BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TWO PROJECTS, CONSISTING OF AN ODOT GRANT SUPPORTING THE METRO REGIONAL TRAVEL OPTIONS PROGRAM, AND THE PE PHASE FOR THE MULTNOMAH COUNTY EARTHQUAKE READY BURNSIDE BRIDGE PROJECT ENABLING FEDERAL REVIEWS AND FUND OBLIGATIONS TO THEN OCCUR (AP22-10-APR)	RESOLUTION NO. 22-5256 Introduced by: Chief Operating Officer Marissa Madrigal in concurrence with Council President Lynn Peterson

WHEREAS, the Metropolitan Transportation Improvement Program (MTIP) prioritizes projects from the Regional Transportation Plan (RTP) to receive transportation related funding; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council approved the 2021-24 MTIP via Resolution 20-5110 on July 23, 2020; and

WHEREAS, JPACT and the Metro Council must approve any subsequent amendments to add new projects or substantially modify existing projects in the MTIP; and

WHEREAS, the U.S. Department of Transportation (USDOT) has issued clarified MTIP amendment submission rules and definitions for MTIP formal amendments and administrative modifications that both ODOT and all Oregon MPOs must adhere to which includes that all new projects added to the MTIP must complete the formal amendment process; and

WHEREAS, ODOT has awarded Metro with a three-year supplemental Travel Options (TO) grant which will directly support Metro's Regional Travel Options (RTO) program; and

WHEREAS, ODOT's TO grant funding of $416,197 of federal funding will be applied to Metro's RTO Rideshare and Travel Demand Management (TDM) program areas and needs to be obligated before the end of FFY 2022; and

WHEREAS, the Earthquake Ready Burnside Bridge replacement and reconstruction project is currently progressing through the National Environmental Policy Act (NEPA) with a Final Environmental Improvement Statement (FEIS) Record of Decision (ROD) expected by late CY 2022; and

WHEREAS, as part of the NEPA ROD federal review process, the project must demonstrate MTIP programming consistency as part of the Code of Federal Regulations NEPA-TIP Validation Requirement; and

WHEREAS, Multnomah County has authorized $123.3 million to fund the Preliminary Engineering phase out of approximately $300 million of local funds committed to the project; and

WHEREAS, a review of the proposed project changes has been completed against the current approved Regional Transportation Plan to ensure the projects remain consistent with the goals and strategies identified in the Regional Transportation Plan; and

WHEREAS, Regional Transportation Plan consistency check areas included financial/fiscal constraint verification, an assessment of possible air quality impacts, consistency with regional approved goals and strategies, and a reconfirmation that the MTIP's financial constraint finding is maintained a result of the March, MTIP Formal Amendment bundle; and

WHEREAS, while the estimated cost for the Earthquake Ready Burnside Bridge replacement project exceeds $100 million, it is not considered capacity enhancing, triggering the need at this time to complete a special amendment performance evaluation; and

WHEREAS, Metro's Transportation Policy and Alternatives Committee (TPAC) received their notification, amendment summary overview, authorized a programming adjustment, and recommended approval to Metro's Joint Policy Advisory Committee on Transportation (JPACT) on April 1, 2022; and

WHEREAS, JPACT approved Resolution 22-5256 consisting of the April 2022 Formal MTIP Amendment on April 21, 2022 and provided their approval recommendation to Metro Council; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT on May 12, 2022 through Resolution 22-5256 to formally amend the 2021-26 MTIP to add the two new projects included in the April Formal MTIP Amendment Bundle.

ADOPTED by the Metro Council this 19th day of May 2022.

Lynn Peterson

Lynn Peterson, Council President

Approved as to Form:

Carrie MacLaren

Carrie MacLaren, Metro Attorney

Proposed April 2022 Formal Transition Amendment Bundle
Amendment Type: **Formal/Full**
Amendment #: **AP22-10-APR**
Total Number of Projects: 2

Key Number & MTIP ID	Lead Agency	Project Name	Project Description	Amendment Action
Project #1 ODOT Key **22583** MTIP ID TBD **New Project**	Metro	**Metro Transportation Options FFY22 - FFY24**	Metro funding to promote and encourage the use of alternative transportation options during federal fiscal years 2022, 2023 and 2024.	**ADD NEW PROJECT:** Add ODOT's supplemental Travel Options grant as a stand-alone project to support Metro's Regional Travel Options (RTO) program
Project #2 ODOT Key **TBD** MTIP ID TBD **New Project**	Multnomah County	**Earthquake Ready Burnside Bridge: NE/SE Grand Ave – NW/SW 3rd Ave**	Replace & construct a new Burnside Bridge to seismic standards covering the limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St with street & intersection upgrades within the project limits for increased public safety	**ADD NEW PROJECT:** **4-4-2022 adjustment:** The formal amendment adds the PE phase with ~~$23.5~~ $123.3 million of local funds for the new Earthquake Ready Burnside Bridge replacement/ reconstruction project. The MTIP Detailed description is updated to be more generic based on the multiple alternatives under review for the FEIS.

Formal/Full MTIP Amendment AP22-10-APR

Metro

Metro
20121-24 Metropolitan Transportation Improvement Program (MTIP)
PROJECT AMENDMENT DETAIL WORKSHEET

Formal/Full Amendment
ADD NEW PROJECT
Add ODOT FY 2022-24 RTO allocation to MTIP

Lead Agency: Metro		Project Type:	Planning	**ODOT Key:**	**22583**
Project Name:		ODOT Type	OP-TDM	**MTIP ID:**	**NEW-TBD**
Metro Transportation Options FFY22 - FFY24	**1**	Performance Meas:	Congest Mit	**Status:**	**0**
		Capacity Enhancing:	No	**Comp Date:**	**12/31/2023**
Project Status: 0 = No activity.		Conformity Exempt:	Yes	RTP ID:	11054
		On State Hwy Sys:	No	RFFA ID:	N/A
Short Description: Metro funding to promote and encourage the use of alternative transportation options during federal fiscal years 2022, 2023 and 2024.		Mile Post Begin:	N/A	RFFA Cycle:	N/A
		Mile Post End:	N/A	UPWP:	Yes
		Length:	N/A	UPWP Cycle:	SFY 2023
		Flex Transfer to FTA	No	Transfer Code	N/A
		1st Year Program'd:	2022	Past Amend:	0
		Years Active:	0	OTC Approval:	No
		STIP Amend #: 21-24-1944		MTIP #: AP22-10-APR	

Detailed Description: ODOT three-year supplemental allocation to Metro's RTO region-wide program supporting alternative transportation options. This allocation is split to support two focused areas: Rideshare portion ($83,239.42 -100% federal) and TDM ($332,957.69 with 10.27% local match).

STIP Description: Metro funding to promote and encourage the use of alternative transportation options during federal fiscal years 2022, 2023 and 2024.

Last Amendment of Modification: None. Initial MTIP programming

PROJECT FUNDING DETAILS								
Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other (RTO)	**Total**
Federal Funds								
AC-STBGS	**ACP0**	**2022**					**$ 416,197**	**$ 416,197**
								$ -
								$ -
Notes:							**Federal Totals:**	**$ 416,197**
Federal Fund Obligations $:								Federal Aid ID
EA Number:								
Initial Obligation Date:								
EA End Date:								
Known Expenditures:								
State Funds								
								$ -
								$ -
							State Total:	**$ -**
Local Funds								
Local	**Match**	**2022**					**$ 38,109**	**$ 38,109**
								$ -
								$ -
							Local Total	**$ 38,109**
Phase Totals Before Amend:			$ -	$ -	$ -	$ -	$ -	$ -
Phase Totals After Amend:			$ -	$ -	$ -	$ -	**$ 454,306**	**$ 454,306**
							Year Of Expenditure (YOE):	$ 454,306
Net Phase Funding Change:			$ -	$ -	$ -	$ -	$ 454,306	$ 454,306
Phase Percent Change:			0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

Notes and Summary of Changes:

> Red font = prior amended funding or project details. Blue font = amended changes to funding or project details. Black font indicates no change has occurred.
> What are we changing? ODOT supplemental RTO allocation is being added to the MTIP as a stand-alone project

Amendment Summary:

The formal amendment adds the ODOT FY 2022-24 RTO program funding allocation. The allocation is split to support two areas: Rideshare portion is $83,239.42 (100% federal) and TDM is $332,957.69 (with 10.27% local match). The programming merges the two together which results in a unusual match. ODOT provided Metro with a funding allocation letter. The new funds for Metro's RTO program originate from non-MPO Key 21817.
> Will Performance Measurements Apply: Transit

RTP References:

> RTP ID: 11054 - Regional Travel Options Activities for 2018-2027
> RTP Description: Metro awards grant funding, coordinates marketing efforts, and provides technical assistance and evaluation to agencies and organizations to encourage people to make fewer auto trips. RTO-funded activities include worksite and college information programs that make transit, bicycling, walking and ridesharing easier to use.
> Regional Significant Project: Yes. The project supports a Key Metro RTP goal of congestion reduction mitigation through the promotion of alternative transportation options.
> UPWP amendment: No. however, the project is part of the larger annual RTO program identified in the annual UPWP Master Agreement
> RTP Goals: Goal 4 - Reliability and Efficiency
> Goal Objective: Objective 4.5 Demand Management
> Goal Description: Increase the number of households and businesses with access to outreach, education, incentives and other tools that increase shared trips and use of travel options.
> Proof of Funding Verification: Yes. A proof-of-funding allocation letter was provided by ODOT as part of the amendment submission
> Scope changes included: No
> Limit changes included: No. However, the project is considered region-wide in the MPA boundary
> Formal/full amendment requirement under Matrix: Adding a new project to the MTIP requires a formal/full amendment
> Add Special Performance Evaluation assessment required to be completed: No
> Exempt or Capacity Project: The project is exempt under 40 CFR 93.126, Table 2 - Air Quality
> Exemption reference: Continuation of ride-sharing and van-pooling promotion activities at current levels.

Fund Codes:

> AC-STBGS = Federal Advance Construction fund type code used as a placeholder until the final federal fund type code is know and committed to the project. In this case, the expected final conversion code is projected to be State STBGS (Surface Transportation Block Grant funds managed and allocated by the state DOT).
> Local = General local funds provided by the lead agency as part of the required match.

Other

> On NHS: N/A
> Metro Model: No
> Model category and type: N/A
> TCM project: No
> Located on the CMP: No

Fund Codes											
Phase	Fund Code	Description	ICAP	Percent of Phase	Total Amount	Federal Percent	Federal Amount	State Percent	State Amount	Local Percent	Local Amount
OT	ACP0	ADVANCE CONSTRUCT PR		100.00%	454,305.61	91.61%	416,197.11	0.00%	0.00	8.39%	38,108.50
	OT Totals			**100.00%**	**454,305.61**		**416,197.11**		**0.00**		**38,108.50**
	Grand Totals				**454,305.61**		**416,197.11**		**0.00**		**38,108.50**

Key 21817 is providing the funding to support the RTO allocation to Metro in Key 22583

Name: **Regional TO Provider Rideshare/TDM FFY22, 23 & 24** Key: **21817**

Description: **Promote & encourage the use of carpools, vanpools, transit, bicycling, walking & teleworking. Continues existing carpool matching, regional vanpool services and community outreach programs** Region: **6**

MPO: **Non-MPO** Work Type: **OP-TDM**

Applicant: **ODOT** Status: **NON-CONSTRUCTION PROJECT**

Location(s)-

Mileposts	Length	Route	Highway	ACT	County(s)
				STATEWIDE	**STATEWIDE**

Current Project Estimate

	Planning	Prelim. Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total
Year						**2022**	
Total						**$1,232,634.00**	**$1,232,634.00**
Fund 1						ACP0 $1,106,042.49	
Match						$126,591.51	

Footnote:

Most Recent Approved Amendment

Amendment No: **21-24-1635** Approval Date: **12/30/2021**

Requested Action: **Reduce the project estimate by $409,291, moving funds to new project key 22525.**

MTIP PROGRAMMING MODIFICATION NOTICE

The below MTIP Worksheet represents modified programming details for the project which include updated project funding and an adjusted Detailed description per a comment request from Multnomah County as part of the public notification process

Formal/Full MTIP Amendment AP22-10-APR

Metro

Metro
20121-24 Metropolitan Transportation Improvement Program (MTIP)
PROJECT AMENDMENT DETAIL WORKSHEET

Formal/Full Amendment
ADD NEW PROJECT
Add new Burnside Bridge replacement PE phase project

Lead Agency: Multnomah County		Project Type:	Planning	**ODOT Key:**	**22592**
Project Name: Earthquake Ready Burnside Bridge: NE/SE Grand Ave – NW/SW 3rd Ave	2	ODOT Type	TBD	**MTIP ID:**	**NEW-TBD**
		Performance Meas:	Safety	**Status:**	**2**
		Capacity Enhancing:	No	**Comp Date:**	**12/31/2028**
Project Status: 2 = Pre-design/project development activities (pre-NEPA) (ITS = ConOps.)		Conformity Exempt:	Yes	RTP ID:	11129 & 11376
		On State Hwy Sys:	No	RFFA ID:	N/A
		Mile Post Begin:	N/A	RFFA Cycle:	N/A
Short Description: Replace & construct a new Burnside Bridge to seismic standards covering the limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St with street & intersection upgrades within the project limits for increased public safety		Mile Post End:	N/A	UPWP:	Yes
		Length:	N/A	UPWP Cycle:	N/A
		Flex Transfer to FTA	No	Transfer Code	N/A
		Special Goals Assess:	Yes/No	Partial Prog:	Yes - PE
		1st Year Program'd:	2022	Past Amend:	0
		Years Active:	0	OTC Approval:	No
		STIP Amend #: TBD		MTIP #: AP22-10-APR	

Detailed Description: ~~Replacement "Long Span" with a moveable span (Vertical or Bascule lift) for the best seismic resiliency standards, adjust lane capacity to be 2 EB through lanes, 1 EB dedicated bus lane and 2 WB through lanes, and with bicycle/pedestrian improvements covering limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St including street & intersection upgrades as required within the limits for increased public safety~~

Replace and reconstruct existing Burnside Bridge to the best seismic resiliency standards plus various required street improvements for public safety which may result in decreasing through-lane capacity from 5 to 4 lanes.

