



600 NE Grand Ave.
Portland, OR 97232-2736

Joint Policy Advisory Committee on Transportation (JPACT) agenda

Thursday, January 17, 2019

7:30 AM

Metro Regional Center, Council chamber

1. **Call To Order, Declaration of a Quorum & Introductions (7:30 AM)**
2. **Public Communication on JPACT Items (7:35 AM)**
3. **Update from the Chair & Committee Members (7:40 AM)**
 - *Chair's Remarks*
 - *2018 Regional Transportation Plan Adoption*
 - *2019 Work Plan*
4. **Consent Agenda**
 - 4.1 Resolution No. 19-4961, For the Purpose of Adding or Amending Existing Projects to the 2018-21 Metropolitan Transportation Improvement Program Involving Eleven Projects Impacting ODOT, Oregon City, and TriMet (JA19-05-JAN)
Attachments: [Draft Resolution 19-4961](#)
[Exhibit A to Resolution 19-4961](#)
[Staff Report to Resolution 19-4961](#)
[Attachment 1 to Staff Report](#)
[Attachment 2 to Staff Report](#)
[COM 18-0193](#)
 - 4.2 Consideration of November 15, 2018 Minutes
Attachments: [November 15, 2018 Minutes](#)
[18-5145](#)
5. **Information/Discussion Items**
 - 5.1 2019 Legislative Update (8:05 AM)
[COM 18-0192](#)

Presenter(s): Randy Tucker, Metro

- 5.2 Climate Smart Findings in 2018 Regional Transportation Plan (8:20 AM) [COM](#)
[18-0190](#)

Presenter(s): Kim Ellis, Metro
Margi Bradway, Metro

Attachments: [Memo: Climate Smart Strategy and the 2018 RTP](#)
[Appendix J: Climate Smart Strategy implementation and monitoring](#)

- 5.3 Emerging Technology Pilot (8:45 AM) [COM](#)
[18-0191](#)

Presenter(s): Eliot Rose, Metro

6. Adjourn (9:00 AM)

Upcoming JPACT Meetings

- *Thursday, February 21 2019*
- *Thursday, March 21, 2019*
- *Thursday, April 18, 2019*

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ការគោរពសិទ្ធិពលរដ្ឋរបស់ ១ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬស្នើសុំទទួលបានការបណ្តឹងរើសអើងសម្រាប់សេវាសេវាសេវា www.oregonmetro.gov/civilrights។
បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃ ថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំស្នើសុំអាចឲ្យគេសម្រួលការបណ្តឹងរបស់លោកអ្នក ។

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600 NE Grand Ave.
 Portland, OR 97232-2736
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DRAFT 2019 JPACT Work Program
As of 1/10/19

Items in italics are tentative

<p><u>January 17, 2019</u></p> <ul style="list-style-type: none"> • Chair’s Remarks: JPACT 2019 Work Plan Overview, 2018 RTP Adoption • Resolution No. 19-4961, For the Purpose of Adding or Amending Existing Projects to the 2018-21 Metropolitan Transportation Improvement Program Involving Eleven Projects Impacting ODOT, Oregon City, and TriMet (JA19-05-JAN) (consent) • 2019 Legislative Update * (Randy Tucker, Metro; 15 min) • Climate Smart Findings in 2018 Regional Transportation Plan (Margi Bradway and Kim Ellis, Metro; 25 min) • Emerging Technology Pilot (Eliot Rose, Metro; 15 min) 	<p><u>February 21, 2019</u></p> <ul style="list-style-type: none"> • <i>RFFA Project Funds Allocation (Margi Bradway/Dan Kaempff, Metro; 20 min)*</i> • <i>MTIP Policy*</i> • <i>Congestion Pricing (ODOT & City of Portland)</i> • <i>Rose Quarter Project (ODOT)</i>
<p><u>March 21, 2019</u></p> <ul style="list-style-type: none"> • <i>RFFA Project Funds Allocation: Recommendation to Metro Council on Policy Framework*</i> • <i>UPWP (first read)*</i> • <i>Central City Transit Analysis</i> • <i>Livable Streets/Performance Based Design Guidance</i> 	<p><u>April 18, 2019</u></p> <ul style="list-style-type: none"> • <i>UPWP: Recommendation to Metro Council*</i> • <i>ODOT 100% Fix-It Leverage List</i> • <i>Jurisdictional Transfer Assessment</i> • <i>Emerging Technology Pilot</i> • <i>TV Highway Corridor Plan</i>
<p><u>May 16, 2019</u></p> <ul style="list-style-type: none"> • <i>T2020 Transportation Regional Investment Measure*</i> • <i>Emergency Transportation Routes Update</i> • <i>Enhanced Transit/STIF Funding For Project Development (with TriMet)</i> 	<p><u>June 20, 2019</u></p> <ul style="list-style-type: none"> • <i>RTO/Safe Routes to Schools</i> • <i>Freight Commodity Study/Planning</i>

<p><u>July 18, 2019</u></p> <ul style="list-style-type: none"> • <i>Mobility Policy Update*</i> • <i>SW Corridor – Marquam Hill Connector (TriMet)</i> • <i>Burnside Bridge (Multnomah County)</i> 	<p><u>August 15, 2019</u></p>
<p><u>September 19, 2019</u></p> <ul style="list-style-type: none"> • <i>Regional Flex Funds</i> 	<p><u>October 17, 2019</u></p> <ul style="list-style-type: none"> • <i>TSMO Strategy</i> • <i>Regional Flexible Funds</i> • <i>SW Corridor: Marquam Connector Update</i>
<p><u>November 21, 2019</u></p> <ul style="list-style-type: none"> • <i>Mobility Update</i> 	<p><u>December 19, 2019</u></p> <ul style="list-style-type: none"> • <i>Regional Flexible Funds: Recommendation to Metro Council</i> • <i>T2020 Transportation Regional Investment Measure Update</i> • <i>Emergency Transportation Routes Update</i>

Parking Lot:

**4.1 Resolution No. 19-4961, For the Purpose of Adding or Amending Existing Projects to the 2018-21 Metropolitan Transportation Improvement Program Involving Eleven Projects Impacting ODOT, Oregon City, and TriMet
(JA19-05-JAN)**

Consent Agenda

Joint Policy Advisory Committee on Transportation
Thursday, January 17, 2018
Metro Regional Center, Council Chamber

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADDING OR) RESOLUTION NO. 19-4961
AMENDING EXISTING PROJECTS TO THE)
2018-21 METROPOLITAN TRANSPORTATION) Introduced by: Chief Operating Officer
IMPROVEMENT PROGRAM INVOLVING) Martha Bennett in concurrence with
ELEVEN PROJECTS IMPACTING ODOT,) Council President Lynn Peterson
OREGON CITY, AND TRIMET (JA19-05-JAN))

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 2018-21 MTIP via Resolution 17-4817 on July 27, 2017; 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, the Metro 2019-21 Regional Flexible Fund Allocation (RFFA) award to Oregon City's Molalla Ave active transportation improvement project qualified to be de-federalized via a fund exchange with TriMet and with no expected federal approvals required is being now removed from the MTIP and will be implemented and monitored outside the MTIP by an Intergovernmental Agreement between Metro and Oregon City; and

WHEREAS, ODOT's OR-8 at River Road Fix-it/Safety improvement project is combining with their OR-224 at Lake/Harmony project which will result in cost savings and allow both projects to be delivered under the same construction contract; and

WHEREAS, ODOT's OR-213 (82nd Ave) at Madison High School project will be combined into a similar project being designed by Portland Public Schools which results in ODOT still contributing \$560,000 of state funds to the project and allows the project to be de-federalized enabling PPS to lead and accelerate delivery during 2019 and results in cost savings enabling \$560,250 of federal funds to be transferred to ODOT's OR-8 River Rd & OR-224 at Lake Rd combined project to resolve a Preliminary Engineering and Construction phase funding shortfall; and

WHEREAS, ODOT's Federal Fiscal Year 2019 Statewide Rail Crossing Program will commit \$300,000 to ODOT's combined OR-8 River Rd & OR224 at Lake Rd project to support needed railroad improvements now part of the project's scope and will be included as part of the amendment to ODOT's OR-8 River Rd & OR-224 at Lake Rd project; and

WHEREAS, ODOT's design of their I-5 from Marine Drive to Fremont Bridge safety improvement project proposed to install variable speed advisory signs on north and southbound I-5 has resulted in higher project costs forcing scope adjustments and project limit reductions to keep the project

within budget, but also realizes construction phase savings to now be used to address a Preliminary Engineering phase funding shortfall; and

WHEREAS, ODOT's review of their I-405 – Fremont (Willamette River) Bridge Fix-it project involving bridge painting has determined they can transfer \$10,000,000 from the project to their Federal Fiscal Year 2019 Major Bridge Maintenance project grouping bucket increasing fund programming to \$20 million which supports efforts to strengthen Region 1 Bridges annually; and

WHEREAS, ODOT's SW Multnomah Blvd Over I-5 Fix-It/safety improvement project proposed to place a structural overlay on the deck, replace or repair leaking joints, and retrofit bridge rails to meet safety standards has seen its overall cost increase by \$656,900 resulting in a decision to transfer funding from a Region 5 canceled project in Key 20540, adjust the scope to their I-84 Fairview to Marine Drive & Tooth Rock Tunnel project to free up additional funds, and commit \$400,000 from the Statewide Bridge Funding project grouping buckets in Keys 20082 and 20083 to cover the funding shortfall; and

