Linn received Regional Flexible Fund Allocation (RFFA) Award for design and construction of multimodal improvements along OR 43 from north City limits/Arbor Dr. to Hidden Springs Rd. /Mary S. Young Park.

<u>May 2017</u> – City of West Linn received Statewide Transportation Improvement Program (STIP) Award for design and construction of multimodal improvements along OR 43 from north City limits/Arbor Dr. to Hidden Springs Rd. /Mary S. Young Park.

<u>November 2017</u> – City of West Linn voters approved impacts to right-of-ways adjacent to City Parks and Open Spaces to allow for future construction of multimodal improvements along entire corridor of OR 43 within West Linn.

<u>November 2018 – Present</u> – City of West Linn is coordinating with Oregon Department of Transportation on grant management, project management and delivery, and future maintenance of multimodal improvements on OR 43 from Mary S. Young Park/Hidden Springs Rd. to the north City limits/Arbor Dr. via intergovernmental agreements. Final design of this section (Hidden Springs Rd. /Mary S. Young Park to north City limits/Arbor Dr.) is anticipated to be completed in 2018 with construction beginning in 2019.

3. Describe the preferred alignment(s) of the project:

To match the existing road alignment.

4. Describe the major design features of the project (*Example: project will include a buffered bikeway of X width, bikeway intersection treatments, wayfinding, bicycle signal, and median*):

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Major characteristics of the design include comfortable separated bike facilities and continuous sidewalks on both sides of the street. A continuous two-way left-turn lane is to be provided to improve access to side streets, and driveways in addition to improved emergency response where no (or limited) shoulder space currently exists. Operational and traffic control improvements are an important aspect of this design and include realignment and redesign of specific signalized and non-signalized intersections.

The preferred cross section for this project includes six-foot sidewalks, seven-foot cycle tracks, a varying width landscape buffer, one motor vehicle travel lane in each direction, and a two-way left-turn center lane. In commercial areas, the sidewalk width may be greater than six feet. In areas with significant transit connections, the cross section is very similar but replaces the landscape buffer with a slightly wider transit stop platform to allow for accessible boarding and landing for the transit vehicles separated from the bicycle facility. In areas with topographical constraints, drainage, or other natural features, the cross section removes the landscape buffer but the bicycle facility remains grade-separated from the motor vehicle lane.

The plan draws on recent innovations in separated intersection design which will include raised corner refuge islands which provide protections to cyclists and allow for "free" right turns; forward queuing for bicyclists to increase visibility and bike entry into intersections ahead of right-turning vehicles for enhanced bike safety; and transition of grade in bicycle and pedestrian facilities to allow for appropriate use of space. Improvements to non-signalized intersections include raised or painted crossing of side streets for pedestrians and cyclists, enhanced pedestrian crossing treatments at high-demand locations, and redesign of side-street approaches to lessen the existing skewed angles at key intersections.

5. Are the preferred alignments and major design features broadly known and supported, or subject to change through the remaining project development process?

The preferred alignments and major design features are broadly known and supported. The need for multimodal improvements on the OR 43 corridor is adopted in the City's 2016 Transportation System Plan (TSP). The preferred alignment and major design features are incorporated in the City's 2016 OR 43 Concept Plan which was adopted as an addendum to the City's TSP. Further public support for the project and design concept is documented through the City's successful ballot measure in November 2017 in which voters approved impacts to right-of-way, parks, and open spaces along the OR 43 corridor for future multimodal improvements by a large majority. Final designs could be subject to change, but such changes are not anticipated to be significant.

6. Describe known or potential impacts to other agency's facilities, prior coordination with those agencies (ODOT, transit, railroads, utilities, etc.) about potential impacts to date, and potentially needed permits or agreements:

Impact to other agency's facilities is guaranteed as the project location is a State facility. The Oregon Department of Transportation (facility owner) was significantly involved in both the City's 2016 Transportation System Plan development as well as the 2016 OR 43 Concept Plan. TriMet, neighboring local jurisdictions, and Portland General Electric also participated in the development of the City's TSP and/or OR 43 Concept Plan. Multimodal improvements in accordance with the designs described in this application have been previously approved and funded for the north portion of OR 43 from the City limits/Arbor Dr. to Hidden Springs Rd. / Mary S. Young Park. Construction is being fully coordinated with ODOT and the City is entering into agreements for

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project and grant management, as well as future maintenance of the multimodal improvements. Similar agreements are anticipated to be secured for any future additional multimodal improvements of the remainder of the corridor (Hidden Springs Rd./Mary S. Young Park to Holly St.).

7. Describe whether right-of-way impacts (both construction easements and permanent) are known and if so, whether right-of-way is secured or not:

The amount of right-of-way available along the OR 43 corridor varies significantly from approximately 200 feet at its widest to only 50 feet at its most narrow spots. Permanent right-of-way impacts are anticipated along portions of the corridor in order to accommodate the proposed cross sections but survey and a more detailed right-of-way analysis is needed in order to fully identify such impacts. Right-of-way acquisition estimates have been included in the overall preliminary project cost analysis. Right-of-way has not been secured to date but the City has received voter approval for right-of-way impacts to open spaces and parks along the corridor for construction of future multimodal improvements. Significant property owners along the corridor that may experience impacts to right-of-way were engaged during the conceptual design planning efforts. All right-of-way acquisition is anticipated to be minor frontage slivers with no taking of any complete parcels.

- 8. Describe how the project will address the needs and contribute to desired outcomes, including:
  - a. Will the project serve Title 1 schools, low-income, low-English proficiency, non-white, elderly and young, and/or persons with disabilities populations? Yes or No: <u>Yes</u> If yes, how?

As a regional corridor, this project will serve multiple communities from Oregon City through Portland. The areas around OR 43 within the project area, in addition to most of West Linn, Oregon City, and Lake Oswego have an above average percentage of seniors as reported in the Regional Equity Atlas. The elderly population in West Linn equals approximately 34.7% of the total residents per the 2016 U.S. Census. West Linn's population with identified disabilities is also centered within the OR 43 corridor with an estimated 26-30% of the residents categorized as such in the City's 2016 Transportation System Plan (TSP). The City's TSP also shows a 10-15% minority population rate within the proposed project area as well as an 11-25% poverty rate, the highest level within West Linn. In addition, the project is directly adjacent to an elementary school that serves these populations.

All transportation disadvantaged populations will benefit greatly from improved walking, bicycling, and public transit access to key destinations. This will be accomplished by sealing gaps in the pedestrian and bicycle network, improving ADA accessibility, improved transit facilities, and improved transit reliability through enhancements such as transit signal prioritization.

b. Will the project reduce fatal and severe injury pedestrian and bicycle crashes or address a high risk location? Yes or No: <u>Yes</u> If yes, how?

Overall efficiency and safety of OR 43 is enhanced by this proposal through both vehicular and active transportation means. This project will improve the cross-modal safety of the transportation system especially where sidewalks and adequate bike facilities are lacking. The OR 43 corridor currently has several locations where pedestrians and cyclists do not have dedicated facilities and are sharing the road with fast moving vehicles. In areas with existing sidewalks, there are often obstructions within the sidewalk forcing users onto the highway. New sidewalks and an improved separated bike facility will provide a designated family-safe area for both uses where all level of users can feel secure along this high volume corridor (approximately 21,000 vehicle trips/day).

OR 43 is the most significant location for serious "injury A" crashes (ODOT classification for high impact/incapacitating injury incidents) within West Linn. There has been 266 reported crashes on OR 43 between 2011-2016, six of which were classified as injury A incidents (including one fatality) according to Oregon Department of Transportation crash data statistics. Pedestrian and bicyclist accidents account for 14 of the total accidents during the same time period. The OR 43 corridor has two Safety Priority Index System locations within West Linn that would be addressed through this project.

c. Will the project provide walking and bicycle access within 1/4 mile of transit stops and stations? Yes or No: <u>Yes</u> If yes, how?

TriMet operates the #35 bus line through West Linn along OR 43 and this area contains a number of residences and commercial uses. Pedestrians and bicyclists will be much better served and linked to the transit system for alternate commuting options. Several existing stops have sidewalk approaches from only a single direction, while others lack sidewalks entirely. A number of existing transit stops have no direct connection to bike facilities. Completing pedestrian and bike facility connections to transit stops will be crucial to ensure that transit riders can make their connections safely and comfortably.

d. Will the project provide walking and bicycle access within 1/4 mile of a school? Yes or No: <u>Yes</u> If yes, how (provide name of school(s))?

The proposed project is directly adjacent to Bolton Primary School and within ¼ mile of West Linn High School. Sidewalks and bicycle facilities separated both horizontally and vertically from the roadway will provide safe and inviting space for all levels of users to access these key locations for safe routes to schools.