STIP Description: TBD

Last Amendment of Modification: None. Initial MTIP programming

PROJECT FUNDING DETAILS

Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other (ITS)	**Total**
Federal Funds								
								$ -
								$ -
								$ -
Notes:							**Federal Totals:**	**$ -**
Federal Fund Obligations $:								Federal Aid ID
EA Number:								
Initial Obligation Date:								
EA End Date:								
Known Expenditures:								
State Funds								
								$ -
								$ -
								$ -
							State Total:	**$ -**
Local Funds			Planning	Prelim Engineering	Right of Way	Utility Relocation	Construction	
~~Other~~	~~OTH0~~	~~2022~~		~~$ 23,558,042~~				$ -
Other	**OTH0**	**2022**		**$ 123,300,000**				**$ 123,300,000**
								$ -
							Local Total	**$ 123,300,000**
Phase Totals Before Amend:			$ -	$ -	$ -	$ -	$ -	$ -
Phase Totals After Amend:			**$ -**	**$ 123,300,000**	$ -	$ -	**$ -**	**$ 123,300,000**
							Year Of Expenditure (YOE):	$ 900,000,000
Net Phase Funding Change:			$ -	$ 123,300,000	$ -	$ -	$ -	$ 123,300,000
Phase Percent Change:			0.0%	100.0%	0.0%	0.0%	0.0%	Programs 13.7% of YOE

Notes and Summary of Changes:

> Red font = prior amended funding or project details. Blue font = amended changes to funding or project details. Black font indicates no change has occurred.

> What are we changing? Adding new project to the MTIP PE phase only. $90 million has been approved for pE work during $2022-24. During FFY 2022, Multnomah County has a budget line item for $23.5 million. Prior to FFY 2022, Multnomah County expended $33.3 million in support of PE. (PE actually started on 2016). The total PE programming then becomes $123,300,000.

Amendment Summary:

The formal amendment only adds the PE phase to the MTIP at this time. A total of $300 million is currently committed for the project. $123,3000 jas been confirmed for the PE phase.

> Will Performance Measurements Apply: Safety + Bridge

RTP References:

> RTP IDs:

- 11129 - Earthquake Ready Burnside Bridge Phase 1
  RTP Description: **EQRB NEPA Phase**. Earthquake ready Burnside will increase safety of people and structures during and after an earthquake. Project will also use proven safety countermeasures to ensure safety of users.
- 11376 - Earthquake Ready Burnside Bridge Phase 2
  RTP Description : **EQRB Design and ROW Phase**. Earthquake ready burnside will increase safety of people and structures during and after an earthquake. Project will also use proven safety countermeasures to ensure safety of users.

> Regional Significant Project: Yes. Many bridges are identified as regionally significant in the Metro region. Burnside St Burnside bridge are identified as a "Major Arterial" in the Motor Vehicle modeling network. They are identified as a "Frequent Bus" in the Transit modeling network. In the Bicycle and Pedestrian modeling networks, Burnside St/bridge is identified a "Bicycle Parkway" and "Pedestrian Parkway"

> UPWP amendment: No

> RTP Goals: Goal 5 - Safety and Security

> Goal Objective: Objective 5.3 - Preparedness and Resiliency

> Goal Description: Reduce the vulnerability of regional transportation infrastructure to natural disasters, climate change and hazardous incidents.

> Proof of Funding Verification:

> Scope changes included: As a planning project in PE, no. Implementation phase will reduce through lane capacity.

> Limit changes included: Yes. No changes to initial limits

> Formal/full amendment requirement under Matrix: Adding a new project to the MTIP requires a formal/full amendment,

> Add Special Performance Evaluation assessment required to be completed: No for PE phase. Possibly yes for implementation phases?

> Exempt or Capacity Project: PE programming is considered exempt.

- PE Phase = planning project: Planning and technical studies.
- Implementation phases = Possible capacity change dues to reduction of through lanes. a RTP consistency review is required. Possible also could dbe interpreted as a non capacity, exempt replacement project under Safety - Widening narrow pavements or reconstructing bridges (no additional travel lanes).

> Exemption reference: 40 CFR 93.126, Table 2 - Other (for PE phase)

Fund Codes:

> Other = General local funds used as overmatch or in place of federal funds .

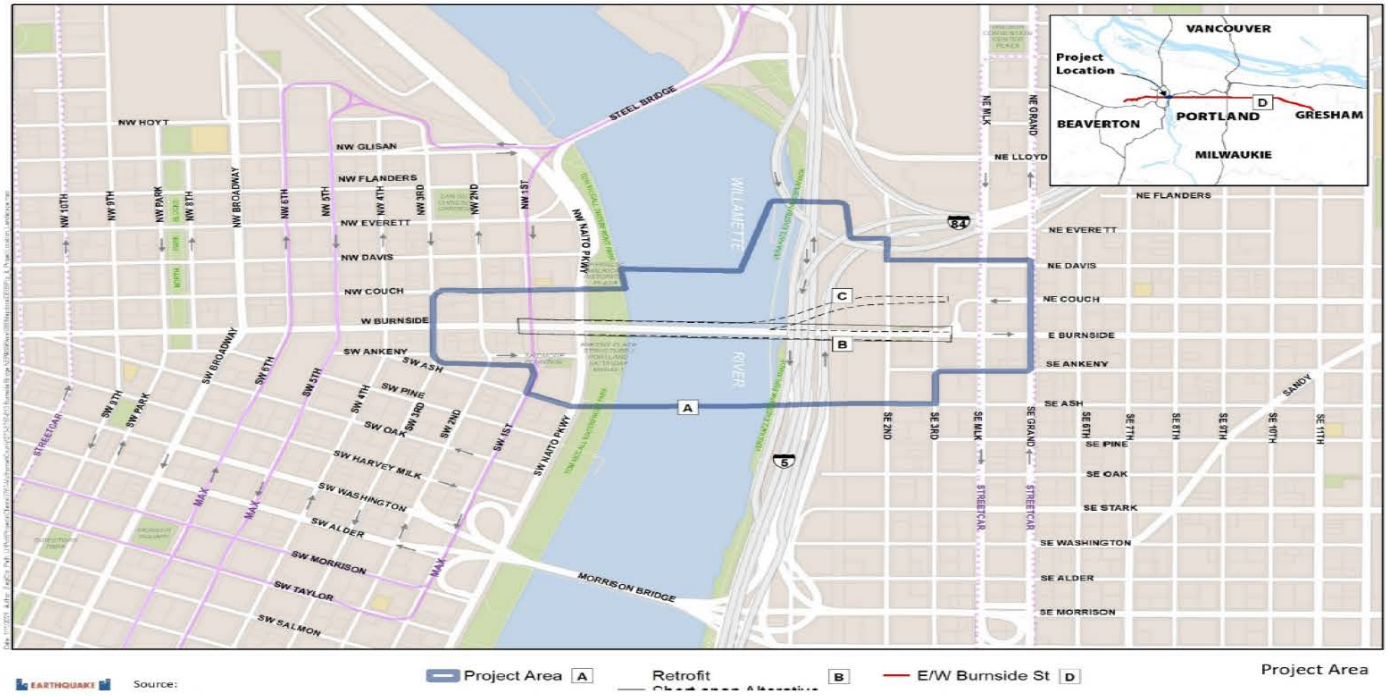
Other

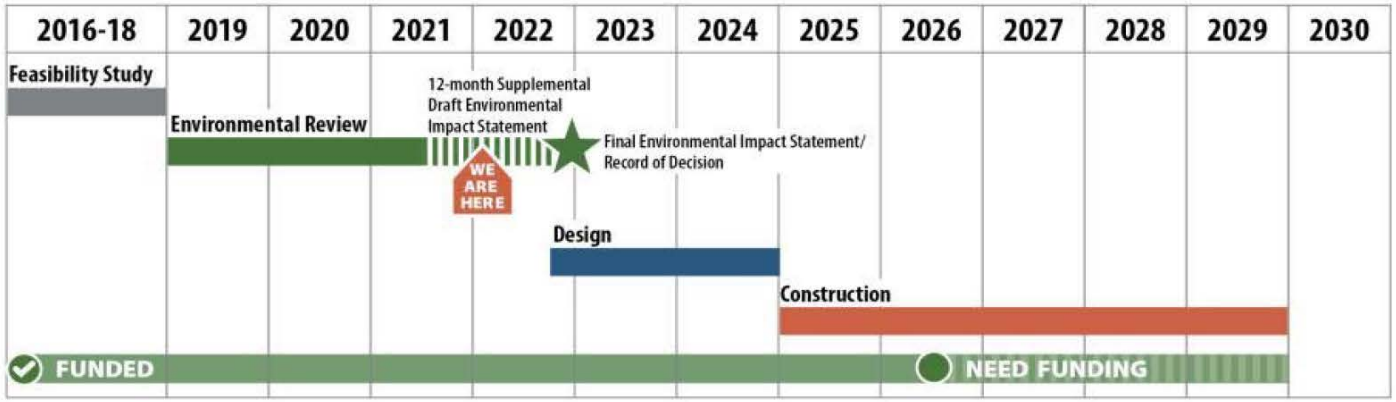
> On NHS: Yes. Burnside St and Bridge are identified on the NHS as a "MAP-21 Principal Arterial"

Metro Model: Yes - Motor Vehicle Network, Transit, Pedestrian , and Bicycle networks. See Regional Significance comments.

> TCM project: No

Figure 1.3-1. Project Area





Memo

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Date: April 21, 2022
To: Metro Council and Interested Parties
From: Ken Lobeck, Funding Programs Lead
Subject: April 2022 MTIP Formal Amendment & Resolution 21-5256 Approval Request (Regular Bundle)

FORMAL AMENDMENT STAFF REPORT

FOR THE PURPOSE OF ADDING TO THE 2021-26 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TWO PROJECTS, CONSISTING OF AN ODOT GRANT SUPPORTING THE METRO REGIONAL TRAVEL OPTIONS PROGRAM, AND THE PE PHASE FOR THE MULTNOMAH COUNTY EARTHQUAKE READY BURNSIDE BRIDGE PROJECT ENABLING FEDERAL REVIEWS AND FUND OBLIGATIONS TO THEN OCCUR (AP22-10-APR)

BACKROUND

What This Is:
The April 2022 Formal Metropolitan Transportation Improvement Program (MTIP) Formal/Full Amendment regular bundle is contained in Resolution 22-5256 and being processed under MTIP Amendment AP22-10-APR. The bundle contains a total of two project amendments.

What is the requested action?
JPACT approved Resolution 22-5256 consisting of two new projects which are required to be added to the MTIP enabling federal reviews and fund obligations to then occur, and now recommends approval by Metro Council.