WHEREAS, ODOT's OR-99W SB Ramp to I-5 SB (Capitol Highway Interchange) project which will address the top layer of the concrete deck that has required patches where pieces have separated, with a structural concrete overlay also has experienced a significant cost increase to the Preliminary Engineering and Construction phases requiring an additional \$927,494 resulting in the need fund leverage funding from other available bridge and/or interchange improvement projects to address the funding shortfall; and

WHEREAS, ODOT's I-5 Barbur Blvd NB Connection Bridge Fix-It/safety improvement project which involves structure painting, pack rust removal, and rivets/bolts replacement faces a cost increase of \$828,692 impacting the Preliminary Engineering and the Construction phases will draw from available funds from a canceled Region 5 project, and scope adjustments from ODOT's Key 20298, I-84 – Fairview to Marine Drive & Tooth Rock Tunnel project and is being renamed for clarity to be the OR-99W – Barbur Blvd Northbound Connection Bridge project; and

WHEREAS, ODOT's I-84 – Fairview to Marine Drive & Tooth Rock Tunnel Highway/ Preservation project will be down-scoped to include I-84 section paving from Fairview to Marine Drive and include a full signal upgrade at NE 238th while eliminating the Tooth Rock Tunnel and McCord Creek Bridge scope elements releasing committed funding to be use on other projects including ODOT's OR-99W Barbur Blvd Northbound Connection Bridge project to address funding shortfalls; and

WHEREAS, TriMet's FY 2018 Preventative Maintenance Transit Oriented Development (TOD) fund exchange project with Metro programmed in Key 21126 has been identified as an inadvertent duplicate project to their already obligated and awarded TOD fund exchange project in Key 21262 and is now being removed from the MTIP to resolve fund programming duplication which could negatively impact Metro's fiscal constraint finding; and

WHEREAS, all amended projects were evaluated against seven revised MTIP review factors to ensure all requested changes and additions can be accomplished legally through the MTIP amendment process; and

WHEREAS, the MTIP review factors included project eligibility/proof of funding, RTP consistency with the financially constrained element, consistency with RTP goals and strategies, determination of amendment type, inclusion in the Metro transportation regional models, determination of Regional Significance, fiscal constraint verification, and compliance with MPO MTIP federal management responsibilities; and

WHEREAS, the MTIP's financial constraint finding is maintained as all projects proof of funding has been verified; and

WHEREAS, no negative impacts to air conformity will exist as a result of the changes completed through the January 2019 Formal MTIP Amendment; and

WHEREAS, all projects included in the January 2019 Formal MTIP Amendment successfully completed a required 30-day public notification/opportunity to comment period without any significant issues raised; and

WHEREAS, TPAC received their notification and recommended approval on January 11, 2019 and approved the amendment approval recommendation to JPACT; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT on January 17, 2019 to formally amend the 2018-21 MTIP to include the January 2019 Formal Amendment bundle consisting of eleven projects.

ADOPTED by the Metro Council this ____ day of _____ 2019.

Lynn Peterson, Council President

Approved as to Form:

Nathan A.S. Sykes, Acting Metro Attorney

2018-2021 Metropolitan Transportation Improvement Program
Exhibit A to Resolution 19-4961



Proposed January, 2018 Formal Amendment Bundle Amendment Type: FORMAL, JA19-05-JAN Total Number of Projects: 11				
ODOT Key	Lead Agency	Project Name	Description	Required Changes
Project #1 Key 20810	Oregon City	Molalla Ave: Beaver Creek Rd to OR213	Construct bike lanes along the entire Molalla Ave: Beavercreek Rd to Highway 213 with Continuous ADA compliant sidewalks ramps; trees and ped level street lighting on west side of corridor; transit amenities along both sides of the corridor and street furnishings	REMOVED PROJECT: This Metro 2019-21 RFFA federally funded project completed a fund swap for local funds and is now a de-federalized project. No federal approvals are required to deliver and complete the project. As such, the project is not required to be programmed in the MTIP or STIP. Key 20810 is being removed from the MTIP through this amendment.
Project #2 Key 20451	ODOT	OR8 at River Road OR8 at River Rd & OR224 at Lake Rd	Full signal upgrade with illumination and ADA improvements Full signal upgrade with illumination and ADA improvements at the intersection of OR8 and River Rd in the City of Hillsboro. Replace overhead flasher with ground mounted advance flashers at the intersection of OR224 and Lake Rd in Clackamas County.	COMBINED PROJECT: Amendment combines scope and funding from two projects: 20454 and 20507 plus adds \$300k in a new Other phase for railroad improvements. Combining Keys 20454 into 20451, adding funding from 20507 and from the ODOT railroad crossing project grouping bucket will reduce overhead costs and allow for efficiencies in delivery.
Project #3 Key 20454	ODOT	OR224 at Lake/Harmony	Replace overhead flasher with ground mounted advance flashers.	COMBINED/CANCELED PROJECT: Scope and funding totaling \$109,078 is combined onto Key 20451. As a result Key 20454 is left with \$0 funding and is being removed from the MTIP

<p>Project #4 Key 20507</p>	<p>ODOT</p>	<p>OR213 (82nd Ave) at Madison High School</p>	<p>Replace signal; rebuild and restripe existing crosswalk; add crosswalks and close a driveway.</p>	<p>FUND SWAP/DE-FEDERALIZATION: Key 20507 is being de-federalized upon review of the project and similar project in development by Portland Public Schools (PPS). ODOT will contribute \$560,250 state funds to the project (IGA in development). This amendment serves to convert the project into a locally funded and delivered project. PPS's delivery schedule is ahead of ODOT's project. The amendment for Key 20507 also advances ROW, UR and CN all to 2019. A budget shortfall has been identified on project K20451. \$560,250 Enhance funds from this project are being reallocated to K20451.</p>
<p>Project #5 Key 20430</p>	<p>ODOT</p>	<p>I-5: MP 303.27 - MP 308.63</p>	<p>Install variable speed advisory signs on I-5 northbound and southbound from the Fremont Bridge to Marine Drive</p>	<p>COST INCREASE/LIMITS & SCOPE CHANGE: Cost increases have occurred to the Preliminary Engineering phase which are being addressed. Causes include extended design period of 6-months, additional administrative/ management costs, design modifications, and added agency coordination requirements. The Amendment changes the project name to reflect the reduced scope. Project mile points are adjusted to match the engineer's plans and removing the Hayden Island location. The construction phase is reduced by \$314,000 and moved to PE . Finally, the construction phase is being advance from 2020 to 2019.</p>
<p>Project #6 Key 20481</p>	<p>ODOT</p>	<p>I-405: Fremont (Willamette River) Bridge</p>	<p>Paint bridge approaches; other section as funding allows.</p>	<p>COST DECREASE: \$10 million of construction phase funding is being transferred to Key 20077, Major Bridge Maintenance FFY 2019, the Statewide Project Grouping bucket to support strengthening of major bridges in Region 1. OTC approval was required for this action to occur.</p>
<p>Project #7 Key 20484</p>	<p>ODOT</p>	<p>SW Multnomah Blvd over I-5</p>	<p>Place a structural overlay on the deck; replace or repair leaking joints; and retrofit the bridge rails to meet safety standards.</p>	<p>COST INCREASE: PE and construction phase increase in cost by a total of \$967,800 to the project. The shortfalls in both phases are addressed through this amendment.</p>

<p>Project #8 Key 20702</p>	<p>ODOT</p>	<p>OR99W SB Ramp to I-5 SB (Capital Highway Interchange)</p>	<p>In SW Portland on OR99W at SW Capital Highway IC on SB Ramp to I-5, preserve deck with structural overlay</p>	<p>COST INCREASE: Preliminary Engineering and construction phases increase in cost due to use of external consulting for PE while construction phase added minor scope elements including cleaning and painting of the steel bearings plus the replacement of deficient ADA ramps. The project cost also was adjusted for inflation. The total project cost increases from \$408,000 to \$1,335,494.</p>
<p>Project #9 Key 20465</p>	<p>ODOT</p>	<p>I-5: Barbur Blvd NB connection bridge OR99W: Barbur Boulevard Northbound Connection Bridge</p>	<p>Paint structure; remove pack rust. Replace rivets and bolts.</p>	<p>COST INCREASE: Preliminary Engineering and construction phases increase in cost due to use of external consulting for PE while the construction phase has increased due to bid prices, plus the costs of the containment for paint removal/paint application and the disposal of hazardous waste were not included in the original project estimate. The project name is being updated to reflect that the mile points are actually for OR99W, and not I-5. There are no changes to the project location or scope. The total project cost increase is \$828,692.</p>
<p>Project #10 Key 20298</p>	<p>ODOT</p>	<p>I-84: Fairview - Marine Drive & Tooth Rock Tunnel I-84: Fairview - Marine Drive</p>	<p>Repave a section of I-84 between Fairview and Marine Dr repaves the Tooth Rock tunnel and installs a full signal upgrade (including ADA) at NE238th Ave. Deck overlay and repair joints on the McCord Creek Bridge (#02193B).</p>	<p>SCOPE CHANGE: A more extensive project for Tooth Rock Tunnel is being scoped for the 21-24 STIP cycle. Through this amendment, the Tooth Rock Tunnel paving work from this project's scope to be re-added in the 21-24 STIP. Similarly, the McCord Creek Bridge is being considered for the 21-24 STIP. As such, this scope element also is removed Key 20298. The project name and description are updated as a result. The revised project scope results in a cost decrease to the project.</p>
<p>Project #11 Key 21126</p>	<p>TriMet</p>	<p>FY18 TriMet Prevent Maint (TOD Fund Exchange)</p>	<p>Enables the annual Transit Oriented Development (TOD) fund exchange to occur</p>	<p>CANCELED PROJECT: Key 21126 is a duplicate entry in the MTIP to TriMet's Key 21262 which already obligated its funds. Key 21126 is being removed from the MTIP as a corrective action.</p>