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e. Will the project use design treatments that will lead to increased use of active transportation modes by providing a good user experience/increasing user comfort? Does the project provide a high degree of separation between people walking and bicycling and motor vehicle traffic? <u>Yes</u> or No: Yes If yes, how?

One of the fundamental objectives of this project is to create an inviting and comfortable active transportation environment for users of all abilities including youth, seniors, and people with disabilities. The OR 43 corridor is significantly lacking in accessible sidewalks and safe bike lanes. The planned separation of walking and bicycling from the roadway and improved connectivity to destinations increases the attractiveness and comfort of active transportation. Bicyclists will benefit from preferential treatments and innovative protected intersection designs that provide raised corner refuge islands, forward stop bars for increased visibility, early entry into intersections, and free right turns. Both bicycle and pedestrian paths will be grade separated and built with different materials and wayfinding signs/stenciling so intended uses stay distinct and clear.

New opportunities for pedestrian crossing enhancements will be reviewed with ODOT and pedestrian countdown timers will be added to traffic signals to enhance the pedestrian experience. ADA accessibility will be achieved by removal of existing obstructions in the sidewalk (e.g. utility poles and boxes), installation of curb ramps, and replacement of narrow curb-tight sidewalks which currently can be as narrow as 3 feet or non-existent. Lighting and landscape improvements will further enrich the active transportation environment.

f. How will the project improve access to and from priority destinations, serve high density areas, and/or increase the number of people walking and bicycling to help relieve congestion? Yes or No: <u>Yes</u> If yes, how?

The project area connects with numerous priority destinations including commercial centers, two schools, regional and local parks, open spaces, and transit stops. OR 43 is classified in Metro's 2014 Regional Transportation Plan (RTP) and Regional Active Transportation Plan (RATP) as a regional pedestrian parkway and a regional bicycle parkway, both of which are high functional class pedestrian and bicycle function routes in the RATP. However, existing bike and pedestrian facilities in the project area are defined as substandard or incomplete in the ODOT Active Transportation Needs Inventory, the 2014 Metro RTP and RATP, as well as in West Linn's Transportation System Plan and OR 43 Concept Plan.

Completion of a safe and uninterrupted bicycle and pedestrian transportation network in this area will vastly improve access via alternative transportation to and from priority destinations by not only making connections to these destinations, but by increasing the user's comfort and safety. The combination of increased access, comfort, and safety should increase the number of people utilizing alternative transportation therefore leading to a reduction of car trips and congestion.

g. Other needs and desired outcomes the project will address identified in the project purpose statement:

While pedestrian and cyclist safety and access are of primary importance, aesthetic conditions also greatly influence a street's appeal to pedestrians and cyclists. Through this plan there are several opportunities to introduce landscaping to the streetscape in order to enhance the visual appeal of the roadway. Incorporating a planting strip between the sidewalk and the roadway, and bringing vegetation to the streetscape could help to soften the visual impacts of the corridor and increase use of active transportation.

9. Describe the existing project funding strategy (will federal or ODOT program funds potentially be requested?):

Full design and construction of improvements to OR 43 are currently funded for the section of OR 43 from Arbor Drive (Lake Oswego city limits) to Hidden Springs Road (Mary S. Young Park) through a combination of Enhance (State), RFFA (METRO), and local funds. It is anticipated that a combination of local, regional, state, and/or federal funds will be required to complete construction of the remainder of the corridor. The project development plans will allow for phasing of construction as funds become available from both public and/or private development.

#### Project Development Scope, Cost and Funding Request

- 1. Total estimated cost <u>for project development</u> (should equal combined amounts identified in #2, 3, and 4, below): \$ 1,150,000
- 2. Amount already expended on project development (estimate is okay): \$ 150,000 (development of adopted OR 43 Concept Plan Update)
- 3. Planned additional local contribution to project development (not required): \$ 694,000
- 4. Total amount requested of RFFA bond proceeds for project development: \$ 306,000
- 5. Total estimated project cost through construction (including project development): \$ 22,000,000
- 6. Provide preliminary project cost estimate to date and a brief description of the method and level of confidence of the estimate (attach any documentation available):

See attached cost estimate using standard Metro cost estimate workbook.

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7. Project cost estimates reviewed by Project Engineer (name): Lance Calvert, P.E.

### **Required Additional Information**

1. GIS shapefile of the project.

Shapefile of the project have been previously submitted to Metro. Please see shapefile for RTP 10127.

2. Project Development Scope of Work Main Tasks and Summary Costs- use the attached template and modify as necessary.

#### Template: Project Development Scope of Work – Main Tasks and Summary Costs

Use the template below (modifying as needed) to describe the project development work that will be completed to advance the understanding and readiness of the project for implementation and increase your agency's confidence in being able to deliver the project to an identified scope and budget.

- The project development work should advance the project on priority issues identified in the current project description that could impact project delivery.
- The end result of the project development work should include a refined project scope, schedule, budget, and funding strategy.
- For projects that may seek federal funding for implementation, agencies should strive to prepare the project to be ready to enter the NEPA and preliminary engineering phase of the project and cost estimates should be updated to account for the federal NEPA and right-of-way process.
- For projects using ODOT program funds or on ODOT facilities, include coordination with ODOT and utilization of ODOT guidelines such as ADA compliant design.

#### **Purpose and Desired Outcomes**

Provide a brief summary description (2-4 lines of text) of the purpose and desired outcomes of the project development work (*Example: The purpose and objective of this study is to....(purpose statement, desired outcomes)* and is located in the . . . (describe study location with boundary limits))

The purpose and objective of this project development work is to secure a 30% engineered design plan for OR 43 from Hidden Springs Rd. / Mary S. Young Park to Holly St. in West Linn in order to connect and build upon currently planned and funded multimodal improvements along OR 43 from Hidden Springs Rd. / Mary S. Young Park to Arbor Drive. Securing a 30% engineered design plan will also allow the City to require any future private development of the corridor to match the plan until local, regional, and/or federal funds are available to complete construction.

Major Project Scope Elements and Summary Costs					
Provide a bullet list of the main tasks that will achieve the purpose and objectives (Examples provided below)	A cost summary per each major task	ID in-house or consultant driven task			
<ul> <li>Project Management:</li> <li>Corridor design, progress reports to the City and ODOT,</li> </ul>	\$150,000				
quality control of deliverables, development of final project schedule.	(15%)	Consultant			
Data Collection and Review:					
<ul> <li>Review of existing plans and data including TSP, OR 43</li> <li>Concept Plan, recent crash data and any additional trend analysis to identify potential contributing factors and/or hot</li> </ul>	\$100,000	Consultant			
spots.	(10%)				
• Conduct held review of corridor including updated pictures of existing conditions and roadway characteristics.					

Page 9 of 10

	Development of Final (30%) Design Plan:		
•	Integrate approved concept plan into proposed alignments		
	and cross sections as appropriate.		
٠	Complete topographic survey of corridor.		
٠	Develop and present final (30%) design of plan, profile, and		
	cross sections.		
•	Develop plans to align with federal, NEPPA and ODOT	\$750,000	
	guidelines/requirements.	\$750,000	Consultant
٠	Prepare final cost estimates including construction, right-of-	(75%)	Consultant
	way acquisitions, utility relocations, stormwater drainage,		
	and design.		
•	Produce hard copy and electronic 30% design plan		
	encompassing all essential elements including but not		
	limited to study area, right-of-way, existing land use,		
	proposed cross sections and alignments, public outreach		
	and feedback, and coordination with partnering or		
	impacted agencies/jurisdictions.		
	Total Proposed Plan Development Costs:	\$1,000,000	

#### **Approach And Oversight**

Discuss how the project development work will be implemented and how expenditures will be tracked and monitored by the agency. Describe the technical, administrative and budget capacity to complete project development work. (*Example: The study will be implemented and completed through a combination of in-house staff work and use of an external consultant to achieve the task elements. Review of staff and consultant work to ensure tasks are completed and funds are expended plus reimbursed properly will occur by\_\_\_\_\_. Agency has identified the following staff and resources to work on the project\_\_\_\_\_.)* 

Project development will be implemented through a combination of in-house and external consultant expertise. City staff will develop a Request for Proposals in order to identify a qualified consultant to assist in technical analysis and development of a 30% engineered design plan for the corridor. As OR 43 is a State facility, the project will require technical coordination with ODOT during development of the 30% design plan as well. The City has a dedicated budget for street capital improvements and a local funding match has been allocated for development of this plan. The City will agree with ODOT and consultant upon a scope of work and fee schedule for task elements prior to implementation of project development. The City utilizes a standard project expenditure spreadsheet to track all expenditures related to capital improvements. This form is reviewed and updated with each payment request to ensure that work is being performed on time and in accordance with the agreed upon scope of work and fee schedule. The City has a Management Analyst on staff who, with assistance from the City Engineer, will review all payments and submitted work by the consultant. The City Engineer will be a technical resource to the consultant. The City Engineer has extensive knowledge of the technical, administrative, and financial requirements to successfully complete this transportation development project.