Proposed April 2022 Formal Amendment Bundle Amendment Type: Formal/Full Amendment #: AP22-09-APR Total Number of Projects: 2					
ODOT Key #	**MTIP ID #**	**Lead Agency**	**Project Name**	**Project Description**	**Description of Changes**
Project #1 Key **22583 New Project**	TBD	Metro	**Metro Transportation Options FFY22 - FFY24**	Metro funding to promote and encourage the use of alternative transportation options during federal fiscal years 2022, 2023 and 2024.	**ADD NEW PROJECT:** Add ODOT's supplemental Travel Options grant as a stand-alone project to support Metro's Regional Travel Options (RTO) program

ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #2 Key **TBD New Project**	TBD	Multnomah County	**Earthquake Ready Burnside Bridge: NE/SE Grand Ave – NW/SW 3rd Ave**	Replace & construct a new Burnside Bridge to seismic standards covering the limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St with street & intersection upgrades within the project limits for increased public safety	**ADD NEW PROJECT:** The formal amendment adds the PE phase with $123.3 million of local funds for the new Earthquake Ready Burnside Bridge replacement/ reconstruction project. The MTIP Detailed description is updated to be more generic based on the multiple alternatives under review for the FEIS.

AMENDMENT BUNDLE SUMMARY:

The April 2022 Formal MTIP Amendment bundle involves adding two new projects to the MTIP. Here is a short summary of the amendment bundle:

- **Keys 22583:** Both Metro and ODOT support Regional Travel Options as a means to help provide alternatives to motor vehicle travel. The ODOT Transportation Options Program focuses on implementation of the Oregon Transportation Options Plan, including: managing demand across the transportation system; educating students and the public on travel options and how to safely use them; connecting veterans, low income populations, communities of color, and others with ways to get to and from work or school; supporting vanpooling; and more. As part of their program, ODOT is providing Metro with a Travel Options grant award of $16,197 of federal funds for the FFY 2022-24 Transportation Options cycle. The new project is being added to the MTIP through this amendment.

- **Key New Project. Earthquake Ready Burnside Bridge:** The primary purpose of the Earthquake Ready Burnside Bridge (EQRB) Project (Project) is to create a seismically resilient Burnside Street lifeline crossing of the Willamette River that would remain fully operational and accessible for vehicles and other modes of transportation immediately following a major Cascadia Subduction Zone (CSZ) earthquake. Through this amendment, the PE phase for the project is being added to the MTIP.

  A more detailed overview of both projects follows the acronym list

JPACT April 21, 2022 Meeting Summary:

The April 2022 Formal Amendment was included on the JPACT consent agenda. The consent agenda was passed without comment or discussion.

TPAC April 1, 2022 Meeting Summary:

Metro staff provided TPAC member their amendment notification and overview at their April 1, 2022 meeting. The April Formal Amendment contains two new projects to be added to the MTIP. First, ODOT has provided Metro with another three-year grant allocation totaling $416,197 of federal funds for the Regional Travel Options (RTO) program and intended to support Rideshare program areas and Transportation Demand Management activities.

The second project proposes to add the PE phase for Multnomah County's Earthquake Ready Burnside Bridge (EQRB). The MTIP programming is necessary now to satisfy FHWA's NEPA-TIP Validation requirement. As part of the NEPA Environmental Assessment (EA) or Final

Environmental Impact statement, approval process to obtain the Record of Decision, a MTIP programming check occurs for comparison against how the project is described in the environmental document. The check occurs to ensure MTIP and the environmental document are consistent in the scope and description for the project.

The MTIP detailed description was developed based on the DEIS project alternative. The MTIP Detailed Description is a Metro internal project description field not seen in the public document that provides additional project scoping details based on how the project will complete transportation demand management modeling. However, with multiple alternatives under review, Multnomah County expressed their concern that the MTIP which is included on the MTIP worksheet as part of Exhibit A to the Resolution could create confusion and suggest a final alternative had been already selected when this was not the case. As a result, Multnomah County has submitted a formal comment to adjust the Detailed Description to be a little more generic. Metro staff review concurs with the request as final update will occur around October based on the final selected alternative.

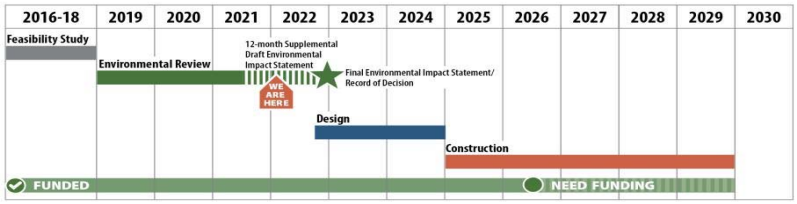
After TPAC agenda mail-out, Multnomah County notified Metro they had obtained the proof-of funding for fiscal constraint demonstration verifying that out of the $300 million of local funds committed to the project, $123.3 million had been specifically committed for the PE phase which includes completion of NEPA and final design. Together, Multnomah County submitted a formal comment to Metro requesting programming adjustments occur to the PE phase funding and MTIP Detailed description. Metro staff have concurred with both requests. At TPAC, Ken Lobeck, Metro staff requested a programming adjustment to the Multnomah County's (EQRB) replacement and reconstruction project to increase the PE phase programming to $123.3 million of local funds and adjust the MTIP Detailed Description to be the following:

"Replace and reconstruct existing Burnside Bridge to the best seismic resiliency standards plus various required street improvements for public safety which may result in decreasing through-lane capacity from 5 to 4 lanes".

By adding the project PE phase now via a formal amendment to the MTIP, the project will be in the active MTIP as planning project by the end of June. No implementation phases are being added yet. By October, the final alternative should be known. Around October, staff will complete required administrative modifications to the project name, location, limits, and description to match up with the final expected alternative. The updates should be ready and present in the MTIP by the end of October. The FEIS ROD approval process I anticipated to occur during the November/December 2022 timeframe which will include the NEPA-TIP Validation check as part of the approval process.

EQRB Programming Next Steps:

Once the environmental document is approved, Multnomah County project staff will continue with final design. At the same time, project staff will be coordinating with Metro Regional Transportation Plan (RTP) staff to develop their funding plan and add the implementation phases (Utility Relocation and Construction) to the new RTP. Upon inclusion in the RTP, MTIP programming staff can move forward to add the Right-of-Way, Utility Relocation, and Construction phases to the MTIP. The project delivery schedule and new RTP development appears to synch up reasonably well for the project.



With their better understanding for the programming need, and the requested programming changes and the issues still facing the EQRB project prior to construction, TPAC moved forward and provided their approval recommendation to JPACT to add the PE phase for the Multnomah County's new EQRB project.

Below is a summary list of transportation acronyms used in the report:

- AC-STBG = "AC" = Federal Advance Construction programmatic fund type code used as placeholder. The "STBGS" tag represents the expected federal fund type code of State allocated Surface Transportation Block Grant funds that will become the final federal fund for the project.
- ADVCON = Generic Advance Construction fund type code where the future federal fund code is not yet known.
- ADA = Americans with Disabilities Act
- Cons or CN = Construction phase
- ConOps = Concept of Operations. Used to evaluate project needs for ITS projects
- CSZ = Cascadia Subduction Zone
- FFY = Federal Fiscal Year (e.g. October 1 through September 30)
- FHWA = Federal Highways Administration
- FMIS = FHWA's Financial Management Information System
- HB2017 = State funds from HB2017 allocated to ODOT
- IGA = Intergovernmental Agreement
- ITS = Intelligent Transportation System
- LAL = ODOT Local Agency Liaison staff member
- Local = Local funds committed by the lead agency for the project usually as part of the match
- LPA = Locally Preferred Alternative
- MP = Mile Post limit markers on the State Highway system
- ODOT = Oregon Department of Transportation
- OTC = Oregon Transportation Commission
- Other = Other local funds committed by the lead agency beyond the required match to the federal funds.
- PE = Preliminary Engineering
- RTO = Regional Travel Options
- RTP (Oregon Parks) = Recreational Trails Program
- RFFA (Step 1 or Step 2) = Refers to a particular funding portion to the Regional Flexible Funding Allocation program
- ROD = NEPA Record of Decision
- ROW/RW = Right of Way phase
- RRFB = Rectangular Rapid Flashing Beacon (RRFP)
- SFY = State Fiscal Year (July 1 through June 30 of each calendar year)
- State = General state funds used as the match requirement for federal funds committed to a project. Also may be committed as stand-alone funding (state only funds) for a project.

- STBG-U = Federal Surface Transportation Block Grant allocated to Metro and committed to eligible projects in the defined urban area.
- TDM = Transportation Demand Management
- TO = Travel Options
- UPWP = Metro Unified Planning Work Program

A detailed overview of each project amendment in the bundle begins on the next page.

Project 1	**Metro Transportation Options FFY22 - FFY24 (New Project)**		
Lead Agency:	**Metro**		
ODOT Key Number:	**22583**	MTIP ID Number:	TBD – New Project

Projects Description:

Project Snapshot:

- **<u>Quick Amendment Summary:</u> The amendment adds the new ODOT grant allocation supporting the Metro Regional Travel Options project to the 2021-26 MTIP**

- <u>Metro UPWP Project:</u> Yes and no
  The Metro RTO program is funded through a RFFA Step 1 allocation and is normally identified as part of the annual UPWP. The ODOT grant is a separate allocation and is treated as a discretionary grant. The ODOT allocation ill proceed to through the normal FHWA Financial Management Information System (FMIS) obligation process. The regular RTO UPWPA allocation will be flex transferred to FTA. The total RTO program funding to be obligated during FFY 2022 are in keys 20879 and the new 22583.

LEAD AGENCY	Metro					
PROJECT NAME	**Metro UPWP Regional Travel Options (SFY 2022)**					
Project IDs		Project Description				Project Type
ODOT KEY	20879	The Regional Travel Options (RTO) program implements strategies to help diversify trip choices reduce pollution and improve mobility.				Regional travel options
MTIP ID	70873					
RTP ID	11054					
Phase		Year	Fund Type	Federal Amount	Minimum Local Match	Other Amount	Total Amount
Other		2022	STBG-URBAN	$3,656,869	$418,545	$0	$4,075,414
			FY 21-26 Totals	$3,656,869	$418,545	$0	$4,075,414
			Estimated Project Cost (YOE$)	**$3,656,869**	**$418,545**	**$0**	**$4,075,414**

- <u>Proposed improvements:</u>
  Key 22583 and 20879 support the goals and strategies of the RTO program. The project's goals are to promote and encourage the use of alternative transportation options during federal fiscal years 2022-24. The funding in Key 22583 will support Rideshare activities and Transportation Demand Management (TDM) activities.

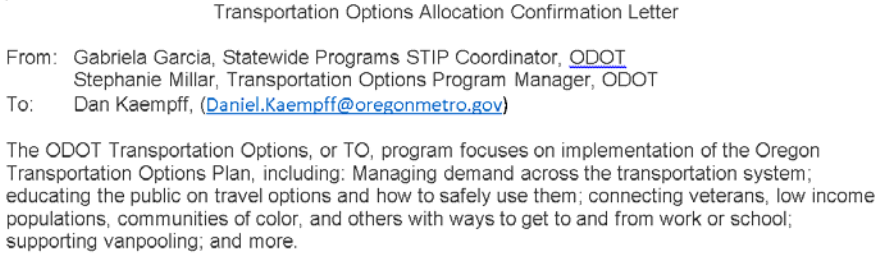
- <u>Source:</u> New project – ODOT funding source

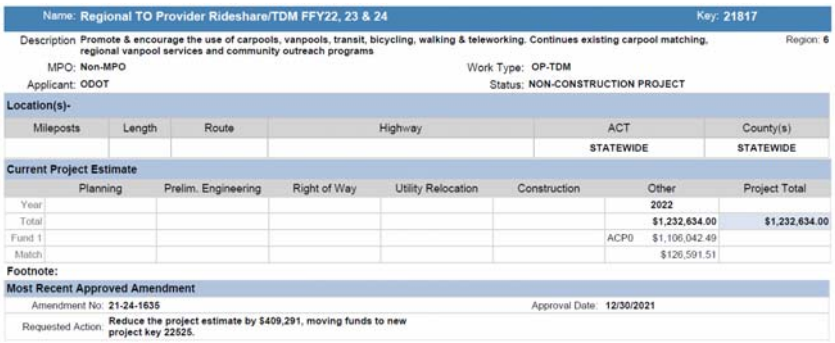
- <u>Amendment Action:</u> The amendment:
  - Adds the new Regional Travel Options project to the MTIP supporting Rideshare and TDM activities later TDM activities
  - Adds $416,197 of federal funds using the Advance Construction fund type code in support of RTP activities.
  - Is needed to occur now as the funds need to obligate before the end of FFY 2022.