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #1 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20810	70885	Oregon City	Molalla Ave. Beaver Creek Rd - Hwy 213					Active Transportation	\$ 7,985,379
Project Description:		Bike lanes along the entire Molalla Ave: Beaver Creek Rd to Highway 213. Continuous ADA compliant sidewalks, ramps; trees and ped level street lighting on west side of corridor; transit amenities along both sides of the corridor and street furnishings							
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
TriMet GF	Local	Local	2019		\$ 1,257,466				\$ 1,257,466
Local	Local	Local	2019		\$ 143,923				\$ 143,923
TriMet GF	Local	Local	2019			\$ 467,514			\$ 467,514
Local	Local	Local	2019			\$ 53,509			\$ 53,509
TriMet GF	Local	Local	2020					\$ 2,075,652	\$ 2,075,652
Local	Local	Local	2020					\$ 3,987,315	\$ 3,987,315
Total:			\$ -	\$ 1,401,389	\$ 521,023	\$ -	\$ 6,062,967	\$ 7,985,379	
Notes:	<p>1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.</p> <p>2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".</p> <p>3. TriMet GF = TriMet local General Funds. .</p> <p>4. Local = General local funds committed by the lead agency in support of the required local match to the federal funds.</p>								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #1 PROPOSED AMENDED CHANGES

ODOT Key	MTIP ID	Lead Agency	Project Name	Project Type	Project Cost
20810	70885	Oregon City	Molalla Ave. Beaver Creek Rd - Hwy 213	Active Transportation	\$ 7,985,379
Project Description:			Bike lanes along the entire Molalla Ave. from Hwy 213 to Hwy 213. Continuous ADA compliant sidewalks, ramps; trees and pedestrian level street lighting on west side of the corridor and street furnishings along both sides of the corridor and street furnishings		

Project is being removed from the MTIP

See Amendment Summary below for details

Fund Type Code	Fund Code	Type	Year	Plan	Right of Way	Construction	Other (TSMO/ITS)	Total	
TriMet GF	Local	Local	2019		\$ 1,257,466			\$ 1,257,466	
Local	Local	Local	2019		\$ 143,923			\$ 143,923	
TriMet GF	Local	Local	2019			\$ 467,514		\$ 467,514	
Local	Local	Local	2019			\$ 53,509		\$ 53,509	
TriMet GF	Local	Local	2020				\$ 2,075,652	\$ 2,075,652	
Local	Local	Local	2020				\$ 3,987,315	\$ 3,987,315	
Total:					\$ -	\$ 1,401,389	\$ 521,023	\$ -	\$ 6,062,967

- Notes:
1. **Red Font** = Funding reductions made to the project phase. **Blue font** = Additions/changes made to the project as part of the amendment.
 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".
 3. STP>200K = Federal Surface Transportation Program funds allocated to Metro and must be applied in urban areas with a population greater than 200,000.
 4. Local = General local funds committed by the lead agency in support of the required local match to the federal funds.

Amendment Summary

Key 20810 was initially awarded \$3,800,632 of federal funds through the 2019-21 Metro Regional Flexible Fund Allocation (RFFA). Subsequent to this award, a project review indicated Key 20810 would be a good candidate for de-federalization. No federal approvals appear required allowing Oregon City to complete the project separately from the regular federal delivery process. Applicable pedestrian and bicycle scope improvements have been incorporated into the Metro Pedestrian and Bicycle modeling networks through the RFFA call.

From an air quality viewpoint, the project is exempt under 40 CFR 93.126, Table 2, "Air Quality - Bicycle and pedestrian facilities category". The project is also considered a non-capacity improvement. Local funds from TriMet were used to swap out the federal funds. TriMet will use the federal funds in support of their federal project needs.

By replacing the federal funds with local funds, Oregon City can move forward to deliver the project faster than if the project remained federalized. Without federal approvals required to deliver the project, funded by only local funds, and as an exempt project, Key 20810 is not necessary to remain in the MTIP. The project is being removed from the MTIP through this amendment.

Metro has completed a local Intergovernmental Agreement (IGA) with Oregon City and will monitor the project delivery status separate from the MTIP requirements. Local funding as shown in the funding table remains committed to deliver the project.

Exhibit A to Resolution 19-4961

2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
 Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects



PROJECT #2 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20451	70996	ODOT	OR8 at River Road					Operations	\$ 1,182,643
Project Description:		Full signal upgrade with illumination and ADA improvements							
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
State STBG-FLX	Z240	Federal	2019		\$ 253,826				\$ 253,826
State	Match	State	2019		\$ 29,052				\$ 29,052
State STBG-FLX	Z240	Federal	2020			\$ 82,146			\$ 82,146
State	Match	State	2020			\$ 9,402			\$ 9,402
State STBG-FLX	Z240	Federal	2021					\$ 725,213	\$ 725,213
State	Match	Local	2021					\$ 83,004	\$ 83,004
Total:				\$ -	\$ 282,878	\$ 91,548	\$ -	\$ 808,217	\$ 1,182,643
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions/changes made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. State STBG-FLX = Federal Surface Transportation Block Grant funds allocated to ODOT for use on eligible highway improvement projects. 4. State = General state funds committed by ODOT in support of the required local match to the federal funds.								

Amendment Summary
 Proposed changes are stated on the next page

PROJECT #2 PROPOSED AMENDED CHANGES

ODOT Key	MTIP ID	Lead Agency	Project Name	Project Type	Project Cost
20451	70996	ODOT	OR8 at River Road OR8 at River Rd & OR224 at Lake Rd	Operations	\$ 2,151,970
Project Description:			Full signal upgrade with illumination and ADA improvements Full signal upgrade with illumination and ADA improvements at the intersection of OR8 and River Rd in the City of Hillsboro. Replace overhead flasher with ground mounted advance flashers at the intersection of OR224 and Lake Rd in Clackamas County.		

Amended MTIP Fund Programming by Phase

Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Railroad Improvements)	Construction	Total
ADVCON	ACPO	Federal	2019		\$ 143,907				\$ 143,907
State	Match	State	2019		\$ 16,471				\$ 16,471
NHPP-FAST	Z001	Federal	2019		\$ 446,745				\$ 446,745
State	Match	State	2019		\$ 51,132				\$ 51,132
Rail Hwy Cross Haz	ZS40	Federal	2019				\$ 270,000		\$ 270,000
State	Match	State	2019				\$ 30,000		\$ 30,000
State STBG-FLX	Z240	Federal	2020			\$ 82,146			\$ 82,146
State	Match	State	2020			\$ 9,402			\$ 9,402
ADVCON	ACPO	Federal	2021					\$ 49,576	\$ 49,576
State	Match	State	2021					\$ 5,674	\$ 5,674
NHPP-FAST	Z001	Federal	2021					\$ 939,399	\$ 939,399
State	Match	State	2021					\$ 107,518	\$ 107,518
Total:				\$ -	\$ 658,255	\$ 91,548	\$ 300,000	\$ 1,102,167	\$ 2,151,970

Notes:	<p>1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.</p> <p>2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".</p> <p>3. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known.</p> <p>4. NHPP-FAST = Federal National Highway Performance Program Funds allocated to ODOT from the FAST Act for various highway improvement needs.</p> <p>5. Rail Hwy Cross Haz = Federal Railroad Crossing Hazards funding allocated to ODOT supporting railroad crossing safety improvements.</p> <p>6. State STBG-FLX = Federal Surface Transportation Block Grant funds allocated to ODOT for use on eligible highway improvement projects.</p> <p>7. State = General state funds committed by ODOT in support of the required local match to the federal funds.</p>
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Amendment Summary

The decision to combine scope and funding from Keys 20454 and 20507 originates from a review that determined the three projects can be delivered under a single contract as similarities in scope activities exist among all three in the project limits. The combining action is considered a fund leveraging effort to save on costs, hold down cost increased, and provide increased efficiencies in project delivery.

The scope and funding from Keys 20454 and 20507 are being combined into Key 20451 as shown on the previous page. The changes to the project scope through the combining effort are significant enough to require a formal amendment to complete the combining effort. \$300, from ODOT's Key 20352, Statewide Rail Crossing Program FFY19, is being shifted to Key 20451. The \$300k is now shown in the Other phase in 2019 supporting required railroad crossing improvements. The project limits are adjusted to include project site locations from Key 20454 on OR224 from MP 2.4 to MP 2.5.

The project name and description are also updated based on the adjusted scope and project limits.

A total of \$109,078 is being transferred from Key 20454 and \$560,250 originates from Key 20507. Note: Adjustments to Keys 20454 and 20507 are included in this amendment bundle and follow as the next two projects in the notification table. The \$300k from for railroad improvements is from the ODOT statewide project grouping funding pot and is considered outside the MPO boundary area. Funding changes to Key 20352 are not required to be included in this amendment bundle. ODOT will make the required funding adjustments directly to the STIP.