#### Instructions for Using This Workbook

#### Password for locking/unlocking this sheet is 'metro'. All other sheets have no password.

Purpose

This workbook provides a methodology for planning-level cost estimating for transportation infrastructure projects. Alternative methodology of similar or better detail is acceptable.

Where agencies propose cost methodology significantly different from this methodology, documentation should be provided. This includes unit costs which vary significantly from that specified here. Consistency of such costs between projects is desirable in that it allows for equitable comparison of projects.

#### Instructions:

This workbook or a comparable cost estimate must be completed for each project submitted.

Complete the project information below and in Sheets 1 through 5. Worksheets are accessed by tabs at the bottom of the window. Sheet 6 summarizes total estimated cost of the project.

Input cells are shaded light blue, and should be filled in by the user (where applicable). Other cells are locked and should not be changed. <sample> Appearance of input cells used throughout this workbook.

Locked cells can be unlocked by selecting Review > Unprotect Sheet. This is not recommended in most cases. Password is 'metro'.

Questions about completing the workbook should be directed to Anthony Buczek, Transportation Engineer with Metro.

Feedback and comments about this workbook are encouraged, and will help to improve it for future updates. phone: 503-797-1674

e-mail: anthony.buczek@oregonmetro.gov

Project Information:		Fill in all of the information below for your project.		
Funding year:	PE	2019		
I	ROW	2020		
(	Const	2021		
Project n	name:	Highway 43 Multimodal Transportation Project Phase II		
Corridor and endp	oints:	MP 9.07 (OR 43 at Mary S. Young State Park) to MP 11.05 (OR 43 at Holly St)		
Project descri	ption:	Enhancements to vehicle, pedestrian and bicycle travel along the Highway 43 corridor		
Local plan proj	ect #:			
RTP proj	ect #:	10127		
Submitting ag	ency:	City of West Linn		
Agency co	ntact:	Lance Calvert		
Contact pl	hone:	503-722-3424		
Contact e	-mail:	lcalvert@westlinnorego	<u>In.qov</u>	

Unit costs year:	2007			
Escalation rate	Used in Calculations	Default	Override	_
2007 - 2008	100.38%	100.38%		Do not override these unless better escalation factors are identified.
2008 - 2009	84.72%	84.72%		2007 - 2015 based on FHWA NHCCI
2009 - 2010	96.78%	96.78%		2016 - 2021 based on ODOT inflation assumptions
2010 - 2011	101.04%	101.04%		
2011 - 2012	105.05%	105.05%		
2012 - 2013	97.86%	97.86%		
2013 - 2014	100.79%	100.79%		
2014 - 2015	100.71%	100.71%		
2015 - 2016	104.00%	104.00%		
2016 - 2017	104.00%	104.00%		
2017 - 2018	104.00%	104.00%		
2018 - 2019	104.00%	104.00%		
2019 - 2020	104.00%	104.00%		
2020 - 2021	104.00%	104.00%		

#### Escalation Lookup Table

v From \ To >	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2007	100.00%	100.38%	85.04%	82.30%	83.16%	87.36%	85.49%	86.16%	86.78%	90.25%	93.86%	97.61%	101.52%	105.58%	109.80%
2008		100.00%	84.72%	81.99%	82.84%	87.03%	85.17%	85.84%	86.45%	89.91%	93.50%	97.24%	101.13%	105.18%	109.38%
2009			100.00%	96.78%	97.79%	102.72%	100.53%	101.32%	102.04%	106.12%	110.37%	114.78%	119.37%	124.15%	129.11%
2010				100.00%	101.04%	106.14%	103.87%	104.69%	105.43%	109.65%	114.04%	118.60%	123.34%	128.28%	133.41%
2011					100.00%	105.05%	102.80%	103.61%	104.35%	108.52%	112.86%	117.38%	122.07%	126.96%	132.04%
2012						100.00%	97.86%	98.63%	99.33%	103.31%	107.44%	111.74%	116.21%	120.85%	125.69%
2013							100.00%	100.79%	101.51%	105.57%	109.79%	114.18%	118.75%	123.50%	128.44%
2014								100.00%	100.71%	104.74%	108.93%	113.29%	117.82%	122.53%	127.43%
2015									100.00%	104.00%	108.16%	112.49%	116.99%	121.67%	126.53%
2016										100.00%	104.00%	108.16%	112.49%	116.99%	121.67%
2017											100.00%	104.00%	108.16%	112.49%	116.99%
2018												100.00%	104.00%	108.16%	112.49%
2019													100.00%	104.00%	108.16%
2020														100.00%	104.00%
2021															100.00%

Workbook revision date: June 27, 2016 (metro)

#### 1. Construction

Sections A through E must be completed. Complete Sections F and/or G if applicable.

Projects will not include all elements below, but most will include elements from multiple sections.

Enter quantities only for elements actually included in your project.

1.A - Road Construction, Reconstruction, or Resurfacing

#### Highway 43 Multimodal Transportation Project Phase II MP 9.07 (OR 43 at Mary S. Young State Park) to MP 11.05 (OR 43 at Holly St) City of West Linn