- <u>Additional Amendment Evaluation Required:</u> No.
  The project does not add motor vehicle through lane capacity and is considered exempt for air quality and transportation modeling analysis. Additionally, the project cost does not exceed $100 million.

	• Funding: The funding for the project consists of an ODOT Grant allocation to Metro for $16,197 of federal funds. Metro provides the local match. • FTA Conversion Code: Not applicable. No transit funds are involved. The federal funds will not be flex transferred to FTA. • Location, Limits and Mile Posts: o Location: Regional o Cross Street Limits: N/A o Overall Mile Post Limits: N/A • Current Status Code: 0 = No activity. Note: This is misleading as the RTO program is an ongoing program and considered fully implemented. The new ODOT funds have not been obligated. Therefore, no implementation activity for them has yet occurred. • Air Conformity/Capacity Status: Key 22583 is a non-capacity enhancing safety improvement project. It is exempt from air quality conformity and transportation demand modeling analysis per 40 CFR 93.126, Table 2 – Air Quality, under the logic of "Continuation of ride-sharing and van-pooling promotion activities at current levels". • Regional Significance Status: The project is considered a regionally significant as it contains federal funds and address a key Metro goal of congestion reduction through alternate travel options. • Amendment ID and Approval Estimates: o STIP Amendment Number: 21-24-1944 o MTIP Amendment Number: AP22-10-APR o OTC approval required: No. However, a program manager funding confirmation letter is included as proof of funding and fiscal constraint demonstration. o Metro approval date: Tentatively scheduled for May 12, 2022.
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT:** Key 22583 is a supplemental grant award from ODOT's Travel Options (TO) program supporting Metro's RTO program. **ODOT TO Program Summary** See additional details at: https://www.oregon.gov/odot/Programs/Pages/TO-Program.aspx The Transportation Options, or TO, program focuses on implementation of the Oregon Transportation Options Plan, including: managing demand across the transportation system; educating students and the public on travel options and how to safely use them; connecting veterans, low

	income populations, communities of color, and others with ways to get to and from work or school; supporting vanpooling; and more. Examples of Transportation Option implementation activities include: Administration of federal grant funds and collaboration on transportation option program priorities with local transportation options partner programs. These programs are often housed within a local transit agency, city, county or Metropolitan Planning Organization. Support congestion mitigation for major Oregon Department of Transportation construction projects, safety corridors, and congestion points. The TO Program supports ODOT Regional offices in providing outreach and education around specific issues or projects to reduce impacts and delays and/or promote safety. Management of the statewide ride matching database, Get There, to help people connect with carpools, vanpools and other travel options. The ride matching database is an essential tool for local and regional partners, and provides information on fuel savings and reductions of vehicles miles traveled. Management of an annual event, Get There Challenge, to help the public become familiar with their transportation options and support carpooling, vanpooling, biking, walking and transit. ODOT manages the annual event in collaboration with our local and regional partners. What are Transportation Options? Transportation Options programs connect people to transportation choices, allowing them to bike, walk, take transit, drive, share rides, and telecommute. TO programs do not address capital infrastructure or service investments – like sidewalks, bike lanes, and transit service. Rather, they provide information and resources to help people learn about their travel options for all types of trips. Transportation Options is also sometimes referred to Transportation Demand Management. Investments in transportation options can provide numerous benefits to our existing transportation system as well as communities across Oregon. From cost savings to improved health, TO programs offer proven benefits to communities large and small. **Metro RTO Program** See additional program details at: https://www.oregonmetro.gov/regional-travel-options-strategic-plan The Regional Travel Options (RTO) program guides the region in creating safe, vibrant, and livable communities by supporting programs that increase walking, biking, ride sharing, telecommuting, and public transit use. The RTO program is a critical strategy for getting the most benefit and use from transportation infrastructure investments. Through grants, sponsorships, policy guidance, regional coordination, and technical

	assistance, the Metro RTO program has been serving the region for over 20 years. In 2019, the funding will be given more focus with the intent of increasing partnerships and achieving greater performance, and a new regional Safe Routes to School (SRTS) program will be established. The Problem: The Portland metro region has grown and is continuing to grow, which results in increased auto trips and congestion. As demand on the transportation system increases, transit and carpool rates have declined,[1] while drive-alone rates have leveled off.[2] With more people moving to the region, decreased transit use and an unchanged drive-alone rate means that more cars are crowding roads. This hurts our economy, contributes to poor air quality and unhealthy lifestyles. It also disproportionately impacts people with lower incomes, older adults, youths and people with disabilities, and other historically-marginalized communities. The Regional Travel Options program includes: • A coordinated education and outreach effort to efficiently use public dollars to reach key audiences • An employer outreach program to save employers and employees money • A regional Safe Routes to School effort that supports local education programs in schools to teach kids how to walk and bicycle to school safely • A regional rideshare program that makes carpooling safer and easier and helps people with limited transit access have options to get around • A grant program that funds partner efforts, such as The Street Trust's Bike Commute Challenge, TriMet's and TMA's work with employers, Ride Connection's RideWise travel training program for seniors and people with disabilities, and Portland Sunday Parkways, to name a few funding for bicycle racks, wayfinding signage and other tools that help people to walk and bicycle funding for pilot projects to test new ways to reach the public through technology or innovative engagement methods.
Additional Details:	ODOT Allocation/Proof of Funding for Fiscal Demonstration  Transportation Options Allocation Confirmation Letter From: Gabriela Garcia, Statewide Programs STIP Coordinator, ODOT Stephanie Millar, Transportation Options Program Manager, ODOT To: Dan Kaempff, (Daniel.Kaempff@oregonmetro.gov) The ODOT Transportation Options, or TO, program focuses on implementation of the Oregon Transportation Options Plan, including: Managing demand across the transportation system; educating the public on travel options and how to safely use them; connecting veterans, low income populations, communities of color, and others with ways to get to and from work or school; supporting vanpooling; and more.

	ODOT has provided Metro in the past with a three-year allocation supporting Metro Regional Transportation options activities. This is a confirmation that Metro will receive a TO allocation for the FFY 2022-24 cycle. Metro's TO total allocation is $454,505.61 split as follows: - Ride share portion: Federal 100% share of $83,239.42 - Travel Demand Management portion: Federal share of $332,957.69 at 89.73% with 10.27% required minimum match - Total federal allocation: $416,197.11 - Minimum match requirement: $38,108.50 - Total funds: $454,405.61 Federal Programming Year for Obligation: FFY 2022 Program Fund type code: State STBG, Z240 ODOT Key number: 22583 The Region 1 STIP Coordinator has been notified to initiate STIP programming. Please advise your MTIP programmer to be on the lookout for the programming request. Please move forward to complete the MTIP programming as soon as possible. Please let us know if you have any questions. Thanks, Gabriela Garcia Stephanie Millar
Why a Formal amendment is required?	Although the OODT funds originate from an existing revenue bucket in Key 21817, the funds are outside the MPA boundary. Therefore, adding the funds to the MTIP requires a new project to be added to the MTIP. Any new project being added to the MTIP requires a formal/full amendment. 
Total Programmed Amount:	Key 22583 programming includes $416,197 of federal funds plus $38,109 of local match to a total of $454,306
Added Notes:	

Name: **Regional TO Provider Rideshare/TDM FFY22, 23 & 24** Key: **21817**

Description: Promote & encourage the use of carpools, vanpools, transit, bicycling, walking & teleworking. Continues existing carpool matching, regional vanpool services and community outreach programs. Region: 6

MPO: Non-MPO Work Type: OP-TDM

Applicant: ODOT Status: NON-CONSTRUCTION PROJECT

Location(s)-

Mileposts	Length	Route	Highway	ACT	County(s)
				STATEWIDE	STATEWIDE

Current Project Estimate

	Planning	Prelim. Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total
Year						2022	
Total						$1,232,634.00	$1,232,634.00
Fund 1						ACP0 $1,106,042.49	
Match						$126,591.51	

Footnote:

Most Recent Approved Amendment

Amendment No: 21-24-1635 Approval Date: 12/30/2021

Requested Action: Reduce the project estimate by $409,291, moving funds to new project key 22525.

Project 2	**Earthquake Ready Burnside Bridge: NE/SE Grand Ave – NW/SW 3rd Ave (New Project)**		
Lead Agency:	**Multnomah County**		
ODOT Key Number:	**TBD – New Project**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • **<u>Quick Amendment Summary:</u> The amendment adds the PE phase for this project to the MTIP. Programming now is required to address the future NEPA-TIP validation requirement as part of the NEPA environmental document Record of Decision (ROD).**		

Added note: The project name and description follow the current name and description in the draft EIS. Continue work towards the final EIS may result in necessary adjustments to the project name and description. If they occur as part of the amendment, necessary will occur as part of the 30-daypublic comment period.

- Metro UPWP Project: No

- Proposed improvements:
  The project as being added to the MTIP will complete NEPA and required design activities in support of the future bridge replacement. The full project will replace & construct a new Burnside Bridge to seismic standards covering the limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St with street & intersection upgrades within the project limits for increased public safety

- Source: New project.

- Amendment Action: The amendment adds the PE phase only for the project to the MTIP enabling a future consistency review to occur between the NEPA environmental document and the MTIP as part of the Final Environmental Impact Statement Record of Decision (ROD).

- Additional Amendment Evaluation Required: Not at this time.
  The project does exceed $100 million but with only PE being programmed is still considered a planning project. Second, the draft proposed improvements do not appear to add capacity and may reduce through-lane capacity. However, will continue to evaluate the need for a special evaluation assessment when the implementation phases (ROW, UR, and Cons) are ready to be added to the MTIP.

  Added note: Programming staff assume Multnomah County will be providing their construction phase project entry as part of the new RTP update. The current RTP contains entries and ROW phases

- Funding:
  The total approved funding currently for the project is $300 million. Multnomah County has directly approved $23.5 million for project needs in FFY 2022 and now has confirmed a total of $123,300,000 is available to complete the PE phase. A funding commitment letter from the Multnomah CFO has been included after the notes section for this amendment.

Capital Budget — fy2022 **adopted** budget

Burnside Bridge Fund (2515)

The Burnside Bridge is deemed to be a lifeline route for emergencies in Portland. As such, it is the Transportation Division's highest priority to ensure that the bridge meets seismic standards to withstand the anticipated magnitude 9.0 Cascadia Subduction Zone event that the Oregon Department of Geology and Mineral Industries has calculated as having a 27% chance of occurring before 2065. This bridge should remain fully operational to vehicles and river traffic following such an event. This Burnside Bridge Fund (2515) was created to track the revenues and expenses related to this effort. The National Environmental Policy Act (NEPA) Study will finish in FY 2022 and will determine the environmental impact of the various options of rebuilding or repairing the Burnside Bridge. Funding comes from the County's Vehicle Registration Fee. Additional information about the project can be found in the Budget Director's Message and the Department of Community Services program offer 90019.

Non-Routine Projects (2515)	FY 2022 Budget	Total Project Cost	Estimated Completion
Burnside Replacement Project	$23,558,042	$630-825 million	FY 2029

- FTA Conversion Code: Not applicable. There are no funds that will be flex transferred to FTA.

- Location, Limits and Mile Posts:
  - Location: In Portland across the Willamette River on the Burnside Bridge
  - Cross Street References: NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St
  - Overall Mile Post Limits: N/A
    Note: The limits are based on the DEIS alternative which could change and require updates to the project name and limits.

Figure 1.3-1. Project Area

- Current Status Code: 2 = Pre-design/project development activities (pre-NEPA) (ITS = ConOps.)

- Air Conformity/Capacity Status:
  Adding only the PE phase for the project allows it to be considered a planning project. At this point the project is exempt from air conformity and transportation demand modeling. As a planning project, the project is exempt under 40 CFR 93/126, Table 2, Other - Planning and technical studies.