Exhibit A to Resolution 19-4961

2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
 Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects



PROJECT #3 EXISTING MTIP PROGRAMMING										
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost	
20454	70997	ODOT	OR224 at Lake/Harmony					Highway	\$ 109,078	
Project Description:			Replace overhead flasher with ground mounted advance flashers.							
Existing MTIP Project Fund Programming by Phase										
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total	
State STBG-FLX	Z240	Federal	2020		\$ 49,466				\$ 49,466	
State	Match	State	2020		\$ 5,662				\$ 5,662	
State STBG-FLX	Z240	Federal	2021					\$ 48,409	\$ 48,409	
State	Match	State	2021					\$ 5,541	\$ 5,541	
Total:				\$ -	\$ 55,128	\$ -	\$ -	\$ 53,950	\$ 109,078	
PROJECT #3 PROPOSED AMENDED CHANGES										
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost	
20454	70997	ODOT	OR224 at Lake/Harmony					Highway	\$ -	
Project Description:			Replace overhead flasher with ground mounted advance flashers.							
Amended MTIP Fund Programming by Phase										
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total	
State STBG-FLX	Z240	Federal	2020		\$ -				\$ -	
State	Match	State	2020		\$ -				\$ -	
State STBG-FLX	Z240	Federal	2021					\$ -	\$ -	
State	Match	State	2021					\$ -	\$ -	
Total:				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions/changes made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. State STBG-FLX = Federal Surface Transportation Block Grant funds allocated to ODOT for use on eligible highway improvement projects. 4. State = General state funds committed by ODOT normally in support of the required match to the federal funds.									

Amendment Summary

Key 20454's scope and funding is combined into Key 20451 to enhance project delivery efficiencies. See Amendment Summary details for Key 20451. As a result Key 20454 is zeroed programmed and will be removed from the MTIP.

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #4 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20507	70981	ODOT	OR213 (82nd Ave) at Madison High School					Highway	\$ 1,120,502
Project Description:			Replace signal; rebuild and restripe existing crosswalk; add crosswalks and close a driveway.						
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
State STBG-FLX	Z240	Federal	2019		\$ 192,920				\$ 192,920
Local	Match	Local	2019		\$ 22,081				\$ 22,081
State STBG-FLX	Z240	Federal	2020			\$ 134,146			\$ 134,146
Local	Match	Local	2020			\$ 15,354			\$ 15,354
State STBG-FLX	Z240	Federal	2020				\$ 9,870		\$ 9,870
Local	Match	Local	2020				\$ 1,130		\$ 1,130
State STBG-FLX	Z240	Federal	2021					\$ 668,489	\$ 668,489
Local	Match	Local	2021					\$ 76,512	\$ 76,512
Total:				\$ -	\$ 215,001	\$ 149,500	\$ 11,000	\$ 745,001	\$ 1,120,502
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. State STP-FLX = Federal allocated Surface Transportation Program funding which ODOT manages/ 4. Local = General local funds committed by the lead agency in support of the required local match to the federal funds.								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #4 PROPOSED AMENDED CHANGES

ODOT Key	MTIP ID	Lead Agency	Project Name	Project Type	Project Cost
20507	70981	ODOT	OR213 (82nd Ave) at Madison High School	Highway	\$ 1,120,500

Project Description: Replace signal; rebuild and restripe existing crosswalk; add crosswalks and close a driveway.

Amended MTIP Fund Programming by Phase

Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
Other	OTH0	Local	2019		\$ 215,000				\$ 215,000
Other	OTH0	Local	2019			\$ 149,500			\$ 149,500
Other	OTH0	Local	2019				\$ 11,000		\$ 11,000
Other	OTH0	Local	2019					\$ 184,750	\$ 184,750
State	S010	State	2019					\$ 560,250	\$ 560,250
Total:				\$ -	\$ 215,000	\$ 149,500	\$ 11,000	\$ 745,000	\$ 1,120,500

- Notes:
1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.
 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".
 3. State = General state funds that in this case are added for the construction phase in place of the federal funds that are being transferred to Key 20451.
 4. Other = Local funds committed by Portland Public Schools in support of the project

Amendment Summary

Key 20507 is being de-federalized upon review of the project and similar project in development by Portland Public Schools (PPS). PPS is currently developing their own Madison High School project, and their scope is identical to that of the ODOT project. PPS is already partway through design and their delivery schedule is ahead of the ODOT project. The project review supports PPS to continue delivering the project.

ODOT will contribute \$560,250 state funds to the project (IGA in development). This amendment serves to convert the project into a locally funded and delivered project with a \$560,250 contribution from ODOT, as approved by Jeff Flowers.

PPS's delivery schedule is ahead of ODOT's project. The amendment for Key 20507 also advances ROW, UR and CN all to 2019.

A budget shortfall has been identified on project K20451. \$560,250 Enhance funds from this project are being reallocated to K20451. This project will remain programmed in the MTIP and STIP.

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #5 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20430	70972	ODOT	I-5: MP 303.27 - MP 308.63					Bridge	\$ 7,799,500
Project Description:			Install variable speed advisory signs on I-5 northbound and southbound from the Fremont Bridge to Marine Drive						
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
HISP	ZS30	Federal	2017		\$ 1,386,500				\$ 1,386,500
HSIP	ZS30	Federal	2020					\$ 6,413,000	\$ 6,413,000
									\$ -
Total:			\$ -	\$ 1,386,500	\$ -	\$ -	\$ 6,413,000	\$ 7,799,500	
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. HSIP = 100% federal - no match required Highway Safety Improvement Program funding allocated to ODOT supporting needed safety improvements								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #5 PROPOSED AMENDED CHANGES

ODOT Key	MTIP ID	Lead Agency	Project Name				Project Type	Project Cost	
20430	70972	ODOT	I-5: MP 303.27 – MP 308.63 I-5: Marine Dr - Fremont Bridge				Bridge	\$ 7,799,500	
Project Description:		Install variable speed advisory signs on I-5 northbound and southbound from the Fremont Bridge to Marine Drive							
Amended MTIP Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
HSIP	ZS30	Federal	2017		\$ 1,386,500				\$ 1,386,500
ADVCON	ACPO	Federal	2017		\$ 314,000				\$ 314,000
ADVCON	ACPO	Federal	2019					\$ 6,099,000	\$ 6,099,000
Total:				\$ -	\$ 1,700,500	\$ -	\$ -	\$ 6,099,000	\$ 7,799,500
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. HSIP = 100% federal - no match required Highway Safety Improvement Program funding allocated to ODOT supporting needed safety improvements 5. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known.								

Amendment Summary

The amendment shifts \$314,000 of construction phase funding to cover a PE funding shortfall. The Preliminary Engineering cost increase are due to a combination of the following factors:

- (1) The design schedule was required to be extended six months to address various project issues.
- (2) Additional efforts in traffic control plans that involved additional meetings with management and the mobility advisory committee.
- (3) Design modifications from Maintenance with security fencing
- (4) Required coordination with Washington Department of Transportation related to traffic control devices extending into the State of Washington.

The limits and scope change address the need to drop its northernmost ITS site (Hayden Island) in order to stay within overall budget. Removing this site will allow sufficient funding for the design and construction of all remaining sites. The project limits change from 303.27 -308.63 (net of 5.36) to 302.80 to 307.30 (net of 4.50) which results in an over limits change of 0.86 which is greater than the 0.25 threshold for limit changes and triggers the formal amendment.

The shift of construction phase funding is allowable as the update estimate has been reduced. The net total cost for the project remains unchanged at \$7,799,500.

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #6 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20481	70973	ODOT	I-405: Fremont (Willamette River) Bridge					Bridge	\$ 27,794,616
Project Description:			Paint bridge approaches; other section as funding allows.						
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
NHPP-FAST	Z001	Federal	2019		\$ 843,783				\$ 843,783
State	Match	State	2019		\$ 96,575				\$ 96,575
NHPP-FAST	Z001	Federal	2021					\$ 24,096,326	\$ 24,096,326
State	Match	State	2021					\$ 2,757,932	\$ 2,757,932
									\$ -
Total:				\$ -	\$ 940,358	\$ -	\$ -	\$ 26,854,258	\$ 27,794,616
Notes:	<p>1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.</p> <p>2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".</p> <p>3. NHPP-FAST = Federal National Highway Performance Program Funds allocated to ODOT from the FAST Act for various highway improvement needs.</p> <p>4. State = General state funds committed by ODOT normally in support of the required match to the federal funds.</p>								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #6 PROPOSED AMENDED CHANGES

ODOT Key	MTIP ID	Lead Agency	Project Name				Project Type	Project Cost	
20481	70973	ODOT	I-405: Fremont (Willamette River) Bridge				Bridge	\$ 17,794,616	
Project Description:			Paint bridge approaches; other section as funding allows.						
Amended MTIP Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
NHPP-FAST	Z001	Federal	2019		\$ 843,783				\$ 843,783
State	Match	State	2019		\$ 96,575				\$ 96,575
NHPP-FAST	Z001	Federal	2019					\$ 15,123,326	\$ 15,123,326
State	Match	State	2019					\$ 1,730,932	\$ 1,730,932
									\$ -
Total:			\$ -	\$ 940,358	\$ -	\$ -	\$ 16,854,258	\$ 17,794,616	
Notes:	<ol style="list-style-type: none"> 1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. NHPP-FAST = Federal National Highway Performance Program Funds allocated to ODOT from the FAST Act for various highway improvement needs. 4. State = General state funds committed by ODOT normally in support of the required match to the federal funds. 								

Amendment Summary

This amendment transfers \$10,000,000 from Key 20481 to Key 20077 to support Major Bridge Maintenance FFY 2019 program.

In 1990, the State of Oregon established a major bridge maintenance (MBM) program, to specifically address major and emergency bridge repairs that were not selected in the STIP or other funding sources. This type of work is generally determined to be of high enough priority that waiting for the STIP or other funding source is not an acceptable solution.

With OTC approval, the programming updates for MBM can be used to address safety, preservation, and strengthening needs for bridges statewide. The additional \$10 million is required to support the funding for strengthening identified bridges. The strengthening of these bridges will be done so that there is adequate load capacity for the vehicles that are using the bridges.