item	Unit	Quantity	Unit cost	Total	_Description
Road - new/reconstruct (not incl. curb. sidewalk, drainage	e) SF	60.000.0	\$15	\$900.000	Specify SF of pavement, not including sidewalks and curbs (these are assumed in unit cost).
Road - resurface	SE	400 000 0	\$4	\$1,600,000	
- Chestiful and the isol width of project	01	400,000.0	φ+ na Width – 20 faat	φ1,000,000	For desumentation of ensumetions used
<ul> <li>Specify length and typical width of project</li> </ul>		Length = 2.00 mill	es, wiulii = 39 ieel		_ror documentation of assumptions used.
Section 1.A Subtotal				\$2,500,000	
1.B - Addition of Roadway Elements to Existing Roadway	<u>(</u>				
Item	Unit	Quantity	Unit cost	Total	Description
Minor widening, no curbs	SF	0.0	\$15	\$0	Used for bike lanes, other minor widening. Does not include curbs, sidewalks, or drainage.
Remove pavement	SF	60.000.0	\$0.75	\$45,000	
Curb only	LE	45 600 0	\$16	\$729,600	For new curb installation. Does not include drainage
Bomovo ourb		15,000.0	\$10 \$6	\$00,000	
Remove curb		15,000.0	90 000 E0	\$90,000	-
Median in existing lane no drainage	LF	0.0	\$86.50	\$0	Includes pavement removal, curbs, landscaping for a 12' median in 14' lane. No drainage included.
Landscaping only - medians and bulbouts	SF	40,000.0	\$4	\$160,000	Install 18" topsoil plus plants
Drainage system - both sides	LF	1,300.0	\$115	\$149,500	For new installatations. Length is overall project length where drainage is added.
Bridge - new or replace	SF	0.0	\$250	\$0	
Specify length and width of bridge					For documentation of assumptions used.
Street trees with tree grates	LF	0.0	\$40	\$0	Per side.
Irrigation system		Provide estimate	<b>&gt;</b>	\$0	For irrigation of medians and bulbouts. Specific estimate required if used (describe in Section 1.G).
Signing/marking	LE	32 700 0	\$2	\$65,400	Use when new pavement markings are to be installed (per line)
Clearing	CT	60,000,0	¢0.00	¢00,+00	
Cleaning	55	60,000.0	\$0.06	\$3,600	
Grading	CY	7,000.0	\$17.50	\$122,500	Provide an estimate of grading and describe assumptions in Section 1.G.
Retaining walls (by wall area)	SF	0.0	\$55	\$0	Use SF of walls if known. If not, estimate length of walls and describe assumptions in Section 1.G.
Retaining walls (by length)	LF	5,400.0	\$250	\$1,350,000	
Section 1.B Subtotal				\$2,715,600	
1.C - Addition of Pedestrian Elements to Existing Roadwa	ay				
Item	Unit	Quantity	Unit cost	Total	Description
Sidewalk, po curb	SE	135 000 0	\$10	\$1 350 000	
Demous sidewells	01	20,000.0	\$10 \$1.05	\$1,330,000	
	55	30,000.0	\$1.25	\$37,500	
Shared-use path	SF	145,000.0	\$5	\$725,000	Includes curb ramps.
Street furniture - bench	EA	16	\$2,275	\$36,400	
Street furniture - bike rack	EA	50	\$330	\$16,500	-
Street furniture - trash can	EA	2	\$1,350	\$2,700	
Section 1.C Subtotal				\$2,168,100	
1.D - Utilities					
Item				Total	Description
I Itility burial		Provide estimate		\$0	If utility burial is included, provide a detailed cost from the appropriate utility
		Provide estimate		0 \$0	Describe what utilities will ar may be releasted. Browide sect actimate and describe accumptions
ounty relocation	Description	Filovide estimate			These are no pleased utility hurida
	Description:	Existing franchise	agreements requir	e utility relocation	i. There are no planned duity burials.
Railroad impacts		Summarize impac	ts		Describe potential impacts to railroads in project area.
Railroad impacts	Summary:	Summarize impac There are no railro	ts bad impacts associ	ated with this pro	Describe potential impacts to railroads in project area. ject.
Railroad impacts	Summary:	Summarize impac There are no railro	ts bad impacts associ	ated with this pro	Describe potential impacts to railroads in project area. ject.
Railroad impacts Section 1.D Subtotal	Summary:	Summarize impac There are no railro	ts oad impacts associ	ated with this pro	Describe potential impacts to railroads in project area. ject.
Railroad impacts Section 1.D Subtotal	Summary:	Summarize impac There are no railro	ets bad impacts associ	ated with this pro	Describe potential impacts to railroads in project area. ject.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting	Summary:	Summarize impac	tts Dad impacts associ	ated with this pro	Describe potential impacts to railroads in project area. ject.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item	Summary:	Summarize impac	tts bad impacts associ	ated with this pro \$0	Describe potential impacts to railroads in project area. ject.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more)	Summary: Unit	Summarize impact	tts pad impacts associ Unit cost \$350.000	ated with this pro \$0 Total \$0	Description Use where at least one roadway is 4 lanes or more
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (Jess than 4-lange)	Summary: Unit EA	Summarize impact There are no railro Quantity 0	Unit cost \$350,000	so	Description Use where at least one roadway is 4 lanes or more. Use where at least one roadway is 4 lanes or more.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (less than 4-lanes)	Summary: Unit EA EA	Summarize impact There are no railro Quantity 0 3	unit cost \$350,000 \$305,000	so Total \$0 \$915,000	Description Use where at least one roadway is 4 lanes or more. Use where both roadways are 3 lanes or less.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (less than 4-lanes) Street lighting - per side	Summary: Unit EA EA LF	Summarize impact There are no railro Quantity 0 3 0.0	tts pad impacts associ Unit cost \$350,000 \$305,000 \$80	Total         \$0           \$915,000         \$0	Description Description Use where at least one roadway is 4 lanes or more. Use where at least one roadways are 3 lanes or less. Install street lighting at 100' spacing per side.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (less than 4-lanes) Street lighting - per side Section 1.E Subtotal	Summary: Unit EA EA LF	Summarize impact There are no railro Quantity 0 3 0.0	tts pad impacts associ Unit cost \$350,000 \$305,000 \$80	ted with this pro \$0 <u>Total</u> \$0 <u>\$915,000</u> \$0 <b>\$915,000</b>	Description Description Use where at least one roadway is 4 lanes or more. Use where both roadways are 3 lanes or less. Install street lighting at 100' spacing per side.
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Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (less than 4-lanes) Street lighting - per side Section 1.E Subtotal 1.F - Associated Costs	Summary: Unit EA EA LF	Quantity O O O O O O O O O O O O O O O O O O O	tts Dad impacts associ Unit cost \$350,000 \$305,000 \$80	\$0 \$0 <u>Total</u> \$0 \$915,000 \$0 \$915,000	Description Use where at least one roadway is 4 lanes or more. Use where both roadways are 3 lanes or less. Install street lighting at 100' spacing per side.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (less than 4-lanes) Street lighting - per side Section 1.E Subtotal 1.F - Associated Costs Item	Summary: Unit EA EA LF	Quantity           0           3           0.0	tts pad impacts associ Unit cost \$350,000 \$305,000 \$80	ated with this pro	Description Use where at least one roadway is 4 lanes or more. Use where at least one roadway is 4 lanes or less. Install street lighting at 100' spacing per side. Description
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Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (less than 4-lanes) Street lighting - per side Section 1.E Subtotal 1.F - Associated Costs Item Mobilization, staging, traffic control Erosion control - enter value to override fixed 1.5% Section 1.F Subtotal 1.G - Additional Information	Summary: Unit EA EA LF S Description:	Summarize impact There are no railed Quantity 0 3 0.0 \$150,000.00 Mobilization chan- Erosion control es	ts Dad impacts associ Unit cost \$350,000 \$305,000 \$80 Basis 10% Estimate ged to 10% to more timate includes a p	Total         S0           \$0         \$915,000           \$915,000         \$915,000           \$915,000         \$915,000           Total         \$829,870           \$150,000         \$0           closely align with oldution control p         \$979,870	Description Use where at least one roadway is 4 lanes or more. Use where both roadways are 3 lanes or less. Install street lighting at 100' spacing per side. Description Use 1.5% of construction costs, or provide a cost estimate and describe assumptions. h the City's concept plan cost estimate lan, as estimate as part of City's concept plan cost estimate
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Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting Item Traffic signals (4-lanes or more) Traffic signals (less than 4-lanes) Street lighting - per side Section 1.E Subtotal 1.F - Associated Costs Item Mobilization, staging, traffic control Erosion control - enter value to override fixed 1.5% Section 1.F Subtotal 1.G - Additional Information Use the space below to provide additional information, in Stormwater/drainage cost breakdown: 5000 LF of 12" reis	Summary: Unit EA EA LF S Description:	Summarize impact There are no railro Quantity 0 3 0.0 \$150,000.00 Mobilization chan Erosion control es not listed above, or the pipe @ \$60/LF; water quantities bas	ts Dad impacts associ Unit cost \$350,000 \$305,000 \$305,000 \$80 Basis 10% Estimate ged to 10% to more ttimate includes a p to expand on assu 500 LF of 24" reinf sed on concept plan ed on concept plan	Total           \$0           \$10           \$0           \$20           \$215,000           \$0           \$915,000           \$150,000           \$150,000           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$150,000           \$20,870           \$100,000           \$20,870           \$100,000           \$20,870           \$100,000           \$20,870           \$100,000           \$20,870           \$100,000           \$20,870           \$100,000           \$20,870           \$20,870           \$20,870           \$20	Description Use where at least one roadway is 4 lanes or more. Use where at least one roadway is 4 lanes or more. Use where both roadways are 3 lanes or less. Install street lighting at 100' spacing per side. Description Use 1.5% of construction costs, or provide a cost estimate and describe assumptions. In the City's concept plan cost estimate lan, as estimate as part of City's concept plan cost estimate ipe @ \$120/LF; 6 sloped end section @ \$700/EA; 10 concrete storm manholes @ \$3000/EA; 60 concrete y engineering design. Many existing structures and crossings will be kept.
Railroad impacts Section 1.D Subtotal 1.E - Traffic Signals and Lighting tem Traffic signals (4-lanes or more) Traffic signals (4-lanes or more) Street lighting - per side Section 1.E Subtotal 1.F - Associated Costs tem Mobilization, staging, traffic control Erosion control - enter value to override fixed 1.5% Section 1.F Subtotal 1.G - Additional Information Use the space below to provide additional information, in Stormwater/drainage cost breakdown: 5000 LF of 12" rei storm inlets @ \$1500/EA; water quality swales 20 @ \$50	Summary: Unit EA EA LF \$ Description: storced concer o0/EA. Storm	Summarize impact There are no railro Quantity 0 3 0.0 \$150,000.00 Mobilization chan Erosion control es not listed above, or the pipe @ \$60/LF; water quantities bas	tts Dad impacts associ Unit cost \$350,000 \$305,000 \$305,000 \$80 Basis 10% Estimate ged to 10% to more timate includes a p to expand on assu to expand on assu to occept plan	so Total \$0 \$915,000 \$915,000 \$915,000 Total \$829,870 \$150,000 closely align wit pollution control p \$979,870 umptions used. orced concrete p ns and preliminan	Description Use where at least one roadway is 4 lanes or more. Use where both roadways are 3 lanes or less. Install street lighting at 100' spacing per side. Description Use 1.5% of construction costs, or provide a cost estimate and describe assumptions. In the City's concept plan cost estimate lan, as estimate as part of City's concept plan cost estimate ipe @ \$120/LF; 6 sloped end section @ \$700/EA; 10 concrete storm manholes @ \$3000/EA; 60 concrete y engineering design. Many existing structures and crossings will be kept.
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#### Highway 43 Multimodal Transportation Project Phase II

Sections A and B must be completed. Complete Section C if applicable. Contact Metro if information for 2.B is needed.