	• Regional Significance Status: The project is considered a regionally significant. Burnside St and Burnside Bridge are identified as a "Major Arterial" in the Motor Vehicle modeling network. They are identified as a "Frequent Bus" in the Transit modeling network. In the Bicycle and Pedestrian modeling networks, Burnside St/bridge is identified a "Bicycle Parkway" and "Pedestrian Parkway" • Amendment ID and Approval Estimates: o STIP Amendment Number: TBD o MTIP Amendment Number: AP22-10-APR o OTC approval required: No. o Metro approval date: Tentatively scheduled for May 12, 2022.
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT (PE PHASE ONLY):** The formal/full amendment adds the PE phase only to the current MTIP as described in support of the NEPA-TIP validation requirement. Multnomah County is currently using local funds to complete the PE phase. They anticipate federal funds once secured will be added later.  The project is currently working to obtain its FEIS with a ROD expected around the November/December 2022 timeframe. The Draft EIS: An EIS is required for projects that require federal action (permits, approvals or funding), and that would likely have significant environmental effects. Before an EIS is final, a draft EIS is first prepared and provided to the public and agencies for review and comment. The Draft EIS includes the following: • Describes the project purpose and need, and the range of alternatives being studied. • Studies the environmental impacts of the alternatives

- Identifies ways to minimize the impacts.
- Evaluates and demonstrates how the action will comply with other environmental regulations.
- Compares and contrasts the alternatives.
- Identifies the preferred alternative, if there is one.

The DEIS was published on February 5th, 2021 and available for public comment through March 24th, 2021. The formal DEIS comment period has concluded.

Supplemental Draft EIS:

If any meaningful changes are made to the project and Preferred Alternative following the DEIS comment period, the project team will study the impacts of those changes and document them in a Supplemental Draft EIS. The SDEIS is then published for another round of public review and comment.

In spring 2021, after the DEIS comment period, new cost and funding challenges were identified by the project team. With this new information, County leadership directed the project team to look at ways to reduce the project cost. Thus, the project team identified cost saving refinements to the Preferred Alternative. These changes and their associated positive and negative impacts are being documented in a Supplemental Draft EIS. This document will be published in spring 2022 for public review and comment.

Final EIS:

Following the comment periods on the Draft and Supplemental EIS, the agency prepares a Final EIS that:

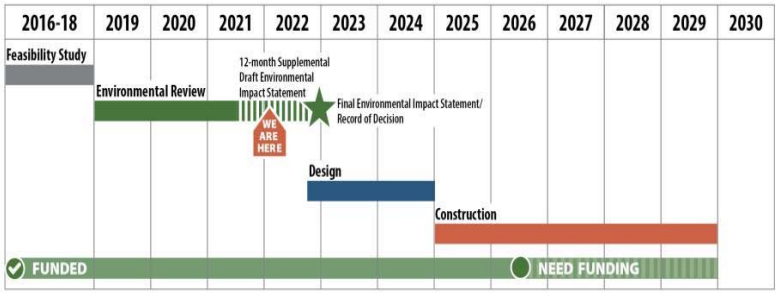
- Provides responses to comments received on the Draft and Supplemental EIS
- Refines and updates the alternatives and analysis as appropriate

Record of Decision (ROD):

- Documents the federal lead agency decision regarding which alternative to advance beyond the NEPA phase
- Includes commitments to mitigation measures
- Demonstrates compliance with other federal environmental regulations
- Can be simultaneous with the Final EIS

After the ROD:

- Waiting period, during which legal challenges to the ROD may be filed
- After the waiting period, begin acquiring funding, permits and approvals, begin final design

	Current draft detailed project descriptions for the MTIP under the DEIS is the following: Short Draft Description: *Replace & construct a new Burnside Bridge to seismic standards covering the limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St with street & intersection upgrades within the project limits for increased public safety* Internal MTIP Draft Detailed Description: The initial proposed MTIP Detailed description is being replaced with more generic version due to the multiple alternatives still under review. The initial draft description below is replaced with the new one also shown: ~~*Replacement "Long Span" with a moveable span (Vertical or Bascule lift) for the best seismic resiliency standards, adjust lane capacity to be 2 EB through lanes, 1 EB dedicated bus lane and 2 WB through lanes, and with bicycle/pedestrian improvements covering limits of NE/SE Grand Ave to NW/SW 3rd Ave and from the I-84/I-5 split south to SE Ash St including street & intersection upgrades as required within the limits for increased public safety.*~~ **Replace and reconstruct existing Burnside Bridge to the best seismic resiliency standards plus various required street improvements for public safety which may result in decreasing through-lane capacity from 5 to 4 lanes.** Final note: As stated previously, the NEPA process continues and a ROD is not expected until late CY 2022. Around the same, the final alternative major scope activities will be reviewed against the MTIP. Required changes with the project name and description will occur at that time to ensure the MTIP and STIP are consistent with the FEIS. Additional project details can be found at: https://www.multco.us/earthquake-ready-burnside-bridge
Additional Details:	Proposed Project Schedule 

Why a Formal amendment is required?	Adding the PE phase for the new Earthquake Ready Burnside Bridge is considered a new project and requires a formal/full amendment to complete.
Total Programmed Amount:	The PE phase programming will be completed with local funds. Multnomah County's commitment to the PE phase totals $123,300,000.
Added Notes:	3 Attachments: 1. Project Fact Sheet 2. Purposed and Need 3. Cost Estimate Summaries

DEPARTMENT OF COUNTY MANAGEMENT

Multnomah County

April 12, 2022

Ken Lobeck
Funding Programs Lead
Metro Regional Center
600 NE Grand Ave
Portland, OR 97232

Ken,

Multnomah County is pleased to provide information that may assist with amending the Metro Regional Transportation Improvement Program with the Preliminary Engineering Phase of the Earthquake Ready Burnside Bridge Project (EQRB).

This memo confirms that Multnomah County has already committed approximately $33.3M of local funds to the completion of the NEPA Phase for the project. The current estimate for the Design Phase, anticipated to start Fall/Winter 2022, is approximately $90M.

In December 2019, the Board of County Commissioners voted to increase the annual Vehicle Registration Fee (VRF) from $19 to $37 beginning in January 2021. The proceeds from the VRF revenues are anticipated to generate approximately $300M for the EQRB project over the next 20 years.

In FY22, the County adopted a $23.5M budget for the EQRB project which is the first of multiple annual local allocations that will occur over the next several years to support EQRB activities.

While funds for the Design Phase are anticipated to be local and originate from the VRF revenues and bonding, the County will continue to pursue federal funds for the Project and would apply them to the Design Phase should they be secured.

Regards,

Eric Arellano
Chief Financial Officer
Department of County Management

Note: The Amendment Matrix located below is included as a reference for the rules and justifications governing Formal Amendments and Administrative Modifications to the MTIP that the MPOs and ODOT must follow.

METRO REQUIRED PROJECT AMENDMENT REVIEWS

In accordance with 23 CFR 450.316-328, Metro is responsible for reviewing and ensuring MTIP amendments comply with all federal programming requirements. Each project and their requested changes are evaluated against multiple MTIP programming review factors that originate from 23 CFR 450.316-328. The programming factors include:

- Verification as required to programmed in the MTIP:
  - Awarded federal funds and is considered a transportation project
  - Identified as a regionally significant project.
  - Identified on and impacts Metro transportation modeling networks.
  - Requires any sort of federal approvals which the MTIP is involved.
- Passes fiscal constraint verification:
  - Project eligibility for the use of the funds
  - Proof and verification of funding commitment
  - Requires the MPO to establish a documented process proving MTIP programming does not exceed the allocated funding for each year of the four year MTIP and for all funds identified in the MTIP.
  - Passes the RTP consistency review: Identified in the current approved constrained RTP either as a stand- alone project or in an approved project grouping bucket
  - RTP project cost consistent with requested programming amount in the MTIP
  - If a capacity enhancing project – is identified in the approved Metro modeling network
- Satisfies RTP goals and strategies consistency: Meets one or more goals or strategies identified in the current RTP.
- If not directly identified in the RTP's constrained project list, the project is verified to be part of the MPO's annual Unified Planning Work Program (UPWP) if federally funded and a

ODOT-FTA-FHWA Amendment Matrix
Type of Change
FULL AMENDMENTS
1. Adding or cancelling a federally funded, and regionally significant project to the STIP and state funded projects which will potentially be federalized
2. Major change in project scope. Major scope change includes: • Change in project termini - greater than .25 mile in any direction • Changes to the approved environmental footprint • Impacts to AQ conformity • Adding capacity per FHWA Standards • Adding or deleting worktype

3. Changes in Fiscal Constraint by the following criteria:
• FHWA project cost increase/decrease:
  • Projects under $500K – increase/decrease over 50%
  • Projects $500K to $1M – increase/decrease over 30%
  • Projects $1M and over – increase/decrease over 20%
• All FTA project changes – increase/decrease over 30%

4. Adding an emergency relief permanent repair project that involves substantial change in function and location.
ADMINISTRATIVE/TECHNICAL ADJUSTMENTS
1. Advancing or Slipping an approved project/phase within the current STIP (If slipping outside current STIP, see Full Amendments #2)
2. Adding or deleting any phase (except CN) of an approved project below Full Amendment #3
3. Combining two or more approved projects into one or splitting an approved project into two or more, or splitting part of an approved project to a new one.
4. Splitting a new project out of an approved program-specific pool of funds (but not reserves for future projects) or adding funds to an existing project from a bucket or reserve if the project was selected through a specific process (i.e. ARTS, Local Bridge...)
5. Minor technical corrections to make the printed STIP consistent with prior approvals, such as typos or missing data.
6. Changing name of project due to change in scope, combining or splitting of projects, or to better conform to naming convention. (For major change in scope, see Full Amendments #2)
7. Adding a temporary emergency repair and relief project that does not involve substantial change in function and location.

regionally significant planning study that addresses RTP goals and strategies and/or will contribute or impact RTP performance measure targets.

- Determined the project is eligible to be added to the MTIP, or can be legally amended as required without violating provisions of 23 CFR450.300-338 either as a formal Amendment or administrative modification:
    - Does not violate supplemental directive guidance from FHWA/FTA's approved Amendment Matrix.
    - Adheres to conditions and limitation for completing technical corrections, administrative modifications, or formal amendments in the MTIP.
    - Is eligible for special programming exceptions periodically negotiated with USDOT.
    - Programming determined to be reasonable of phase obligation timing and is consistent with project delivery schedule timing.
- Reviewed and initially assessed for Performance Measurement impacts.
- MPO responsibilities completion:
    - Completion of the required 30 day Public Notification period:
    - Project monitoring, fund obligations, and expenditure of allocated funds in a timely fashion.
    - Acting on behalf of USDOT to provide the required forum and complete necessary discussions of proposed transportation improvements/strategies throughout the MPO.

APPROVAL STEPS AND TIMING

Metro's approval process for formal amendment includes multiple steps. The required approvals for the April 2022 Formal MTIP amendment (AP22-10-APR) will include the following:

Action	Target Date
Initiate the required 30-day public notification process	March 29, 2022
TPAC notification and approval recommendation	April 1, 2022
JPACT approval and recommendation to Council	April 21, 2022
Completion of public notification process	April 27, 2022
Metro Council approval	**May 12, 2022**

Notes:

* The above dates are estimates. JPACT and Council meeting dates could change.

** If any notable comments are received during the public comment period requiring follow-on discussions, they will be addressed by JPACT.

USDOT Approval Steps (The below time line is an estimation only):

Action	Target Date
Final amendment package submission to ODOT & USDOT	May 19, 2022
USDOT clarification and final amendment approval	Mid-June, 2022

ANALYSIS/INFORMATION

1. **Known Opposition:** None known at this time.
2. **Legal Antecedents:**
    a. Amends the 2021-24 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 20-5110 on July 23, 2020 (FOR THE PURPOSE OF

ADOPTING THE 2021-2024 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA).

b. Oregon Governor approval of the 2021-24 MTIP: July 23, 2020
c. 2021-2024 Statewide Transportation Improvement Program (STIP) Approval and 2021 Federal Planning Finding: September 30, 2020

3. **Anticipated Effects:** Enables the projects to obligate and expend awarded federal funds, or obtain the next required federal approval step as part of the federal transportation delivery process.
4. **Metro Budget Impacts:** None to Metro

RECOMMENDED ACTION:

JPACT approved Resolution 22-5256 consisting of two new projects which are required to be added to the MTIP enabling federal reviews and fund obligations to then occur, and now recommends approval by Metro Council.