Three major bridges in Portland are undergoing load ratings and advance analysis which include: (1) Willamette River, Interstate 5 (Marquam), (2) Willamette River, U.S. 30 Bypass (St. Johns), and (3) Willamette River, Oregon 99 West (Steel)

Key 20077 is ODOT's statewide project grouping bucket supporting the FFY 2019 Major Bridge Maintenance program. Key 20077 is programmed outside of the MPO boundary area and not programmed in the MTIP. ODOT will provide the required updates to Key 20077 through the STIP.

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #7 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20484	70976	ODOT	SW Multnomah Blvd over I-5					Bridge	\$ 1,571,000
Project Description:		Place a structural overlay on the deck; replace or repair leaking joints; and retrofit the bridge rails to meet safety standards.							
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
NHPP-FAST	Z001	Federal	2017		\$ 191,125				\$ 191,125
State	Match	State	2017		\$ 21,875				\$ 21,875
NHPP-FAST	Z001	Federal	2020					\$ 1,218,533	\$ 1,218,533
State	Match	State	2020					\$ 139,467	\$ 139,467
									\$ -
Total:				\$ -	\$ 213,000	\$ -	\$ -	\$ 1,358,000	\$ 1,571,000
Notes:	<p>1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.</p> <p>2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".</p> <p>3. NHPP-FAST = Federal National Highway Performance Program Funds allocated to ODOT from the FAST Act for various highway improvement needs.</p> <p>4. State = General state funds committed by ODOT normally in support of the required match to the federal funds.</p>								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #7 PROPOSED AMENDED CHANGES

ODOT Key	MTIP ID	Lead Agency	Project Name	Project Type	Project Cost
20484	70976	ODOT	SW Multnomah Blvd over I-5	Bridge	\$ 2,538,800
Project Description:			Place a structural overlay on the deck; replace or repair leaking joints; and retrofit the bridge rails to meet safety standards.		

Amended MTIP Fund Programming by Phase

Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
Redistribution	ZS30	Federal	2017		\$ 191,125				\$ 191,125
State	Match	State	2017		\$ 21,875				\$ 21,875
ADVCON	ACPO	Federal	2017		\$ 278,971				\$ 278,971
State	Match	State	2017		\$ 31,929				\$ 31,929
ADVCON	ACPO	Federal	2020					\$ 1,807,970	\$ 1,807,970
State	Match	State	2020					\$ 206,930	\$ 206,930
Total:				\$ -	\$ 523,900	\$ -	\$ -	\$ 2,014,900	\$ 2,538,800

Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.
	2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".
	3. Redistribution = Annual federal funds (similar to Surface Transportation Block Grant STBG) redistributed from FHWA back to the states. These are unobligated funds from other states that failed to meet their annual obligation targets. States that do meet their obligation targets receive a portion as a bonus for the year. These federal funds are referred to as "Redistribution funds" and programmed with this nomenclature/
	5. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known.
	6. State = General state funds committed by ODOT normally in support of the required match to the federal funds.

Amendment Summary

Trough this amendment, PE increases by \$310,900 and construction phase by \$656,900. The cost increase are primarily due to the PE phase changing from an internal driven effort to an external consultant led process. The construction phase increase results from having to include overpass protective screening and moving the delivery date to 2020.

The additional funds will be sourced from several areas which include: (1) The cancellation of K20540 (a Region 5 bridge project). (2) The removal of bridge scope/funding from K20298. And, (3) \$400K from Statewide Bridge funding buckets K20082/K20083.

The cost increase is \$967,800 which equals a 61.6% increase to the project resulting in the need for the formal amendment.

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #8 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20702	71016	ODOT	OR99W SB Ramp to I-5 SB (Capitol Highway Interchange)					Bridge	\$ 408,000
Project Description:			In SW Portland on OR99W at SW Capitol Highway IC on SB Ramp to I-5 preserve deck with structural overlay						
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
ADVCON	ACPO	Federal	2019		\$ 35,892				\$ 35,892
State	Match	State	2019		\$ 4,108				\$ 4,108
ADVCON	ACPO	Federal	2020					\$ 330,206	\$ 330,206
State	Match	State	2020					\$ 37,794	\$ 37,794
									\$ -
			Total:	\$ -	\$ 40,000	\$ -	\$ -	\$ 368,000	\$ 408,000
Notes:	<p>1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.</p> <p>2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".</p> <p>3. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known.</p> <p>4. State = General state funds committed by ODOT normally in support of the required match to the federal funds.</p>								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #8 PROPOSED AMENDED CHANGES

ODOT Key	MTIP ID	Lead Agency	Project Name				Project Type	Project Cost	
20702	71016	ODOT	OR99W SB Ramp to I-5 SB (Capitol Highway Interchange)				Bridge	\$ 1,335,494	
Project Description:		In SW Portland on OR99W at SW Capitol Highway IC on SB Ramp to I-5 preserve deck with structural overlay							
Amended MTIP Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
ADVCON	ACPO	Federal	2019		\$ 311,812				\$ 311,812
State	Match	State	2019		\$ 35,688				\$ 35,688
ADVCON	ACPO	Federal	2020					\$ 886,527	\$ 886,527
State	Match	State	2020					\$ 101,467	\$ 101,467
									\$ -
Total:			\$ -	\$ 347,500	\$ -	\$ -	\$ 987,994	\$ 1,335,494	
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known. 4. State = General state funds committed by ODOT normally in support of the required match to the federal funds.								

Amendment Summary

The amendment address a funding shortfall in the PE and construction phases. The estimate for preliminary engineering was based on the design being done internally, and did not fully account for roadway, traffic control, and project management costs. The project now will be designed by external consulting sources increasing the engineering costs.

The Construction costs have increased to account for the addition of the cleaning and painting of the steel bearings, replacement of deficient ADA ramps, and for inflation.

The summary of cost increases to the phases are as follows: PE increases by \$307,500 with construction increasing by \$619,994. The total project cost increases from \$408,00 to \$1,334,494

Funds are being sourced from a combination of the cancellation of K20540 (a Region 5 bridge project), and the removal of bridge scope/funding from ODOT's Key K20298, I-84: Fairview - Marine Drive and Tooth Rock Tunnel (also part of this amendment bundle).

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #9 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20465	70998	ODOT	I-5: Barbur Blvd NB connection bridge					Bridge	\$ 1,669,975
Project Description:			Paint structure; remove pack rust. Replace rivets and bolts						
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
NHPP-FAST	Z001	Federal	2019		\$ 122,033				\$ 122,033
State	Match	State	2019		\$ 13,967				\$ 13,967
NHPP-FAST	Z001	Federal	2020					\$ 1,376,436	\$ 1,376,436
State	Match	State	2020					\$ 157,539	\$ 157,539
									\$ -
Total:				\$ -	\$ 136,000	\$ -	\$ -	\$ 1,533,975	\$ 1,669,975
Notes:	<p>1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.</p> <p>2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".</p> <p>3. NHPP-FAST = Federal National Highway Performance Program Funds allocated to ODOT from the FAST Act for various highway improvement needs.</p> <p>4. State = General state funds committed by ODOT normally in support of the required match to the federal funds.</p>								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #9 PROPOSED AMENDED CHANGES									
ODOT Key	MTIP ID	Lead Agency	Project Name				Project Type	Project Cost	
20465	70998	ODOT	I-5: Barbur Blvd NB Connection Bridge OR99W: Barbur Boulevard Northbound Connection Bridge				Bridge	\$ 2,498,667	
Project Description:			Paint structure; remove pack rust. Replace rivets and bolts						
Amended MTIP Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
ADVCON	ACPO	Federal	2019		\$ 308,420				\$ 308,420
State	Match	State	2019		\$ 35,300				\$ 35,300
ADVCON	ACPO	Federal	2020					\$ 1,933,634	\$ 1,933,634
State	Match	State	2020					\$ 221,313	\$ 221,313
Total:				\$ -	\$ 343,720	\$ -	\$ -	\$ 2,154,947	\$ 2,498,667
Notes:	<p>1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment.</p> <p>2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated".</p> <p>3. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known.</p> <p>4. State = General state funds committed by ODOT normally in support of the required match to the federal funds.</p>								

Amendment Summary

The amendment addresses a PE and construction phase funding shortfall. The initial estimate for preliminary engineering was based on the entire design being done internally. The design of the paint portion of the project will be done by ODOT's Bridge Preservation Unit. The remainder of the project will be designed by a consultant. As a result, the engineering costs have increased.

Construction costs have increased due to bid prices that are higher than were accounted for when the project was initially programmed. Additionally, the costs of the containment for paint removal/paint application and the disposal of hazardous waste were not included in the original project estimate.

The project name is being updated to reflect that the mile points are actually for OR99W, and not I-5. There are no changes to the project location or scope. The cost increase to EP is \$207,720 while the construction phase increases by \$620,972. The total project cost increase is \$828,692.

The source of the additional funding originates from a combination of the canceled project Key 20540 (a Region 5 bridge project), and the removal of bridge scope/funding from Key 20298, I-84: Fairview - Marine Drive and Tooth Rock Tunnel (also part of this amendment bundle).