MP 9.07 (OR 43 at Mary S. Young State Park) to MP 11.05 (OR 43 at Holly St) City of West Linn

2.A - Status and Information			
Please place an 'X' in the appropriate box.			
EA not completed; an EIS IS expected.			
EA not completed; an EIS is NOT expected.	<u>c                                     </u>		
EA not completed; unknown whether EIS is expected.			
EA has been completed; an EIS IS required.			
EA has been completed; an EIS is NOT required.			
Both an EA and an EIS have been completed.			
Describe expected environmental impacts, assumptions, and unknow	wns		
Descriptio	n: Environmental mitigation is not e	expected.	
2.B - Environmental Impacts and Mitigation			
ltem Ur	nit Quantity Unit cost	Total	Description
Estimate acreage of impact/mitigation ACI	RE 0.00 \$150,000	\$0	
Section 2.B Subtotal		\$0	
2.C. Additional Information			
Use the space below to provide additional information, including item	is not listed above, or to expand on a	issumptions used.	
Other Expected Costs	Provide estimate	L     L	
Section 2.C Subtotal		\$0	
		¢0	Castion 2 Tatal
i otal estimate for environmental mitigation		\$0	Section 2   otal

#### 3. Right-of-Way Cost Estimation Highway 43 Multimodal Transportation Project Phase I Use either Method 'A' or Method 'B'. Method 'A' is preferred. Complete Section C if applicable. MP 9.07 (OR 43 at Mary S. Young State Park) to MP 11.05 (OR 43 at Holly St) City of West Linn Where the exact SF of ROW is unknown, an estimate must be made. At the most simplistic level, this estimate can be made by calculating the difference between the proposed cross-section width and the existing ROW width, multiplied by the project length. Where ROW width cannot be determined, it should be assumed to be the width of the existing roadway including sidewalks. 3.A - Method 'A' (moderate confidence) Unit Quantity Unit cost Item Total Description SF Estimate area (SF) of ROW taking 80000.0 Describe assumptions used in calculating area: Estimate unit cost (per SF) of taking \$ \$20.00 The concept design indicates which parcels may be affected by the road widening. Area was measured between existing ROW and proposed edge of Describe assumptions used in calculating unit cost(s): road/sidewalk. All properties assumed to be "developed" ROW taking for cost estimate. This cost is consistent with the City's recent appraisals and acquisition n other locations. Estimated total cost of taking \$1.600.000 Estimated area multiplied by estimated unit cost. Number of affected parcels: EA 46 \$10.000 \$460,000 Reflects administrative costs of property acquisition. Section 3.A Subtotal \$2.060.000 3.B - Method 'B' (low confidence) Item Unit Quantity Unit cost Total Description Estimate square-feet of high-value ROW taking SF \$30 \$0 Use in urban areas and moderate to high-priced neighborhoods. Estimate square-feet of developed ROW taking SF \$20 \$0 Use in other established neighborhoods. SF \$0 Estimate square-feet of undeveloped ROW taking \$15 Use in undeveloped areas. Describe assumptions used in calculating area: \$0 Estimated total cost of taking Estimated area multiplied by estimated unit cost. FA \$0 Number of affected parcels: \$10.000 Reflects administrative costs of property acquisition. Section 3.B Subtotal \$0 3.C - Additional Information Use the space below to provide additional information, including items not listed above, or to expand on assumptions used.

SUMMARY

Method 'A' Right-of-Way estimate (moderate confidence) Method 'B' Right-of-Way estimate (low confidence) **\$2,060,000** Section 3 Total (moderate confidence)

**\$0** Section 3 Total (low confidence)

4. Design and Administration Costs				Highway 43 Multimodal Transportation Project Phase II
Complete input cells in Sections A and B if applicable. Default markup	values can be over	ridden.		MP 9.07 (OR 43 at Mary S. Young State Park) to MP 11.05 (OR 43 at Holly St)
				City of West Linn
<u>4.A - Design</u>				
Construction Costs (from Section 1):	\$9,862,770			
Environmental Impact Costs (from Section 2):	\$0			
Item	Base Cost	Markup	Total	Description
Surveying, design, coordination	\$9,862,770	23%	\$2,268,437	(Default 30%) Typically included in the professional engineering contract
Construction Engineering	\$9,862,770	13%	\$1,282,160	(Default 20%) Engineering services during construction
Other Expected Costs	Provide estimate			
Description of other expected costs:	Survey, design, co	pordination and co	nstruction engine	ering markups reduced to 20% and 12% because the preliminary layout and significant planning have
	been completed.		e assistance throu	ignout the project at no additional cost.
Section 4.A Subtotal			\$3,550,597	
4.B - Administration				
Project Administration will be applied throughout project.			T	7
Administration	\$9,862,770	10%	\$986,277	(Default 35%) Project overhead
Section 4.B Subtotal			\$986,277	
4.C - Additional Information				
Use the space below to provide additional information, including items	not listed above, or	to expand on assu	imptions used.	the description of the fact that the description of the second state of the fact that the description of the second state of the se
Administration markup reduced to 10%. Reasons include: preliminary of included in grant funds. Administration for environmental aspects are e	esign has been cor	npleted and project	of work is within e	ion due to public input during development process, local staff time will be funded by the City and not existing right-of-way and contained within existing payed surfaces
SUMMARY				

Total of all above items

\$4,536,874 Section 4 Total

#### 5. Contingency and Risk

Complete input cells in Section A if applicable. Default markups can be overriden. Section B must be completed.

Highway 43 Multimodal Transportation Project Phase II MP 9.07 (OR 43 at Mary S. Young State Park) to MP 11.05 (OR 43 at Holly St) City of West Linn

5.A - Contingency				
Item	Section Total	Markup	Contingency \$	Description
Section 1 - Construction	\$9,862,770	20%	\$1,972,554	(Default 20%)
Section 2 - Environmental	\$0	20%	\$0	(Default 20%)
Section 3.A - Right-of-Way (moderate confidence)	\$2,060,000	40%	\$824,000	(Default 40%)
Section 3.B - Right-of-Way (low confidence)	\$0	50%	\$0	(Default 50%)
Section 4.A - Design	\$3,550,597	20%	\$710,119	(Default 20%)
Section 4.B - Administration	\$986,277	No contingency of	on Administration	•
Other Expected Costs	Provide estimate	>		
Description of other expected costs:				

#### Section 5.A Subtotal

\$3,506,673

#### <u>5.B - Risk</u>

Describe project components, impacts, or unknowns that are uncertain in scope at this point. Items might include:

environmental issues

agency approvals
existing deficient infrastructure

nearby historic or cultural resourcesrailroad or utility work

complex or untested components

bridge work

other unique elements

Description of these items is not intended to affect project selection, but rather to identify and document key issues that need refinement.

Metro Cost Estimation Workbook

#### 6. Project Summary Sheet

Highway 43 Multimodal Transportation Project Phase II MP 9.07 (OR 43 at Mary S. Young State Park) to MP 11.05 (OR 43 at Holly St) Enhancements to vehicle, pedestrian and bicycle travel along the Highway 43 corridor City of West Linn

6.A - Cost Summary in 2007\$	Item Total	Phase Total
Preliminary Engineering (PE)		\$2,948,968
Surveying, design, coordination	\$2,268,437	
Contingency at 20%	\$453,687	
Administration at 10%	\$226,844	
Right-of-Way (ROW)		\$2,884,000
Right-of-Way (moderate confidence)	\$2,060,000	
Contingency at 40%	\$824,000	
Right-of-Way (low confidence)	\$0	
Contingency at 50%	\$0	
Construction (Const)	<b>1 1 1 1 1</b>	\$14,488,409
Construction (Section 1)	\$9,862,770	
Contingency at 20%	\$1,972,554	
Environmental (Section 2)	\$0	
Contingency at 20%	\$0	
Construction Engineering	\$1,282,160	
Contingency at 20%	\$256,432	
Administration at 10%	\$1,114,493	
		Total
		\$20,321,377

### 6.B - Funding Summary by Year of Expenditure

Phase		20	07 Dollars	YOE Year	Escalation	YOE Cost
Preliminary Engineering	PE	\$	2,948,968	2019	1.52%	\$ 2,990,000
Right-of-Way	ROW	\$	2,884,000	2020	5.58%	\$ 3,040,000
Construction	Const	\$	14,488,409	2021	9.80%	\$ 15,910,000
	Total	\$	20,321,377			\$ 21,940,000

Highway 43 MSY To I205 Project\_Cost Estimate Workbook - 6-Summary



## **Project Development Scope of Work Form**

Complete this form for projects proposed to receive 2019-2021 RFFA bond proceeds for project development of active transportation projects.