Three Attachments:
1. ERBB - Project Fact Sheet
2. ERBB - Purpose and Need
3. ERBB – Cost Estimate Summaries

EARTHQUAKE READY BURNSIDE BRIDGE

Multnomah County is working to create an earthquake ready Willamette River crossing

Project Update – Fall 2021

Multnomah County

FACT SHEET

BETTER – SAFER – CONNECTED

Fall 2021

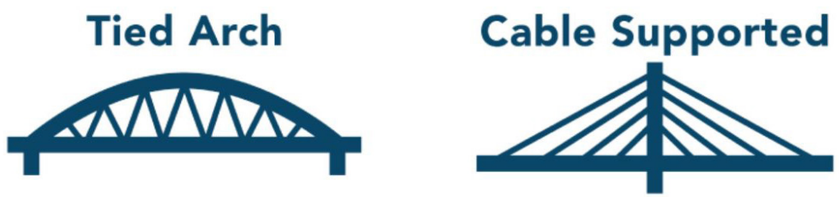
Portland's aging downtown bridges are not expected to withstand a major earthquake.

That's why Multnomah County is taking the lead on making at least one Willamette River crossing earthquake ready. Located in the heart of downtown and on a regional lifeline route, a resilient Burnside Bridge will help our community recover after a major earthquake and provide a long-term river crossing that supports our transportation needs for the next century.

PREFERRED ALTERNATIVE - REPLACEMENT LONG SPAN

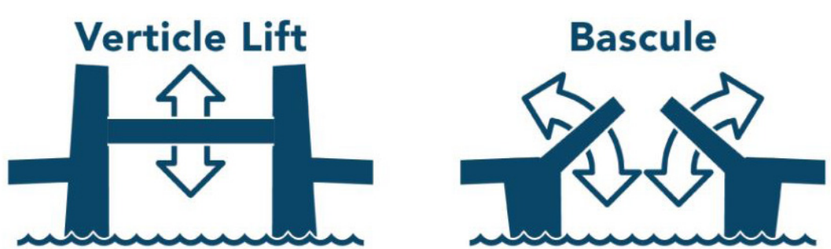
In fall 2020, the Replacement Long Span was recommended as the Preferred Alternative for the Draft Environmental Impact Statement. Of all the alternatives studied, the Replacement Long Span was the lowest cost and best for seismic resiliency. Long Span bridges have fewer columns in the ground but more structure above the deck like the Tilikum Crossing Bridge in Portland. This helps avoid seismic risks associated with building in the dangerous soils surrounding the Burnside Bridge.

LONG SPAN BRIDGE TYPES UNDER CONSIDERATION



MOVABLE SPAN TYPES UNDER CONSIDERATION

The new bridge will have a movable span to allow ships to pass. Currently, two movable span types are under consideration, including:



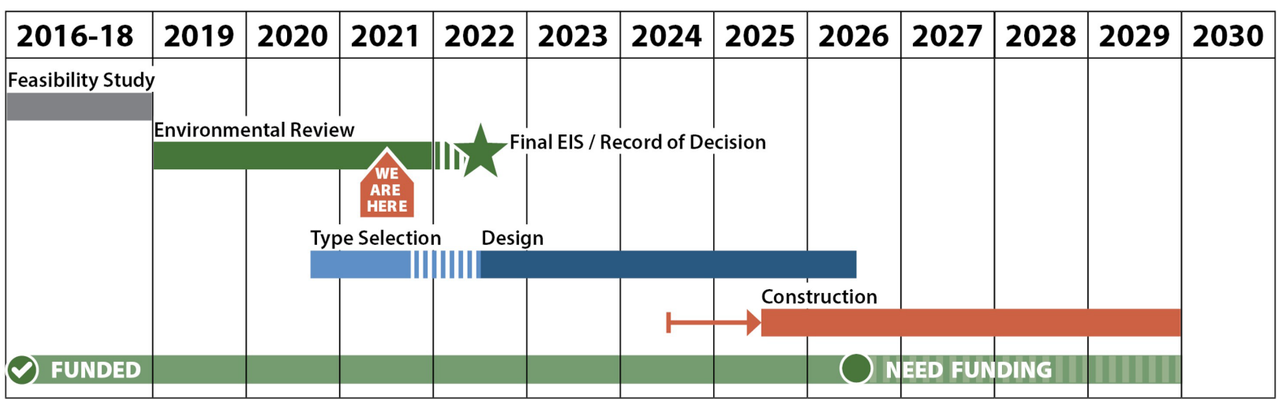
BALANCING PROJECT DESIGN AND PROJECT COST

Given the current competition for funding of large infrastructure projects, County leaders asked the project team to analyze ways to reduce the cost so that the project is more likely to be fully funded and built. The project team is now analyzing a handful of potential cost-saving measures. Learn more about the cost-saving measures on the back of this factsheet or online at **https://tinyurl.com/EQRB-PA.**

Aerial view of the existing Burnside Bridge looking northwest towards Old Town Chinatown.

CHANGES TO THE PROJECT TIMELINE

The evaluation of proposed cost reductions, development of detailed cost estimates and continued funding work will add about nine months to the Environmental Review Phase and push out the Design and Construction phases.



POTENTIAL COST-SAVING MEASURES

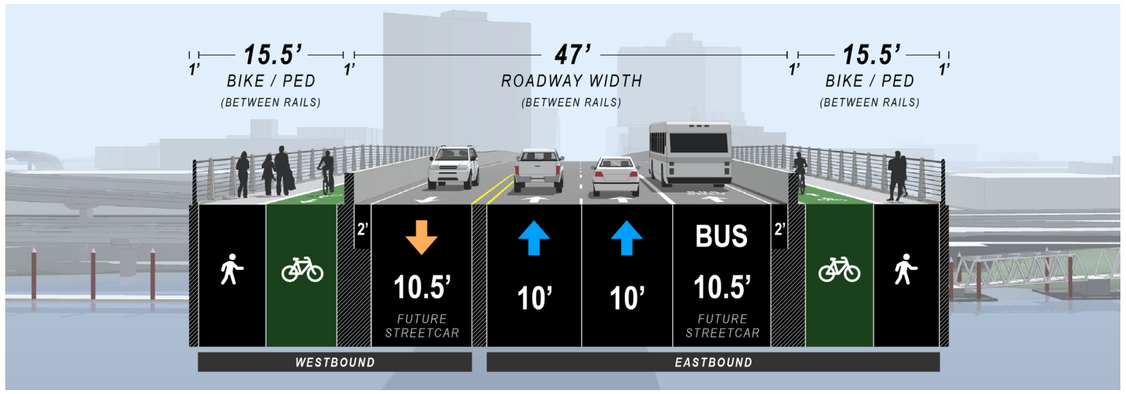
The project team is working to achieve the right balance between the project design and the project cost. The cost range for the Preferred Alternative in the Draft EIS exceeded $800 million. The team is working to bring that cost down to ensure the project can be funded and built.

Finding cost-savings will require changes to the Preferred Alternative but will not reduce the project's core purpose of creating a seismically resilient bridge that is immediately usable by our community and emergency responders following a major earthquake. Before making any decisions, we will carefully analyze these potential cost-reduction measures:

Reducing the bridge width compared to the Preferred Alternative.

This would remove one vehicle lane compared to the Preferred Alternative and provide bicycle/pedestrian facilities of at least 14-feet on each side with a crash-worthy barrier between traffic lanes and the shared use paths. This proposed width would be comparable to today's bridge.

$140-$165M Savings



Example of a 4-lane bridge. A variety of lane widths and allocations are currently under analysis including a reversible lane.

Selecting a 'girder' structure type for the west approach.

This would place two rows of support columns in Waterfront Park – more than some of the options initially considered, but fewer than there are now. The girder structure type does not require a support structure above the deck of the bridge.

$15-$20M Savings

Rendering of girder structure type over Waterfront Park near downtown.

Adding support columns near East 2nd Avenue.

Adding a row of support columns east or west of NE/SE 2nd Avenue on the east side if a Tied Arch design is used. The project will explore ways to minimize the impacts to the Skatepark below the bridge.

$5-$15M Savings

Other measures under consideration

- Limiting improvements to the connections from the bridge to the Skidmore MAX station and Eastbank Esplanade to those that meet Americans with Disability Act compliance standards.
- Limiting the budget for aesthetic enhancements.
- Others. We'll keep looking for additional opportunities to keep costs down.

Measures that the project team will NOT pursue

- Reduce seismic resiliency standards
- Eliminate potential for future Streetcar
- Reduce width down to three vehicular lanes
- Eliminate capacity for oversized and specialized heavy haul vehicles
- Reduce bike/ped width to less than 14 feet on each side
- Remove the crash-worthy barrier between vehicular lanes and bike/pedestrian facilities

NEXT STEPS

The project team will continue to evaluate the proposed cost-saving measures and develop more detailed cost estimates before sharing the results and seeking your feedback in fall/winter 2021.

In spring 2022, we'll publish an updated Environmental Impact Statement documenting the changes. This will provide another opportunity for comments.

The county is dedicated to pursuing funding opportunities and will continue to seek outside funds so we can build an earthquake-ready Burnside Bridge.

Visit the website to learn more and sign up for email notifications.

CONTACT

Mike Pullen for more details or questions

Multnomah County Communications Office

mike.j.pullen@multco.us or **(503) 209-4111**

For information about this project in other languages, please call 503-209-4111 or email burnsidebridge@multco.us.
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BurnsideBridge.org

@MultCoBridges, #ReadyBurnside

Multnomah County

Chapter 1

Purpose and Need for the Project

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Multnomah County

1 Purpose and Need for the Project

1.1 Why are we considering the Burnside Bridge Project?

Oregon is located in the Cascadia Subduction Zone (CSZ), making it subject to some of the world's most powerful, recurring earthquakes. Studies show that the most recent CSZ earthquake occurred just over 300 years ago, and that there is a significant risk that the next major earthquake will occur within the lifetimes of the majority of Oregon residents (Goldfinger et al. 2012). The best available science warns that given current conditions, the next major CSZ event is expected to result in thousands of deaths, widespread damage to our region's critical infrastructure, and long-term adverse social and economic impacts (OSSPAC 2013).

The effects of the next CSZ earthquake can be reduced through preparation, including creating seismically resilient transportation "lifeline routes," particularly to provide access to critical facilities in urban areas. Such lifeline routes will facilitate post-earthquake emergency response, rescue, and evacuation, as well as enable post-disaster regional recovery and help prevent permanent population loss and long-term economic decline (OSSPAC 2013). The importance of having a seismically resilient lifeline route across the Willamette River is why Multnomah County has proposed to make the Burnside Bridge earthquake ready.

1.2 Location, Setting, and History

The Burnside Bridge is located in the center of Portland, Oregon (see Figure 1.3-1). Burnside Street is Portland's north-south street address baseline, and the Willamette River is the east-west baseline. The bridge provides daily connection across the Willamette River for about 35,000 vehicle trips and over 3,000 pedestrian and bicycle trips per day. Burnside Street is a designated east-west regional lifeline route.

The current Burnside Bridge was built in 1926 in response to a growing population and the increasing use of motor vehicles; it replaced the original 1892 bridge. The current bridge initially supported six lanes of traffic, but in 1995, one traffic lane was converted into bicycle lanes. The bridge now has bicycle lanes and sidewalks in both directions, and it has five motor vehicle lanes: two westbound and two eastbound general traffic lanes plus one eastbound transit-only lane.

The bridge has had minor modifications since it was constructed: electric streetcar service ended in the late 1940s, lighting and traffic control devices were updated in the 1950s, automobile traffic gates were installed in 1971, and the bascule pier fenders were replaced on the upstream side in 1983. Multiple deck resurfacing projects and expansion joint repairs have been conducted over the years. Most recently, Multnomah County implemented the Burnside Bridge Maintenance Project in 2017 that will provide limited additional service life for the existing structure. Maintenance work included improvements and repairs to the main bridge span, approaches, and other elements such as mechanical and electrical repairs related to drawbridge operation.

1.3 Purpose of the Project

The primary purpose of the Earthquake Ready Burnside Bridge (EQRB) Project (Project) is to create a seismically resilient Burnside Street lifeline crossing of the Willamette River that would remain fully operational and accessible for vehicles and other modes of transportation immediately following a major CSZ earthquake. A seismically resilient Burnside Bridge would support the region's ability to provide rapid and reliable emergency response, rescue, and evacuation after a major earthquake, as well as enable post-earthquake economic recovery. In addition to ensuring that the crossing is seismically resilient, the purpose is also to provide a long-term, low-maintenance safe crossing for all users.