Exhibit A to Resolution 19-4961

**2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects**



PROJECT #10 EXISTING MTIP PROGRAMMING									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20298	70939	ODOT	I-84: Fairview - Marine Drive & Tooth Rock Tunnel					Preservation	\$ 5,792,148
Project Description:			Repave a section of I-84 between Fairview and Marine Dr repaves the Tooth Rock tunnel and installs a full signal upgrade (including ADA) at NE238th Ave. Deck overlay and repair joints on the McCord Creek Bridge (#02193B).						
Existing MTIP Project Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total
NHPP-FAST	Z001	Federal	2019		\$ 370,660				\$ 370,660
State	Match	State	2019		\$ 31,270				\$ 31,270
ADVCON	ACPO	Federal	2019		\$ 322,770				\$ 322,770
State	Match	State	2019		\$ 27,230				\$ 27,230
NHPP-FAST	Z001	Federal	2020			\$ 2,294			\$ 2,294
State	Match	State	2020			\$ 194			\$ 194
NHPP-FAST	Z001	Federal	2021					\$ 3,937,110	\$ 3,937,110
State	Match	State	2021					\$ 450,620	\$ 450,620
ADVCON	ACPO	Federal	2021					\$ 599,430	\$ 599,430
State	Match	State	2021					\$ 50,570	\$ 50,570
Total:			\$ -	\$ 751,930	\$ 2,488	\$ -	\$ 5,037,730	\$ 5,792,148	
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. NHPP-FAST = Federal National Highway Performance Program Funds allocated to ODOT from the FAST Act for various highway improvement needs. 4. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known. 5. State = General state funds committed by ODOT normally in support of the required match to the federal funds.								

Amendment Summary
Proposed changes are stated on the next page

PROJECT #10 PROPOSED AMENDED CHANGES									
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost
20298	70939	ODOT	I-84: Fairview - Marine Drive & Tooth Rock Tunnel I-84: Fairview - Marine Drive					Preservation	\$ 4,792,148
Project Description:			Repave a section of I-84 between Fairview and Marine Dr repaves the Tooth Rock tunnel and installs a full signal upgrade (including ADA) at NE238th Ave. Deck overlay and repair joints on the McCord Creek Bridge (#02193B). Repave a section of I-84 between Fairview and Marine Dr and install a full signal upgrade (including ADA) at NE 238th Ave.						
Amended MTIP Fund Programming by Phase									
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Other Utility Relocation)	Construction	Total
NHPP-FAST	Z001	Federal	2019		\$ 263,703				\$ 263,703
State	Match	State	2019		\$ 22,247				\$ 22,247
NHPP	M001	Federal	2019		\$ 106,957				\$ 106,957
State	Match	State	2019		\$ 9,023				\$ 9,023
NHPP-FAST	Z001	Federal	2020			\$ 2,294			\$ 2,294
State	Match	State	2020			\$ 194			\$ 194
NHPP-FAST	Z001	Federal	2021					\$ 3,778,971	\$ 3,778,971
State	Match	State	2021					\$ 318,807	\$ 318,807
NHPP	M001	Federal	2021					\$ 267,394	\$ 267,394
State	Match	State	2021					\$ 22,558	\$ 22,558
Total:			\$ -	\$ 401,930	\$ 2,488	\$ -	\$ 4,387,730	\$ 4,792,148	
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions/changes made to the project as part of the amendment. 2. Shaded rows (funding in years before 2018): Funding in year prior to 2018 are considered prior obligated years. These funding years are outside the existing active years of the 2018-2021 MTIP. In the MTIP, the funding is totaled and listed as "Prior Obligated". 3. NHPP-FAST = Federal National Highway Performance Program Funds allocated to ODOT from the FAST Act for various highway improvement needs. 4. NHPP = Federal National Highway Performance Program (other than FAST ACT) allocated to ODOT for highway system performance improvements 5. ADVCON = A federal fund code placeholder termed "Advance Construction". Use when Obligation Authority limitations or federal fund programming liquidity exists. Requires ODOT to use State funds to initially cover the phase's costs until the federal fund is known. 6. State = General state funds committed by ODOT normally in support of the required match to the federal funds.								

Amendment Summary

A more extensive project for Tooth Rock Tunnel is being scoped for the 21-24 STIP cycle. Therefore, the Tooth Rock Tunnel paving work has been removed from this project's scope and it will be completed in the 2021-2024 STIP.

Similarly, the McCord Creek Bridge is being considered for the 21-24 STIP and it is the top priority bridge project for Region 1. ODOT is removing the McCord Creek Bridge work from this project's scope as well.

The \$1,000,000 HB2017 Bridge Seismic funds associated with the McCord Creek Bridge scope is being reallocated to keys 20465, 20484, and 20702.

As a result of the scope changes, the project name and description removes the "Tooth Rock Tunnel" from both. The PE phase decreases from \$751,930 to \$401,930 and the construction phase decreases from \$5,037,730 to \$4,387,730. The net change decreases the total project cost by \$1,000,000, Delivery years remain unchanged.

Exhibit A to Resolution 19-4961

2018-2021 Metropolitan Transportation Improvement Program Chapter 5 Tables Amendment
 Action: Amend the MTIP to increase or adjust required funding and scope, or add new projects



PROJECT #11 EXISTING MTIP PROGRAMMING										
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost	
21126	71020	TriMet	FY18 TriMet Prevent Maint (TOD) Fund Exchange)					Transit	\$ 3,461,176	
Project Description:			Enables the annual Transit Oriented Development (TOD) fund exchange to occur							
Existing MTIP Project Fund Programming by Phase										
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other (Transit)	Total	
STP>200K	Z230	Federal	2019					\$ 3,105,713	\$ 3,105,713	
Local	Match	Local	2019					\$ 355,463	\$ 355,463	
Total:			\$ -	\$ -	\$ -	\$ -	\$ 3,461,176	\$ 3,461,176		

PROJECT #11 PROPOSED AMENDED CHANGES										
ODOT Key	MTIP ID	Lead Agency	Project Name					Project Type	Project Cost	
21126	71020	TriMet	FY18 TriMet Prevent Maint (TOD) Fund Exchange)					Transit	\$ -	
Project Description:			Enables the annual Transit Oriented Development (TOD) fund exchange to occur							
Amended MTIP Fund Programming by Phase										
Fund Type Code	Fund Code	Type	Year	Planning	Preliminary Engineering	Right of Way	Construction	Other (Transit)	Total	
STP>200K	FF90	Federal	2020					\$ -	\$ -	
Local	Match	Local	2020					\$ -	\$ -	
Total:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Notes:	1. Red Font = Funding reductions made to the project phase. Blue font = Additions/changes made to the project as part of the amendment. 2. STP>200K = Surface Transportation Program funds allocated to Metro for use in areas with a population of at least 200,000 people 3. Local = General local funds committed by the lead agency in support of the required local match to the federal funds.									

Amendment Summary

During the FFY 2018 End of Year Project Phase Slips Review, Key 21126 was identified a duplicate project to Key 21262. Key 21262 is TriMet's FY 2018 TOD Exchange project which already obligated. Canceling a project from the MTIP requires a formal amendment, but insufficient time was available to complete the amendment and delete the project from FFY 2018. The project was carried over (slipped) into FFY 2019 and now is being canceled from the MTIP as a corrective action.

Memo

Date: Friday, January 11, 2019
To: JPACT and Interested Parties
From: Ken Lobeck, Funding Programs Lead, 503-797-1785
Subject: January 2019 MTIP Formal Amendment plus Approval Request of Resolution 19-4961

STAFF REPORT

FOR THE PURPOSE OF ADDING OR AMENDING EXISTING PROJECTS TO THE 2018-21 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM INVOLVING ELEVEN PROJECTS IMPACTING ODOT, OREGON CITY, AND TRIMET (JA19-05-JAN)

BACKGROUND

What this is:

The January 2019 Formal Metropolitan Transportation Improvement Program (MTIP) Amendment bundle (for FFY 2019) contains required changes and updates impacting ODOT, Oregon City and TriMet. Eleven projects comprise the amendment bundle. Most of the requested changes are for ODOT funded/managed projects.

Several projects require cost increases due to scope updates, combining efforts, and additional scope requirements being added to the projects. The USDOT/ODOT/MPO Amendment Matrix defines the parameters for formal amendments and administrative modifications. Projects that involve a major scope change require a formal amendment to demonstrate that fiscal constraint is still maintained, no impacts to air quality results, and the project still provides final deliverables that consistent with project entry in the Regional Transportation Plan (RTP), or with the original funding award. The three primary types of existing project changes that trigger the need for a formal amendment include: (1) Scope changes, (2) limit changes, and (3) cost changes.

Scope Changes:

Major scope changes usually involve the addition or deletion of a specified non capacity-work element such as having to include unforeseen storm water mitigation improvements as part of the project, or adding ADA compliance scope activities. Some scope changes result when two or more projects are combined together to be delivered under the same construction contract. The combining effort may result in significant cost savings where additional scope improvements can be added to the project which initially were thought to be beyond the project's budget. As final design progresses, the revised scope of work will be compared to the original planned improvement to determine the impact of the changes and if they are considered major or minor and how they impact the project's final environmental document. When the scope is determined to be major, then a formal/full amendment is required to the MTIP and STIP to complete the changes.

Limit Changes:

A result of a major scope change is often seen upon the project limits. The scope change may result in extending the project or shortening it depending on the type of scope element that is added to the project. For years, MTIP/STIP staff, STIP coordinators, FHWA staff, project managers, and Local Agency Liaisons (LAL) have argued of what constitutes a "significant" limit change for a project resulting in the need for a formal/full amendment. FHWA resolved the debate by establishing

that limit changes beyond 0.25 miles are considered a major change and require a formal/full amendment to complete. Therefore, if the scope change results in a change in the environmental footprint (*i.e. the project limits change*) greater than a ¼ mile, the change must be made via a formal/full amendment.