Project requirement checklist – project must:

- Yes Help complete the regional bicycle and/or pedestrian network (<u>https://gis.oregonmetro.gov/rtp/</u>)
- Yes Be in a local Transportation System Plan
- Yes Be in the 2014 Regional Transportation Plan or the draft 2018 Regional Transportation Plan

#### Name of Project: Willamette River Ped Bike Bridge Feasiblity Study

Total project cost (start to finish): \$21,536,380 Amount requested for project development: \$306,000

#### **Project Contact**

Name, title, phone & email for:

- 1. Project Lead: Stephen Williams, Principal Transportation Planner, (503) 742-4694, swilliams@clackamas.us
- 2. Project Manager: Karen Buehrig, Transportation Planning Manager, (503) 742-4683, KarenB@co.clackamas.or.us
- 3. Project Engineer: Joel Howie, Capital Project Manager, (503) 742-4658, JHowie@co.clackamas.or.us

#### **Project Information**

- 1. City (ies) where project is located: Lake Oswego/Milwaukie
- 2. County(ies) where project is located: Clackamas County
- 3. Start location To be determined in the proposed study End location To be determined in the proposed study
- 4. Corresponding TSP project number(s) for the nominated project: Clackamas County #2022
- 5. Corresponding RTP project number(s) for the nominated project: Draft 2018 RTP #10085

#### **Current Project Description**

1. Briefly describe the project purpose (what issue or need will the project address) The Willamette River is a major barrier to pedestrian and bike mobility in the Metro region south of downtown Portland. A gap of approximately 10 miles without ped/bike access across the Willamette River exists between Sellwood Bridge and the Oregon City Bridge. The purpose of this project is to provide a ped-bike bridge across the Willamette River connecting Lake Oswego downtown to areas east of the river and the regional and local ped bike systems greatly increasing ped-bike mobility within the southern portion of the Metro Planning Area.

- 2. Summarize the planning and project development process for this project to date (identify plans, studies, or documents that have led to the current project definition): Originally it was hoped that a ped-bike accommadation could be built on the side of the existing UPRR bridge with the support of the railroad. A study conducted by Metro and local partners in 2009 determined that the railroad would not agree to that concept. As a result of this determination, the local governments have determined that a new ped-bike bridge is the only feasibility alternative and are seeking to conduct this study to assess the feasiblity of such a bridge. If the partners determine that this project is feasible, this study will result in an agreement to move forward, as well as the inputs that are necessary for a complex project such as this one to advance into the full project development process.
- 3. Describe the preferred alignment(s) of the project: Identifying the preferred alignment for a new bridge across a major river in an urban environment is not an easy task and will be the major work task for this study. Most discussion for this project has focused on the the bridge being located between central Lake Oswego on the west side of the river and Oak Grove on the east (see attached map). This location provides a connection between the Lake Oswego downtown with higher density housing in the Oak Grove area. The largest task of this feasibility study is an alternatives analysis to identify alignments/design concepts and analyze their feasibility. If the project is advanced by the partners the preferred alignment will be determined at the conclusion of the environmental review process.
- 4. Describe the major design features of the project (*Example: project will include a buffered bikeway of X width, bikeway intersection treatments, wayfinding, bicycle signal, and median*): This project will provide an exclusive ped-bike bridge across the Willamette River, approach structures and fully separated ped-bike connections to the existing regional and local ped-bike network on both sides of the river.
- 5. Are the preferred alignments and major design features broadly known and supported, or subject to change through the remaining project development process? There has been strong public support on both the east and west sides of the river for the development of a proposed ped-bike bridge. As noted above the preferred alignment will be identified at the conclusion of the NEPA process. The major design features as identified in the previous question (exclusive ped-bike bridge, fully separated connections to the regional ped-bike network) are not subject to change. More detailed alternatives analysis and conceptual design tasks to be conducted in this feasibility study will identify specific treatments in greater detail.
- 6. Describe known or potential impacts to other agency's facilities, prior coordination with those agencies (ODOT, transit, railroads, utilities, etc.) about potential impacts to date, and potentially needed permits or agreements: Coordination with the railroad occurred during the previous process and resulted in the understanding that use of the railroad bridge for the ped-bike crossing was not an option. Impacts to other agencies facilities and coordination with the resource agencies will occur in the course of this feasibility study. Permitting requirements or agreements will be identified in this feasibility study and secured during the project development process.
- 7. Describe whether right-of-way impacts (both construction easements and permanent) are known and if so, whether right-of-way is secured or not: Right-of-way impacts are not known. However, the desire of the project sponsors is to use existing public lands on either side of the river for the bridge landing points and avoid the need to secure additional right-of-way.
- 8. Describe how the project will address the needs and contribute to desired outcomes, including:

- a. Will the project serve Title 1 schools, low-income, low-English proficiency, non-white, elderly and young, and/or persons with disabilities populations? Yes or No: Yes If yes, how? The Oak Grove Elementary School is a Title 1 school. The Oak Grove area has higher densities than is typical in Clackamas County of those with low income, low-English proficiency, those with disabilities or who are non-white. The Willamette River Ped-Bike Bridge will increase access to jobs and to community places/services for the residents of Oak Grove. In addition, the highest density concentration of seniors in Clackamas County is located in the immediate area of the proposed project. The Lake Oswego area has a higher than typical density of seniors. The proposed bridge will provide greatly expanded opportunities for bike and pedestrian mobility benefiting the populations of both communities.
- b. Will the project reduce fatal and severe injury pedestrian and bicycle crashes or address a high risk location? Yes or No: Yes If yes, how? Travel for pedestrians or bikes between locations on the east and west side of the Willamette River, such as Oak Grove and Lake Oswego currently requires a trip of 10 miles through a number of high risk corridors and intersections including River Road, McLoughlin Blvd and OR 43. The addition of the Willamette Ped-Bike Bridge will reduce that trip to less than a mile in length on fully separated ped-bike facilities, greatly reducing the risk of crashes and injury.
- c. Will the project provide walking and bicycle access within 1/4 mile of transit stops and stations? Yes or No: Yes. If yes, how? The Willamette Ped-Bike Bridge provide direct pedestrian and bicycle connection between two of the highest ridership transit routes in Clackamas County. This will greatly expand access to transit for those on both sides of the river.
- d. Will the project provide walking and bicycle access within 1/4 mile of a school? Yes or No: Yes If yes, how (provide name of school(s))? Oak Grove Elementary School
- e. Will the project use design treatments that will lead to increased use of active transportation modes by providing a good user experience/increasing user comfort? Does the project provide a high degree of separation between people walking and bicycling and motor vehicle traffic? Yes or No: Yes If yes, how? The proposed project will provide a separated ped-bike facility between Oak Grove and Lake Oswego. This facility will improve the user experience and comfort due to full separation from motor vehicle traffic and a reduction in trip length from over 10 miles to just 1 mile. These benefits will lead to increased use of active transportation modes and greatly increase the places and destinations that are accessible by ped-bike.
- f. How will the project improve access to and from priority destinations, serve high density areas, and/or increase the number of people walking and bicycling to help relieve congestion? Yes or No: Yes If yes, how? Lake Oswego and Oak Grove are two of the higher density locations within Clackamas County and have many priority destinations. These

locations are separated by only a few thousand feet across the Willametter River. The lack of a connecting bridge means that those wishing to go from one to the other by bike must travel at least 10 miles. The proposed bridge would bring those priority destinations within range of an easy ped-bike trip from either side of the river, great improving access. The bridge would also provide opportunities to replace longer vehicle trips with short pedestrian or bicycle trips, reducing congestion.

- g. Other needs and desired outcomes the project will address identified in the project purpose statement: The proposed bridge will open access to a beautiful view of the Willamette River. In addition to the transportation benefits, we think it will also be an attraction and a benefit to the communities.
- 9. Describe the existing project funding strategy (will federal or ODOT program funds potentially be requested?): Identification of the funding strategy is an important purpose of this feasibility study. This study will identify and secure the support of a group of partner governments to support both the development/construction of the project as well as the long term operations and maintenance. Likely sources of funding include the North Clackamas Park and Recreation District, the local governments as well as the proposed regional bond and possibly federal funds through Metro/ODOT.

#### **Project Development Scope, Cost and Funding Request**

- Total estimated cost for project development (should equal combined amounts identified in #2, 3, and 4, below): \$ 2,584,366 (full cost of all development tasks including the cost of the previous Metro study, cost of this proposed feasibility analysis, and full environmental, design and permitting costs that will be incurred if the project moves forward)
- 2. Amount already expended on project development (estimate is okay): Less than \$100,000 (Metro 2009 study)
- 3. Planned additional local contribution to project development (not required): \$0
- 4. Total amount requested of RFFA bond proceeds for project development: \$ 306,000
- 5. Total estimated project cost through construction (including project development): \$ 21,536,380
- 6. Provide preliminary project cost estimate to date and a brief description of the method and level of confidence of the estimate (attach any documentation available): The project cost estimate was developed by Clackamas County capital projects staff based on typical costs for a ped-bike bridge of this type.
- 7. Project cost estimates reviewed by Project Engineer (name): Joel Howie, PE

#### **Required Additional Information**

1. GIS shapefile of the project. The exact location of the proposed project is not known at this time and will be the subject of this study. The attached map shows public and privately owned

properties on both shores of the Willamette River in the area that is viewed as the most likely location for the bridge based on current information.