Figure 1.3-1. Project Area

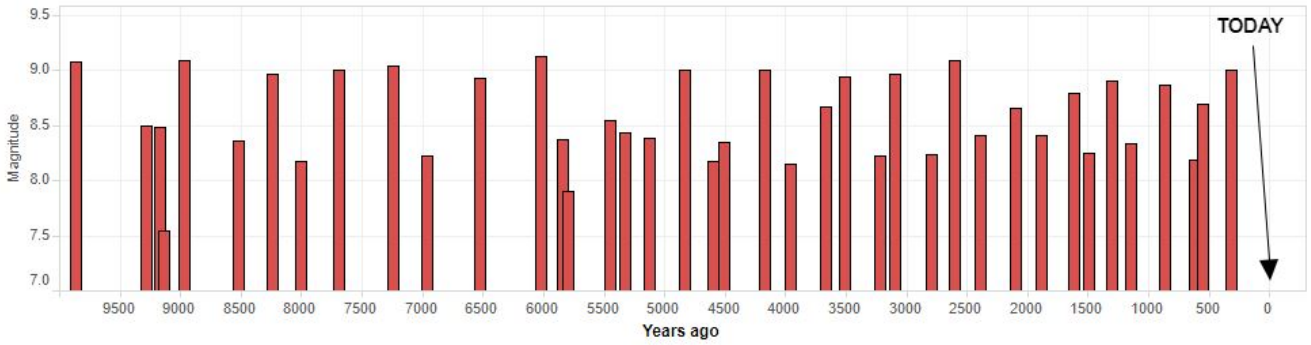
1.4 Need for the Project

The Project is intended to address the following needs.

Need for a Seismically Resilient River Crossing and Lifeline Route

Geologic evidence shows that more than 40 major earthquakes have originated along the CSZ fault over the last 10,000 years (Figure 1.4-1). The intervals between CSZ earthquakes have ranged from a few decades to over a thousand years. The last major earthquake in Oregon occurred 320 years ago, a timespan that exceeds 75 percent of the intervals between major Oregon earthquakes (see Figure 1.4-1). *The Oregon Resilience Plan* predicts extensive casualties, infrastructure damage, and economic losses from the next CSZ earthquake (OSSPAC 2013).

Figure 1.4-1. Frequency and Magnitude of CSZ Earthquakes



Source: Oregon Live n.d.
Note: Earthquake magnitude (strength) numbers are approximate and based on the Richter scale.

All of the older bridges crossing the Willamette River are expected to suffer seismic damage in a major earthquake. Some are expected to collapse, and none are expected to be usable immediately following the earthquake (see Figure 1.4-2). In addition, the east side access roads to all of the downtown bridges, except to the Burnside Bridge, pass under and/or travel on aging Interstate 5 (I-5) overpasses that are expected to collapse in a major earthquake, thereby blocking access to those river crossings (Hawthorne, Morrison, Steel and Broadway Bridges). See Figure 22 in Attachment G.

In addition to having no I-5 overpasses that would block access to the Burnside Bridge, Burnside Street extends 17 miles from Washington County to Gresham with very few overpasses vulnerable to collapse. This is one of the reasons that the Regional Disaster Preparedness Organization, composed of cities, counties, Metro, and the Red Cross, designated the Burnside Corridor as a “Primary East-West Emergency Transportation Route” (Task Force 1996), a designation reflected in regional plans (ODOT 2014). The Burnside Bridge provides a key link in the Burnside Street lifeline route connecting two sides of our region across the Willamette River, and yet in its current condition the Burnside Bridge is far from able to live up to its lifeline designation. At 94 years old, the bridge is an aging structure requiring increasingly more frequent and significant repairs and maintenance. As with the other aging County- and State-owned bridges crossing the Willamette River, the Burnside Bridge is expected to be unusable immediately following the next CSZ earthquake.

Figure 1.4-2. Risk of Bridge and Overpass Collapse

The State-owned bridges (Ross Island, Marquam, Fremont, and St. Johns Bridges) were also designed and built before the CSZ had been identified and understood. The Oregon Department of Transportation (ODOT) expects that all of the State-owned bridges crossing the Willamette River near downtown Portland would be unusable immediately following a CSZ earthquake and has classified expected damage ranging from "collapse" for the Ross Island Bridge and "extensive" for the St. Johns Bridge, to "moderate" for the Fremont and Marquam Bridges. ODOT anticipates that the main river portion of the Marquam Bridge, following inspection and repairs, could potentially be serviceable 4 weeks after a CSZ earthquake. However, because the I-5 viaducts/ramps on the east side are expected to suffer extensive damage, there could be no way to access the bridge.

ODOT has identified seismic retrofit needs and priorities for the state highway system from the coast to east of the Cascades. Estimated costs are in the billions, and ODOT has suggested that implementation could occur in five phases over several decades. The State-owned Willamette River crossings are not the first priorities for the state system, in part because of the high cost to replace or retrofit multiple vulnerable structures. Creating a regionally continuous, seismically resilient Willamette River crossing within the state highway system would require retrofitting or replacing at least one large State-owned bridge and its associated multiple overpasses and viaducts (Goldfinger et al. 2012). By comparison, upgrading the County-owned Burnside Bridge would be a smaller-scale project with no associated overpasses or viaducts, and it is integral to the regional Burnside Street lifeline route (ODOT 2014). See Figure 1.4-3 for a comparison of seismic vulnerability for downtown bridge approaches.

The two newest bridges over the Willamette River (Sellwood Bridge and Tilikum Crossing) are not expected to collapse in a CSZ earthquake, but are also not expected to provide the downtown core or the Burnside lifeline route with viable crossing options after a major seismic event. The Sellwood Bridge was designed to survive a CSZ earthquake and be back in service quickly after the event, and the County mitigated a landslide-prone area near the west end of the bridge. However, the hills above Highway 43 north of the bridge area could slide and block downtown bridge access. Even without such landslides, access to the downtown core and the Burnside lifeline route via the Sellwood Bridge would require approximately 10 miles of out-of-direction travel. The Sellwood Bridge could serve a lifeline function following a major earthquake, but it would not serve the same broad area, population, or downtown core that is served by the Burnside Bridge and Burnside Street lifeline route.

The Tilikum Crossing, serving light rail transit, streetcar, buses, bicyclists, and pedestrians, is also expected to survive and be serviceable following a CSZ earthquake. However, because it is not on or connected to a designated lifeline route, nor intended for general vehicular usage, the approaches to the bridge were designed to "life safety" standards and not intended to provide lifeline functions. Life safety standards result in a structure that will preserve lives by avoiding collapse in a major earthquake, but the structure is not necessarily expected to be usable immediately following such an event. In addition, the west side access to the bridge crosses under several seismically vulnerable I-5 and Interstate 405 (I-405) viaducts that, in their current conditions, would likely suffer severe damage in a major earthquake and block the route to the bridge.

Need for Post-Earthquake Emergency Response

Absent significant and targeted infrastructure resiliency improvements, the next CSZ earthquake is expected to render all of the downtown Portland Willamette River crossings unusable (either because of damage to each crossing's bridge, its approaches, or both). This means that none of the designated lifeline routes or evacuation routes across the river will be available for emergency response, rescue, or evacuation immediately following the earthquake.

Figure 1.4-3. Seismic Vulnerability of Downtown Bridge Approaches

Need for Post-Earthquake Recovery

While the cost to build resilient infrastructure is high, it is lower than the cost to a community of losing access to and attempting to rebuild infrastructure following a disaster (Chang 2000). Transportation infrastructure damaged by an earthquake impairs a region's long-term ability to recover economically and socially after a disaster, adversely affecting a region's population and economy for many years after a major earthquake (OSSPAC 2013; Madhusudan and Ganapathy 2011).

Need for Emergency Transportation Routes and Seismic Resiliency as Stated in Plan and Policy Directives

Local plans and policies that designate Burnside Street as a lifeline and evacuation route help describe the need for this Project. In addition, statewide policy describes the need through recommendations for creating seismically resilient transportation routes such as that anticipated with this Project. Relevant plans and policies are briefly summarized below.

Metro's Regional Emergency Management Group was formed by intergovernmental agreement among the region's cities, counties, Metro, and the Red Cross to improve disaster preparedness, response, recovery, and mitigation plans and programs. Current local plans reflect that group's 1996 report which designates Burnside Street as a "Primary East-West Emergency Transportation Route" (Task Force 1996).

The City of Portland's *Evacuation Plan* (BEM 2017) addresses evacuation needs for general disasters including flooding, hazardous materials spills, fires, etc. The plan identifies Burnside Street both as a possible evacuation route east of the river and as a primary east-west evacuation route in downtown Portland west of the river. On the east side, Interstate 84 (I-84) is the designated primary east-west evacuation route while Burnside Street is designated a secondary eastside route due to less consistent capacity. However, while I-84 has greater capacity, it would likely be impassable following a major earthquake because of the collapse of multiple overpasses (18 overpasses cross I-84 between the Willamette River and Interstate 205 [I-205]). Burnside Street has no overpasses or bridges through this segment, which is a significant advantage for a lifeline transportation route following a major earthquake.

The Oregon Resilience Plan's specific roadway and bridge recommendations focus on State-owned rather than locally owned facilities. However, this statewide plan emphasizes the importance of creating seismically resilient local bridges and roads, particularly to support lifeline functions in urban areas (OSSPAC 2013).

Need for Long-Term Multimodal Travel Across the River

In addition to its function as a lifeline route, Burnside Street serves as an important long-term multimodal (multiple modes of travel such as pedestrians, bicyclists, cars, and transit) connection between the east and west sides of the Willamette River in downtown Portland and between Gresham and Washington County. The existing Burnside Bridge's five vehicular traffic lanes carry approximately 35,000 vehicles per day, while the sidewalks and bike lanes carry over 3,000 bicyclists and pedestrians per day. The bridge also carries multiple bus routes and is planned to carry a streetcar line. Any changes to the existing crossing should serve not only the post-earthquake lifeline need, but should also address the continued long-term need for a safe multimodal crossing.

1.5 Application of the Purpose and Need in Alternatives Identification and Screening

Prior to initiating the Draft EIS, the project team conducted a feasibility study and evaluation process[1] to identify and screen potential alternatives. The criteria used in that study and the screening reflected the Project's purpose as well as feasibility considerations, environmental impacts, and costs. This screening process, which is discussed in Chapter 2 and documented in detail in the *EQRB Alternatives Screening Technical Memorandum* (Multnomah County 2018), included three steps:

1. Pass/Fail Screening
2. Preliminary Screening
3. Alternatives Evaluation

Each step added increasingly detailed analysis of how well the alternatives being considered could or could not achieve the project purpose; screening also considered the fundamental feasibility of alternatives as well as environmental impacts and costs of the alternatives. These considerations were used to eliminate poorly performing alternatives from further consideration and to help identify the range of reasonable alternatives to study in detail in the Draft EIS.

Pass/Fail Step

The pass/fail analysis was based on yes/no questions that reflected the core purpose of seismic resilience and the need for alternatives to meet basic feasibility/constructability criteria. Alternatives had to pass the basic threshold for each of these criteria to advance to the next screening step. Four pass/fail criteria were developed to eliminate alternatives that would not meet fundamental requirements of being "seismically resilient" after the next major earthquake:

- Alternatives need to be fully operable following a CSZ 8+ earthquake. This means that they need to be usable for all modes immediately after the earthquake without requiring repairs.
- Alternatives cannot have two or more earthquake-related blockages (e.g., seismically vulnerable overpasses or viaducts) on the access route to them.
- Crossing locations have to be within 4 minutes by motor vehicle (travelling 30 mph) of the Burnside Street lifeline route. This is to maximize emergency response travel time for vehicles using the Burnside Street lifeline route since it is expected to be the least affected east-west lifeline route after the next major earthquake.
- Alternatives need to provide at least three travel lanes, or equivalent, after a major earthquake.

In addition, a pass/fail criterion was included to eliminate alternatives that would have unacceptable impacts to major public infrastructure. This eliminated alternatives that would cause long-term full closures of interstate highways, major arterials, the Union Pacific Railroad mainline, commercial river traffic, or the MAX light rail line.

Preliminary Screening Step

The criteria topics in this step were similar to those in Step 1, but rather than being pass/fail, the remaining alternatives received a score for each criterion, and the total scores were used to determine the more promising alternatives and drop those that scored substantially lower. The preliminary screening criteria

[1] The informal scoping process, conducted consistent with Planning and Environment Linkages requirements, is discussed in the Draft EIS Summary.

included a more detailed evaluation of seismic resiliency than was in the pass/fail criteria of Step 1, and the added consideration of how well alternatives could meet the other purpose of the Project – long-term functionality for multiple modes, independent of a seismic event.