Cost Changes beyond the Amendment Matrix Threshold:

The third type of change that can trigger a formal/full amendment is a cost change (increase or decrease) that exceeds the Amendment Matrix’s Cost Change threshold. For projects with a total project cost of \$1 million or greater, the allowable cost increase or decrease that can occur via an administrative modification is up to 20%. If the total cost change to the project is 20% or greater for these types of projects (\$1 million or greater), then a formal/full amendment is required to be completed. Determining a project’s accurate total cost early before NEPA even begins is more of an art than science. How much should the project manager add contingency funding to properly address the costs and not get blindsided at the end of final design with a 30% or greater cost increase to the project? Multiple cost factors may impact the project which the project manager may or may not foresee. Unfortunately, these factors can and will contribute to significant costs above the administrative threshold, and by far are the most common reason for the formal amendment

As a result of the above three areas, the number of mid-year formal amendments increase as more accurate design costs are realized, required limit changes are inserted into the project, and scope changes emerge as projects grow closer to completing final design. The January 2019 Formal MTIP amendment involves eleven projects which nine are impacted from a combination of major scope, limit, and/or funding changes.

What is the requested action?

TPAC requests JPACT’s approval recommendation to Metro Council for resolution 19-4961 enabling the eleven identified projects to be amended correctly into the 2018 MTIP, with final approval to occur from USDOT.

The summary of the eleven projects is shown in the below table:

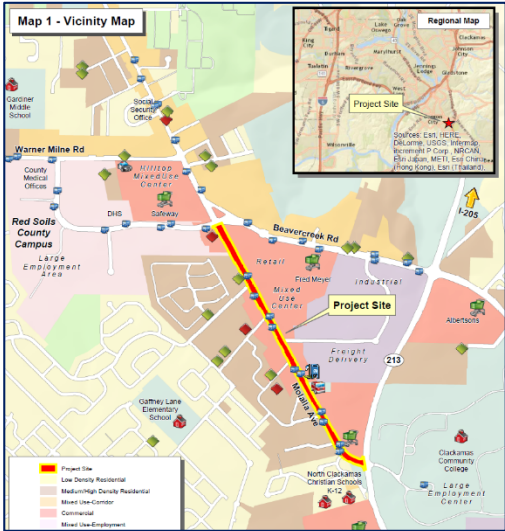
ODOT Key	Lead Agency	Project Name	Description	Required Changes
Project #1 Key 20810	Oregon City	Molalla Ave: Beaver Creek Rd to OR213	Construct bike lanes along the entire Molalla Ave: Beavercreek Rd to Highway 213 with Continuous ADA compliant sidewalks ramps; trees and ped level street lighting on west side of corridor; transit amenities along both sides of the corridor and street furnishings	REMOVED PROJECT: This Metro 2019-21 RFFA federally funded project completed a fund swap for local funds and is now a de-federalized project. No federal approvals are required to deliver and complete the project. As such, the project is not required to be programmed in the MTIP or STIP. Key 20810 is being removed from the MTIP through this amendment.

<p>Project #2 Key 20451</p>	<p>ODOT</p>	<p>OR8 at River Road OR8 at River Rd & OR224 at Lake Rd</p>	<p>Full signal upgrade with illumination and ADA improvements Full signal upgrade with illumination and ADA improvements at the intersection of OR8 and River Rd in the City of Hillsboro. Replace overhead flasher with ground mounted advance flashers at the intersection of OR224 and Lake Rd in Clackamas County.</p>	<p>COMBINED PROJECT: Amendment combines scope and funding from two projects: 20454 and 20507 plus adds \$300k in a new Other phase for railroad improvements. Combining Keys 20454 into 20451, adding funding from 20507 and from the ODOT railroad crossing project grouping bucket will reduce overhead costs and allow for efficiencies in delivery.</p>
<p>Project #3 Key 20454</p>	<p>ODOT</p>	<p>OR224 at Lake/Harmony</p>	<p>Replace overhead flasher with ground mounted advance flashers.</p>	<p>COMBINED/CANCELED PROJECT: Scope and funding totaling \$109,078 is combined onto Key 20451. As a result Key 20454 is left with \$0 funding and is being removed from the MTIP</p>
<p>Project #4 Key 20507</p>	<p>ODOT</p>	<p>OR213 (82nd Ave) at Madison High School</p>	<p>Replace signal; rebuild and restripe existing crosswalk; add crosswalks and close a driveway.</p>	<p>FUND SWAP/DE-FEDERALIZATION: Key 20507 is being de-federalized upon review of the project and similar project in development by Portland Public Schools (PPS). ODOT will contribute \$560,250 state funds to the project (IGA in development). This amendment serves to convert the project into a locally funded and delivered project. PPS's delivery schedule is ahead of ODOT's project. The amendment for Key 20507 also advances ROW, UR and CN all to 2019. A budget shortfall has been identified on project K20451. \$560,250 Enhance funds from this project are being reallocated to K20451.</p>
<p>Project #5 Key 20430</p>	<p>ODOT</p>	<p>I-5: MP 303.27 - MP 308.63 I-5: Marine Dr - Fremont Bridge</p>	<p>Install variable speed advisory signs on I-5 northbound and southbound from the Fremont Bridge to Marine Drive</p>	<p>COST INCREASE/LIMITS & SCOPE CHANGE: Cost increases have occurred to the Preliminary Engineering phase which are being addressed. Causes include extended design period of 6-months, additional administrative/ management costs, design modifications, and added agency coordination requirements. The Amendment changes the project name to reflect the reduced scope. Project mile points are adjusted to match the engineer's plans and removing the Hayden Island location. The construction phase is reduced by \$314,000 and moved to PE . Finally, the construction phase is being advance from 2020 to 2019.</p>
<p>Project #6 Key 20481</p>	<p>ODOT</p>	<p>I-405: Fremont (Willamette River) Bridge</p>	<p>Paint bridge approaches; other section as funding allows.</p>	<p>COST DECREASE: \$10 million of construction phase funding is being transferred to Key 20077, Major Bridge Maintenance FFY 2019, the Statewide Project Grouping bucket to support strengthening of major bridges in Region 1. OTC approval was required for this action to occur.</p>

Project #7 Key 20484	ODOT	SW Multnomah Blvd over I-5	Place a structural overlay on the deck; replace or repair leaking joints; and retrofit the bridge rails to meet safety standards.	COST INCREASE: PE and construction phase increase in cost by a total of \$967,800 to the project. The shortfalls in both phases are addressed through this amendment.
Project #8 Key 20702	ODOT	OR99W SB Ramp to I-5 SB (Capitol Highway Interchange)	In SW Portland on OR99W at SW Capitol Highway IC on SB Ramp to I-5, preserve deck with structural overlay	COST INCREASE: Preliminary Engineering and construction phases increase in cost due to use of external consulting for PE while construction phase added minor scope elements including cleaning and painting of the steel bearings plus the replacement of deficient ADA ramps. The project cost also was adjusted for inflation. The total project cost increases from \$408,000 to \$1,335,494.
Project #9 Key 20465	ODOT	I-5: Barbur Blvd NB connection bridge OR99W: Barbur Boulevard Northbound Connection Bridge	Paint structure; remove pack rust. Replace rivets and bolts.	COST INCREASE: Preliminary Engineering and construction phases increase in cost due to use of external consulting for PE while the construction phase has increased due to bid prices, plus the costs of the containment for paint removal/paint application and the disposal of hazardous waste were not included in the original project estimate. The project name is being updated to reflect that the mile points are actually for OR99W, and not I-5. There are no changes to the project location or scope. The total project cost increase is \$828,692.
Project #10 Key 20298	ODOT	I-84: Fairview - Marine Drive & Tooth Rock Tunnel I-84: Fairview - Marine Drive	Repave a section of I-84 between Fairview and Marine Dr repaves the Tooth Rock tunnel and installs a full signal upgrade (including ADA) at NE238th Ave. Deck overlay and repair joints on the McCord Creek Bridge (#02193B).	SCOPE CHANGE: A more extensive project for Tooth Rock Tunnel is being scoped for the 21-24 STIP cycle. Through this amendment, the Tooth Rock Tunnel paving work from this project's scope to be re-added in the 21-24 STIP. Similarly, the McCord Creek Bridge is being considered for the 21-24 STIP. As such, this scope element also is removed Key 20298. The project name and description are updated as a result. The revised project scope results in a cost decrease to the project.
Project #11 Key 21126	TriMet	FY18 TriMet Prevent Maint (TOD Fund Exchange)	Enables the annual Transit Oriented Development (TOD) fund exchange to occur	CANCELED PROJECT: Key 21126 is a duplicate entry in the MTIP to TriMet's Key 21262 which already obligated its funds. Key 21126 is being removed from the MTIP as a corrective action.

A detailed summary of the eleven projects being amended is provided in the tables starting on the next page.