2. Project Development Scope of Work Main Tasks and Summary Costs- use the attached template and modify as necessary.

#### **Purpose and Desired Outcomes**

Provide a brief summary description (2-4 lines of text) of the purpose and desired outcomes of the project development work (*Example: The purpose and objective of this study is to....(purpose statement, desired outcomes)* and is located in the . . . (describe study location with boundary limits))

**Purpose of Project:** There is currently a 10 mile segment of the Willamette River between Sellwood Bridge and the Oregon City Bridge without ped-bike access across the river. The proposed ped-bike bridge between Lake Oswego and Oak Grove/Milwaukie would provide an active transportation connection across the river greatly increasing ped-bike mobility, add an important scenic and community asset, and improve access to jobs and community places for those in historically marginalized communities.

Outcomes of the Willamette River Ped-Bike Bridge Active Transportation Development Project: The outcomes of this proposed active transportation development project are to 1) Identify the preferred location, bridge concept and cost; 2) Work with regional, state and federal partners to determine the scope and special studies that will be needed for environmental review and permitting; 3) Develop a funding plan for full project development and construction as well as on-going operations and maintenance; 4) Work with local, regional and state partners to identify appropriate roles and contributions to the project development, operations and maintenance; 5) Conduct public input to gage the public support/concern about the proposed project.

Location: Although a specific location has not been identified, the study will focus on public properties along the run of the Willamette River between Milwaukie downtown and Marylhurst University, as shown on the attached map.

Major Project Scope Elements	and Summary Costs	
Provide a bullet list of the main tasks that will achieve the purpose and objectives (Examples provided below)	A cost summary per each major task	ID in-house or consultant driven task
<b>Task #1:</b> Alternatives analysis of possible bridge locations, connection to the bike ped network, with an identification of the preferred bridge location alternatives	\$140,000	Consultant
<b>Task #2</b> : Environmental scoping to identify special studies and analysis that will be necessary.	\$20,000	Consultant
<b>Task #3</b> : Conceptual cost estimate and funding plan for project development, operations and maintenance.	\$50,000	Consultant

Task #4: Interagency coordination with local	\$16,000	Staff & Consultant
governments, special districts, and state/federal agencies		
on roles and responsibilities		
Task #5: Intergovernmental Agreement between the	\$15,000	Staff and Consultant
partners for project development, operations, and		
maintenance		
Task #6: Conduct public involvement activities including	\$40,000	Staff and Consultant
presentations, outreach and other activities to inform the		
public about the proposed project and secure input.		
Task #7: Project management and administrative	\$25,000	Staff
oversight		
Total Proposed Study Costs:	\$306,000	

#### **Approach And Oversight**

Discuss how the project development work will be implemented and how expenditures will be tracked and monitored by the agency. Describe the technical, administrative and budget capacity to complete project development work.

This project development project will primarily be conducted by a consultant under the direction and oversight of the Clackamas County Department of Transportation and Development (DTD). At any particular time DTD has over 20 projects in development and has an extensive staff of project managers, engineers, finance and administrative specialist who are well versed in all aspects of the management of publically funded projects. The DTD has carried out a number of projects using funding from Metro and is knowledgeable about all conditions and requirements. The DTD Principal Transportation Planner will be the project manager under the direction of the Transportation Planning Supervisor. Working with the project manager will be a Project Management Team including the Capital Projects Supervisor, the Administrative Services Manager, the Bike and Pedestrian Coordinator, and the Community Outreach Specialist. This group will ensure that all administrative, legal and professional standards are met and that the project is completely in a timely and responsible fashion.





Portland Metro Area Value Pricing Feasibility Analysis

## **DRAFT Initial Value Pricing Concepts**

SUBJECT: Summary of Initial Value Pricing Concepts for Preliminary Analysis

DATE: December 6, 2017

FROM: WSP Project Team

The purpose of this brief memorandum is to provide a description of value pricing concepts along the I-5 and I-205 corridors in the Portland metro area that will be advanced for analysis to learn more information, including evaluation of traffic, constructability, and other factors. These concepts do not represent proposals or recommendations – they are for testing and learning about potential effects of value pricing applications.

The initial concepts are consistent with legislative direction and are "bookend" concepts. They are intended to demonstrate the full spectrum of benefits and impacts and serve as a launching point for technical analysis and public discussion. Though one of these concepts could end up as all or part of the Policy Advisory Committee (PAC) recommendation or in the Oregon Transportation Commission (OTC) report to the Federal Highway Administration (FHWA), project staff expects to refine the concepts (looking at segments, etc.) after reviewing the preliminary analysis with the PAC and the public.

## 1. BASELINE (YEAR 2027)

The baseline concept does not implement a pricing or tolling system on either I-5 or I-205. The baseline conditions reflect growth forecasts and projects identified in the Portland Metro's Regional Transportation Plan (RTP). The projects include those identified in the financially constrained project list through year 2027 for consistency with the regional plan.<sup>1</sup> The list includes over 700 regional multimodal transportation investments that were submitted by transportation agencies in the region and have been approved by Metro Council. It is a representative concept to present the effects of not tolling I-5 and I-205 and will be used for comparative purposes.

## 2. PRICED ROADWAY

This concept converts all general purpose lanes to congestion-priced lanes, usable by the payment of a variably priced fee (which changes to prevent congestion within the priced lanes). This strategy does not affect the overall corridor footprint, but some technology installations would be required to properly assess and collect toll payments.

<sup>&</sup>lt;sup>1</sup> Oregon Metro. 2018 Regional Transportation Plan. <u>https://www.oregonmetro.gov/public-projects/2018-regional-transportation-plan/call-projects</u>

DRAFT Initial Value Pricing Concepts

## **Potential benefits**

- Reduces congestion for all travelers on the roadway
- Highest potential improvement in travel time reliability and efficiency for all users
- Higher person and vehicular throughput during peak periods
- Minimizes construction requirements

## Potential implementation issues

- Public acceptance can be a challenge when converting un-tolled to priced freeways
- Requires federal (USDOT) concurrence to convert existing lanes
- Still constrained by geometric and other bottlenecks which reduce overall pricing effectiveness
- May create incentive for diversion to unpriced corridors

# Relevant examples of priced roadways

- Many toll road facilities throughout the U.S. price all lanes; most are legacy toll roads in the Northeast, California, and/or Texas
- SR-520 in Seattle converted a previously toll-free freeway to a variably-priced roadway to reduce congestion and generate funds to construct a new bridge across Lake Washington



SR-520 in Seattle: Conversion of previous general purpose roadway to full-time priced roadway to fund newly constructed bridge and related infrastructure

## **3. PRICED LANE**

The priced lane concept involves dedicating lanes for use by any combination of passenger vehicles (single or high occupancy), buses, trucks, or any other vehicle meeting eligibility requirements and willing to pay the prevailing fee. Priced lanes are adjacent to general purpose lanes, and offer a choice to travelers for either 1) paying a fee and using the priced lane for better travel times, or, 2) to avoid payment by using the general purpose lanes or another route.

Priced lanes may be created through reallocation of existing lanes or shoulders in either full- or part-time applications or through highway widening or restriping. Access control is often accomplished by physically separating a priced lane from other facilities via barrier, such as concrete barriers or plastic delineators, or using painted buffers to signal separation from other adjacent lanes.

Portland Metro Area Value Pricing Feasibility Analysis



DRAFT Initial Value Pricing Concepts

## Priced lanes: convert one existing general purpose lane

This priced lane concept describes where the existing leftmost general purpose lane (closest to the median barrier) is converted to a priced lane. Providing a recommended buffer often requires restriping and accommodation within existing shoulders. This concept does not provide any new capacity.

## **Potential benefits**

- Highest potential improvement in travel time reliability and efficiency for express lane users
- Higher person and vehicular throughput during peak periods

## Potential implementation issues

- Loss of vehicle carrying capacity may worsen the onset of peak conditions
- Public acceptance can be a challenge with conversion of existing lanes
- Only permissible with USDOT concurrence, like pricing all lanes
- Not feasible in segments with only 2 lanes of travel in each direction
- Oregon restrictions prohibit large trucks in the left lane

## Priced lanes: construct a new priced lane

This priced lane concept describes an instance where a new priced lane is provided through construction or restriping, potentially using existing shoulder space to accommodate the new lane. The capacity is typically implemented on the leftmost side of each direction (closest to the median barrier).