Alternatives Evaluation Step

Step 3 included yet more detailed analysis of seismic resiliency, more detailed analysis of how well the alternatives would meet the long-term needs of specific modes, and added criteria to help screen out alternatives that would have extraordinary environmental impacts or costs. The criteria were organized into six categories:

1. Seismic Resiliency
2. Non-Motorized Transportation
3. Connectivity
4. Built Environment
5. Environmental Justice/Equity
6. Financial Stewardship

Additional discussion of screening is in Chapter 2 of the Draft EIS, and full details of this screening process, criteria, findings, and results can be found in the *EQRB Alternatives Screening Technical Memorandum* (Multnomah County 2018).

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Attachment O

Cost Risk Assessment Cost Estimate Summaries

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Multnomah County

Attachment 3: Cost Estimate Summaries

2020 Cost Risk Assessment (CRA) Process

Earthquake Ready Burnside Bridge (EQRB)

Alt: Enhanced Seismic Retrofit Alternative (No Temp Bridge)

Workshop Date: February 26, 2020

CRA Cost Range

(opinion of probable cost range as of February 2020 Project analysis)

10% Chance cost will be less than: **$803M**

10% Chance cost will be more than: **$973M**

80% Chance cost will be in this range

Project Need - Multnomah County is delivering the EQRB Project to provide our community with a reliable Willamette River crossing on the Burnside regional lifeline route after a major earthquake.

Description – The Enhanced Seismic Retrofit Alternative would upgrade the existing bridge. While this alternative allows for the preservation of portions of the historic Burnside Bridge, it requires replacement of some elements, extensive retrofitting of others, and retains many columns in unstable soil near the river.

CRA Schedule Range

(opinion of probable cost range as of February 2020 Project analysis)

Construction Start Date: **March 2024**
Construction Completion Date: **October 2028**

Key Assumptions and Findings

- Construction Manager / General Contractor (CM/GC) delivery method
- 3 to 4 years to construct
- Traffic to be detoured to adjacent bridges during construction
- Costs escalated to mid-point of construction
- This alternative would have consequential impacts to the historic elements of the existing bridge.
- This alternative possesses the greatest construction risks of all the alternatives.

Major Project Risks

Key Project Cost Risks (impacting estimated expected value impacts)

Threats

- Fluctuating market conditions due to competitive labor market ($11M to $34M)
- Cost of change orders due to ground improvement ($9M to $31M)
- Cost of change orders due to CSO Force Main relocation ($5M to $26M)
- Cost of change orders due to obstructions during shaft construction ($5M to $15M)

Opportunities

- Design innovations from contractor input ($13M to $15M)
- Benefit of alternative ground improvement measures ($0M to $3M)
- Benefit from reduced foundation sizing due to refined seismic analysis ($2M to $4M)

Key Schedule Risks (Impacting Construction Completion Milestone):

Threats

- Delays associated with CSO Force Main relocation (2 to 9 months)
- Challenges with movable bridge Installation and Commissioning (2 to 4 months)
- Difficulties with in-river cofferdam construction (1 to 3 months)

Opportunities

- Construction acceleration from contractor input (1 to 3 months)
- Use of full depth precast deck panels to accelerate construction (0 to 1 month)

Level of Project Design — Low | Medium | High

NEPA Phase

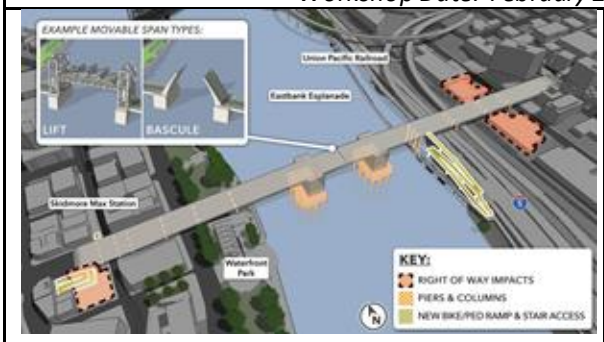
Multnomah County

2020 Cost Risk Assessment (CRA) Process

Earthquake Ready Burnside Bridge (EQRB)

Alt: Replacement Alternative with Short-span Approach (No Temp Bridge)

Workshop Date: February 26, 2020



CRA Cost Range

(opinion of probable cost range as of February 2020 Project analysis)

10% Chance cost will be less than: **$832M**

10% Chance cost will be more than: **$1.016B**

80% Chance cost will be in this range

Project Need - Multnomah County is delivering the EQRB Project to provide our community with a reliable Willamette River crossing on the Burnside regional lifeline route after a major earthquake.

Description - The Replacement Alternative with Short-span Approach would replace the existing Burnside Bridge with a new movable bridge at about the same surface height and location as the current bridge. It would have fewer columns than the current bridge, but more than the Replacement Long Span alternative.

Key Assumptions and Findings

- Construction Manager / General Contractor (CM/GC) delivery method
- 4 to 5 years to construct
- Traffic to be detoured to adjacent bridges during construction
- Costs escalated to mid-point of construction
- This alternative is more expensive, has greater natural resource impacts, and presents more seismic risk than the Replacement Long Span because it requires more columns in unstable soil near the river.

CRA Schedule Range

(opinion of probable cost range as of February 2020 Project analysis)

Construction Start Date: **March 2024**
Construction Completion Date: **August 2029**

Major Project Risks

Key Project Cost Risks (impacting estimated expected value impacts)

Threats

- Fluctuating market conditions due to competitive labor market ($13M to $39M)
- Cost of change orders due to ground improvement ($9M to $31M)
- Cost of change orders due to unforeseen circumstances ($5M to $23M)
- Cost of change orders due to obstructions during shaft construction ($5M to $10M)

Opportunities

- Design innovations from contractor input ($13M to $15M)
- Benefit of alternative ground improvement measures ($0M to $3M)
- Benefit from reduced foundation sizing due to refined seismic analysis ($2M to $4M)

Key Schedule Risks (Impacting Construction Completion Milestone):

Threats

- Challenges with movable bridge Installation and Commissioning (2 to 4 months)
- Delays associated with Local Agency permitting and Land Use approvals (1 to 4 months)
- Difficulties with in-river cofferdam construction (1 to 3 months)

Opportunities

- Construction acceleration from contractor input (1 to 3 months)
- Use of full depth precast deck panels to accelerate construction (0 to 2 months)

Level of Project Design — Low | Medium | High

NEPA Phase

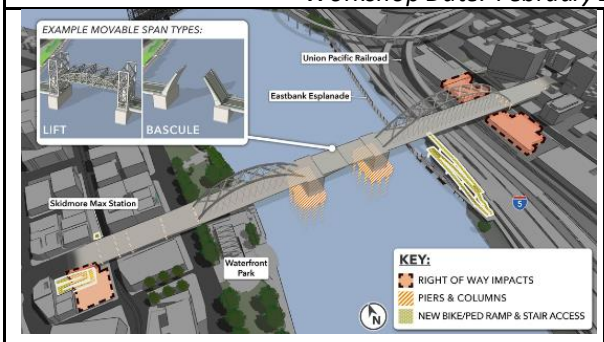
Multnomah County

2020 Cost Risk Assessment (CRA) Process

Earthquake Ready Burnside Bridge (EQRB)

Alt: Replacement Alternative with Long-span Approach (No Temp Bridge)

Workshop Date: February 26, 2020



CRA Cost Range

(opinion of probable cost range as of February 2020 Project analysis)

10% Chance cost will be less than: **$800M**

10% Chance cost will be more than: **$965M**

80% Chance cost will be in this range

Project Need - Multnomah County is delivering the EQRB Project to provide our community with a reliable Willamette River crossing on the Burnside regional lifeline route after a major earthquake.

Description – The Replacement Alternative with Long-span Approach would replace the existing Burnside Bridge with a new movable bridge in the same location and length as the existing bridge with support structure above the roadway surface resulting in fewer columns below. This means there are longer spans between columns.

Key Assumptions and Findings

- Construction Manager / General Contractor (CM/GC) delivery method
- 4 to 5 years to construct
- Traffic to be detoured to adjacent bridges during construction
- Costs escalated to mid-point of construction
- This alternative was recommended because it is the most seismically resilient, has the lowest cost, and has the fewest natural resources impacts of any of the replacement alternatives.

CRA Schedule Range

(opinion of probable cost range as of February 2020 Project analysis)

Construction Start Date: **March 2024**
Construction Completion Date: **August 2029**

Major Project Risks

Key Project Cost Risks (impacting estimated expected value impacts)

Threats

- Fluctuating market conditions due to competitive labor market ($13M to $39M)
- Cost of change orders due to unforeseen circumstances ($5M to $23M)
- Cost of change orders due to obstructions during shaft construction ($5M to $10M)

Opportunities

- Design innovations from contractor input ($13M to $25M)
- Benefit of alternative ground improvement measures ($0M to $2M)
- Benefit from reduced foundation sizing due to refined seismic analysis ($2M to $4M)

Key Schedule Risks (Impacting Construction Completion Milestone):

Threats

- Challenges with movable bridge Installation and Commissioning (2 to 4 months)
- Delays associated with Local Agency permitting and Land Use approvals (1 to 4 months)
- Difficulties with in-river cofferdam construction (1 to 3 months)

Opportunities

- Construction acceleration from contractor input (1 to 3 months)
- Use of full depth precast deck panels to accelerate construction (0 to 2 months)

Level of Project Design — Low | Medium | High

NEPA Phase

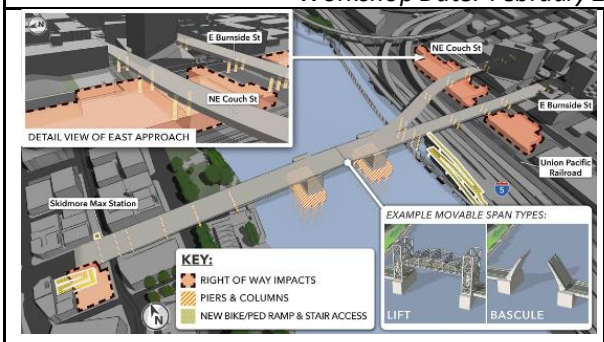
Multnomah County

2020 Cost Risk Assessment (CRA) Process

Earthquake Ready Burnside Bridge (EQRB)

Alt: Replacement Alternative with Couch Extension (No Temp Bridge)

Workshop Date: February 26, 2020



CRA Cost Range

(opinion of probable cost range as of February 2020 Project analysis)

10% Chance cost will be less than: **$899M**

10% Chance cost will be more than: **$1.095B**

80% Chance cost will be in this range

Project Need - Multnomah County is delivering the EQRB Project to provide our community with a reliable Willamette River crossing on the Burnside regional lifeline route after a major earthquake.

Description - The Replacement Alternative with Couch Extension would replace the existing Burnside Bridge with a new movable bridge and a split east approach. In addition to its Burnside Street leg, it also includes an extension to Couch Street over NE 3rd and NE 2nd Avenues. It is at about the same surface height as the current bridge.

Key Assumptions and Findings

- Construction Manager / General Contractor (CM/GC) delivery method
- 4 to 5 years to construct
- Traffic to be detoured to adjacent bridges during construction
- Costs escalated to mid-point of construction
- This alternative provides the greatest benefit to freight and transit due to its smoothing the existing Couch St "S" curve alignment on the east bridgehead.
- This alternative requires many more columns in unstable soil near the river, increasing seismic risks and making it the most expensive alternative studied.

CRA Schedule Range

(opinion of probable cost range as of February 2020 Project analysis)

Construction Start Date: **March 2024**
Construction Completion Date: **August 2029**

Major Project Risks

Key Project Cost Risks (impacting estimated expected value impacts)

Threats

- Fluctuating market conditions due to competitive labor market ($13M to $40M)
- Cost of change orders due to ground improvement ($9M to $31M)
- Cost of change orders due to unforeseen circumstances ($5M to $23M)
- Cost of change orders due to obstructions during shaft construction ($5M to $15M)

Opportunities

- Design innovations from contractor input ($13M to $25M)
- Benefit of alternative ground improvement measures ($0M to $2M)
- Benefit from reduced foundation sizing due to refined seismic analysis ($2M to $4M)

Key Schedule Risks (Impacting Construction Completion Milestone):

Threats

- Challenges with movable bridge Installation and Commissioning (2 to 4 months)
- Delays associated with Local Agency permitting and Land Use approvals (1 to 4 months)
- Difficulties with in-river cofferdam construction (1 to 3 months)

Opportunities

- Construction acceleration from contractor input (1 to 3 months)
- Use of full depth precast deck panels to accelerate construction (0 to 2 months)

Level of Project Design — Low | Medium | High

NEPA Phase

Multnomah County