## **Potential benefits**

- Highest potential improvement in travel time reliability and efficiency for express lane users; potentially more limited improvement for general purpose lane users
- Higher person and vehicular throughput during peak periods
- New capacity can be priced under Federal law

### Implementation issues

- Public acceptance of new capacity requires concurrence with long range transportation planning
- Segments with geometric constraints may require costly and impactful reconstruction efforts (may be cost prohibitive)
- Oregon restrictions prohibit large trucks in the left lane

## Relevant examples of priced lanes

There are over 45 operational priced lanes in the U.S.

• Some were created from highway widening

DRAFT Initial Value Pricing Concepts



• Only one existing general purpose lane conversion to priced lanes (a 1 mile segment of I-35E near St. Paul, Minnesota).

## 4. INITIAL ANALYSIS

In addition to the concepts described above – Baseline, Priced Roadway, and two Priced Lane strategies – combination concepts will also be examined using the regional model to help inform understanding about the potential range of impacts and benefits. **These concepts do not represent proposals or recommendations – they are for testing and learning about potential effects of value pricing applications.** The following concepts are depicted on Figure 1, and described as:

- Baseline: no tolls on any lanes or roadways
- Priced Roadway: toll all lanes on I-5 and I-205
- Priced Lane Convert: convert one existing general purpose lane on I-5 and I-205 to a priced lane each travel direction
- Priced Lane Construct: construct a new priced lane on I-5 and I-205 in each travel direction
- Combination: Baseline on I-5 with Priced Lane Construct on I-205
- Combination: Priced Roadway on I-5 with Baseline on I-205
- Combination: Priced Lane Convert on I-5 with Priced Roadway on I-205
- Combination: Priced Lane Convert on I-5 with Priced Lane Construct on I-205

These concepts were developed to portray the broadest range of potential value pricing application in the Portland metro area to set a foundation for technical concept evaluation and conversation with the public. The concept evaluation stage will provide additional information that will help determine what pricing applications work best and where. At the next PAC meeting in February, the PAC will use findings from the evaluation and public input on these concepts to identify a set of concepts for further consideration. These future concepts may include some of the initial concepts or new combinations, but will also consider pricing treatments on specific segments of the freeways. A second round of technical evaluation and public engagement will be conducted using this refined set of concepts.

After the evaluation stage, the PAC will develop a recommendation to the OTC regarding value pricing type, location, and potential mitigation opportunities to consider further. The OTC will then develop a report for submittal to FHWA by December 2018. After the FHWA submittal, next steps will be determined with FHWA and depend on the type of value pricing concept(s) selected to move forward. After 2018 we expect that ODOT would conduct additional public outreach and environmental analysis under the National Environmental Policy Act and prepare documentation required as part of the FHWA systems engineering process for developing traffic management and toll systems. Some proposals also require approval by the U.S.



Portland Metro Area Value Pricing Feasibility Analysis

DRAFT Initial Value Pricing Concepts

Secretary of Transportation before Oregon would have permission to deploy value pricing on I-5 and I-205. This post-feasibility analysis process could take from 1-5 years or more.







## Portland Metro Area Value Pricing Feasibility Analysis FACT SHEET

# We have a congestion problem

It's not your imagination — more people and merchandise are sitting in Portland-area traffic longer. Buses, bicycles and pedestrians also are affected as the system slows. Regional growth has strained the Portland metro area's six major highways — including I-5 and I-205, the primary north-south routes for the state. Congestion and delays are increasing throughout all hours of the day creating unpredictability, costing people and businesses, and increasing crashes.

### Not one single solution

In 2017, the Oregon Legislature authorized funding to substantially improve area highways, transit, biking and walking facilities, and use technology to make the system work better. The Legislature also directed the Oregon Transportation Commission (OTC) to seek federal approval to implement value pricing on I-5 and I-205 to address the congestion problem.

### What Is value pricing?

Pricing strategies have been used successfully for years by utilities, sporting events and movie theaters. The cost is determined by how many users want to use a limited service.

Value pricing is a proven tool resulting in faster, more reliable and predictable trips. It has been implemented with success in the United States and around the world.

Value pricing uses fees or tolls to manage congestion. During more congested times of the

day a higher fee is charged, encouraging some drivers to consider other travel options such as alternate routes, carpools, transit or travel at less congested times. This improves mobility for all drivers who pay the fee, and potentially for the entire system. Fees are collected electronically so drivers do not have to stop at toll booths.

The main types of value pricing strategies that will be considered include:

- Priced lanes, which give drivers a choice to pay to use the lane to save time or to use the adjacent, unpriced lanes.
- Priced roadways, a concept under which all lanes would be priced.

Both types of value pricing tools could be applied to the entire highway or to specific highway segments, which could include bridges.

Implementation of priced lanes in the Portland metro area requires a decision about whether to construct new lanes or convert general travel lanes.

+30,761 MORE PEOPLE Portland area population growth 2014 - 2015



Hours of weekday congestion in the Portland area 2013 - 2015



+22.6% MORE TRAFFIC DELAYS In the Portland metro region 2013 - 2015

### **BENEFITS OF VALUE PRICING**

#### FOR SAFETY

Reducing congestion, particularly at bottlenecks, smooths and steadies traffic flow, and reduces the opportunity for rear-end crashes.

#### FOR COMMUTERS

Improvement in travel time reliability and efficiency for priced lane users.

#### FOR FREIGHT

Congestion relief through value pricing allows businesses to reduce travel time which saves costs and reduces truck trips.

## Value pricing: A tool to reduce congestion in the Portland metro area

The Oregon Department of Transportation (ODOT) is conducting a feasibility analysis to determine if value pricing could improve mobility by allowing people to choose to pay a fee to get a more reliable and predictable trip on I-5 or I-205 during peak travel times. Those who do not want to pay a fee may choose to travel during off-peak hours and pay a lower fee, or choose other modes of transportation. Some may not make the trip at all. There are many ways value pricing could be applied.

The Oregon Transportation Commission (OTC) has directed a public input process and technical analysis of potential value pricing options.

#### Any proposal will reflect our values

To make sure that any proposal reflects our values around fairness and equity, OTC created a Policy Advisory Committee (PAC) so diverse perspectives can inform a final proposal. The PAC will consider the benefits to congested corridors and effects to travelers and adjacent neighborhoods. The PAC will recommend to the OTC the best location and type of value pricing for the region. The OTC is the tolling authority in the state and will submit its proposal to the Federal Highway Administration (FHWA) by the end of December 2018. Next steps include additional public outreach; environmental, traffic, and revenue analysis; and a tolling agreement.

#### Make your voice heard

Public review and input on value pricing is essential to help fully evaluate value pricing to determine how best to implement it.

- Ask a question or provide a comment: ValuePricingInfo@odot.state.or.us
- Provide input to the Policy Advisory Committee: ValuePricingPAC@odot.state.or.us
- Learn more: www.oregon.gov/ODOT/Pages/Value-Pricing.aspx





For Americans with Disabilities Act or Civil Rights Title VI accommodations, translation/interpretation services, or more information call 503-731-4128, TTY (800) 735-2900 or Oregon Relay Service 7-1-1.

#### MEMORANDUM

TO:	C4 Metro Subcommittee
FROM:	Trent Wilson, Government Affairs Specialist
DATE:	February 8, 2018
SUBJECT:	City Caucus re MPAC other Cities and JPACT Cities seat

#### Overview

At the January 17 C4 Metro Subcommittee meeting, city members recommended an annual placeholder be added on the C4 Metro Subcommittee agenda to allow for discussion of the appointments to two seats: MPAC Other Cities of Clackamas County and JPACT Cities of Clackamas County. February 14 was the next available time to host this discussion, which will be held as a city caucus.

According to JPACT bylaws, Clackamas County's largest city is supposed to convene discussion for the JPACT Cities position. Lake Oswego, the largest city in Clackamas County, has allowed for the C4 Metro Subcommittee to facilitate the caucus for this discussion.

#### **Current Members**

- Mayor Mark Gamba: MPAC Other Cities of Clackamas County
- Mayor Tim Knapp: JPACT Cities of Clackamas County

#### Eligible cities for these seats (members and alternates)

*MPAC Other Cities of Clackamas County*: Gladstone, Happy Valley, Johnson City, Milwaukie, Rivergrove, West Linn, Wilsonville

JPACT Cities of Clackamas County: Gladstone, Happy Valley, Johnson City, Lake Oswego, Milwaukie, Oregon City, Rivergrove, West Linn, Wilsonville