Projects 1:	Molalla Ave. Beaver Creek Rd - Hwy 213		
Lead Agency:	Oregon City		
ODOT Key Number:	20810	MTIP ID Number:	70885
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: Metro RFFA Awarded Project • Funding: 2019-21 RFFA Award • Type: Active transportation project • Location: Molalla Ave • Cross Streets: Beaver Creek Rd to Hwy 214 • Project approved for de-federalization via Metro-TriMet Fund Exchange • Mile Post Limits: N/A • Current Status Code: 3 - In Preliminary Engineering phase • Proposed improvements: Bike lanes along the entire Molalla Ave: Beaver Creek Rd to Highway 213. Continuous ADA compliant sidewalks ramps; trees and ped level street lighting on west side of corridor; transit amenities along both sides of the corridor and street furnishings • STIP Amendment Number: TBD • MTIP Amendment Number: JA19-05-JAN 		
What is changing?	<p>AMENDMENT ACTION: REMOVING THE PROJECT FROM THE MTIP</p> <p>Key 20810 was initially awarded \$3,800,632 of federal funds through the 2019-21 Metro Regional Flexible Fund Allocation (RFFA). Subsequent to this award, a project review indicated Key 20810 would be a good candidate for de-federalization. The requirements for de-federalization include the following:</p> <ul style="list-style-type: none"> • The MTIP is not required as part of any federal approvals (e.g. obligating the project funds). • No federal approvals are required for the project to implement phases and expend local funds. • The project is a non-capacity enhancing project and inclusion in the Metro modeling network to demonstrate a capacity improvement is not required. • The project is not subject to air quality improvements as a condition of funding. • The project is considered “exempt” from the requirement to demonstrate conformity per 40 CFR 93.126, Table 2 or 40 CFR 93.127 Table 3. • The project does not possess any scope improvements considered sensitive to the public where MTIP programming is deemed necessary. <p>No federal approvals appear required allowing Oregon City to complete the project separately from the regular federal delivery process. The MTIP is not required to obligate the project’s local funds.</p> <p>From an air quality viewpoint, the project is exempt under 40 CFR 93.126, Table 2, "Air Quality - Bicycle and pedestrian facilities category". The project is also</p>		



	<p>considered a non-capacity improvement. Local funds from TriMet were used to swap out the federal funds. TriMet will use the federal funds in support of their federal project needs. By replacing the federal funds with local funds, Oregon City can move forward to deliver the project faster than if the project remained federalized. Without federal approvals required to deliver the project, now funded by only local funds, and as an exempt project, Key 20810 is not necessary to remain in the MTIP. The project is being removed from the MTIP through this amendment.</p> <p>Metro has completed a local Intergovernmental Agreement (IGA) with Oregon City and will monitor the project delivery status separate from the MTIP requirements. Local funding as shown in the funding table remains committed to deliver the project.</p>
Additional Details:	The project will be monitored internally by Metro in a similar fashion to federally funded projects.
Why a Formal amendment is required?	Removing (or canceling) a project in the MTIP with Metro funding requires a formal amendment. per the approved FHWA/FTA/ODOT/MPO MTIP/STIP Amendment Matrix
Total Programmed Amount:	The approved project total cost of \$7,985,379 remains for the project. However, it will no longer appear in the MTIP.
Added Notes:	

Project #2:	OR8 at River Road OR8 at River Rd & OR224 at Lake Rd		
Lead Agency:	ODOT		
ODOT Key Number:	20451	MTIP ID Number:	70669
Project Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It Region 1 • Projected Fund Type: NHPP for PE & Cons, State STP for ROW • Type: Operations – Signalized Intersections • Location: OR-8 • Cross Streets: OR8 at River Rd and OR224 at Lake Rd • Mile Post Limits: 11.70 to 11.75 • Current Status Code: 1 – Pre PE obligation/Amendment required • Proposed improvements: Full signal upgrade with illumination and ADA improvements Full signal upgrade with illumination and ADA improvements at the intersection of OR8 and River Rd in the City of Hillsboro. Replace overhead flasher with ground mounted advance flashers at the intersection of OR224 and Lake Rd in Clackamas County. • STIP Amendment Number: 18-21-2034 • MTIP Amendment Number: JA19-05-JAN 		
What is changing?	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Key 20454 OR224 at Lake/Harmony Scope & Funding of \$109,078 into Key 20451 </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Key 20352 Statewide Rail Crossing Program FFY19 \$300,000 of funding into Key 20451 </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Key 20507 OR213 (82nd Ave) at Madison High School \$560,250 of funding into Key 20451 </div>
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Key 20451 OR8 at River Rd & OR224 at Lake Rd Increases from 1,182,643 to \$2,151,970 </div>		

MTIP. It does not need to be included in this amendment bundle. ODOT will make the required funding reduction in the 2018 STIP separate from his amendment.

As a result of combining 20454 into 20451 and the funding transfers from 20352 and 20507:

- The Preliminary Engineering phase increases by \$375,378 from \$282,877 to \$658,255 in 2019.
- An "Other" phase for necessary railroad improvements is created with \$300,000 planned to occur in 2019.
- The Right-of-Way phase remains unchanged at \$91,548 and is still planned for 2020.
- The Construction phase increases by \$293,950 from \$808,217 to \$1,102,167.
- The total project cost increases by \$969,328 from \$1,182,643 to \$2,151,970

Fund code Translations:

Z240 = State STP-FLX = State Surface Transportation Improvement Program-Flex

Z001 - NHPP-FAST = National Highway Performance Program - FAST Act

ZS40 = Rail Hwy Cross Haz = Rail-Highway Crossing Hazards

Additional Details:

2018-2021 Active STIP		CLACKAMAS		2018-2021 Active STIP			
Name: OR224 at Lake/Harmony			Key: 20454				
Description: Replace overhead flasher with ground mounted advance flashers.							
MPO: Portland Metro MPO		Work Type: OP-SSI					
Applicant: ODOT		Status: PROJECT SCHEDULED FOR CONSTRUCTION					
Region: 1							
Location(s)							
Mileposts	Length	Route	Highway	ACT	County(s)		
2.40 to 2.60	0.10	OR-224	CLACKAMAS	REGION 1 ACT	CLACKAMAS		
Current Project Estimate							
	Planning	Prelim. Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total
Year	2020			2021			
Total		\$55,128.00			\$53,950.00		\$109,078.00
Fund 1		Z240 \$49,466.35			Z001 \$48,409.34		
Match		\$5,661.65			\$5,540.66		
Footnote: \$ 109,078 Total Operations allocation							

2018-2021 Active STIP		STATEWIDE		2018-2021 Active STIP			
Name: Statewide Rail Crossing Program FFY19			Key: 20352				
Description: Funding for the statewide rail crossing program for Federal fiscal year 2019. Projects to be selected based on the program requirements and need.							
MPO: Non-MPO		Work Type: SAFETY					
Applicant: ODOT RAIL DIVISION		Status: BUCKET OF FUNDS					
Region: 6							
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	2019			2019			
Total					\$10,692,619.20		\$10,692,619.20
Fund 1					ZS40 \$9,623,357.28		
Match					\$1,069,261.92		
Footnote:							
Most Recent Amendment Approved							
Amendment No: 18-21-1847			Approval Date: 12/7/2018				
Requested Action: Reduce project estimate by \$300,000, moving funds to project key 19683.							

	<table border="1"> <tr> <td colspan="2">Name: OR213 (82nd Ave) at Madison High School</td> <td colspan="2">Key: 20507</td> </tr> <tr> <td colspan="4">Description: Replace signal, rebuild and restripe existing crosswalk, add crosswalks and close a driveway.</td> </tr> <tr> <td colspan="2">MPO: Portland Metro MPO</td> <td colspan="2">Work Type: OP-SSI</td> </tr> <tr> <td colspan="2">Applicant: ODOT</td> <td colspan="2">Status: PROJECT SCHEDULED FOR CONSTRUCTION</td> </tr> <tr> <td colspan="4">Location(s)</td> </tr> <tr> <td>Mileposts</td> <td>Length</td> <td>Route</td> <td>Highway</td> </tr> <tr> <td>1.64 to 1.65</td> <td>0.01</td> <td>OR-213</td> <td>CASCADE NORTH</td> </tr> <tr> <td colspan="2"></td> <td>ACT</td> <td>County(s)</td> </tr> <tr> <td colspan="2"></td> <td>REGION 1 ACT</td> <td>MULTNOMAH</td> </tr> <tr> <td colspan="4">Current Project Estimate</td> </tr> <tr> <td></td> <td>Planning</td> <td>Prelim. Engineering</td> <td>Right of Way</td> </tr> <tr> <td></td> <td></td> <td>2019</td> <td>2020</td> </tr> <tr> <td></td> <td></td> <td>2020</td> <td>2021</td> </tr> <tr> <td></td> <td></td> <td>2021</td> <td></td> </tr> <tr> <td>Total</td> <td></td> <td>\$215,000.00</td> <td>\$149,500.00</td> </tr> <tr> <td></td> <td></td> <td>\$192,919.50</td> <td>\$134,146.35</td> </tr> <tr> <td>Fund 1</td> <td>Z240</td> <td>\$192,919.50</td> <td>\$134,146.35</td> </tr> <tr> <td></td> <td></td> <td>\$22,080.50</td> <td>\$15,353.65</td> </tr> <tr> <td>Match</td> <td></td> <td>\$22,080.50</td> <td>\$15,353.65</td> </tr> <tr> <td></td> <td></td> <td>\$11,000.00</td> <td>\$745,000.00</td> </tr> <tr> <td></td> <td></td> <td>\$9,870.30</td> <td>\$668,488.50</td> </tr> <tr> <td></td> <td></td> <td>\$1,120.70</td> <td>\$76,511.50</td> </tr> <tr> <td colspan="4">Footnote: \$ 1,120,500 Total Operations allocation</td> </tr> </table>	Name: OR213 (82nd Ave) at Madison High School		Key: 20507		Description: Replace signal, rebuild and restripe existing crosswalk, add crosswalks and close a driveway.				MPO: Portland Metro MPO		Work Type: OP-SSI		Applicant: ODOT		Status: PROJECT SCHEDULED FOR CONSTRUCTION		Location(s)				Mileposts	Length	Route	Highway	1.64 to 1.65	0.01	OR-213	CASCADE NORTH			ACT	County(s)			REGION 1 ACT	MULTNOMAH	Current Project Estimate					Planning	Prelim. Engineering	Right of Way			2019	2020			2020	2021			2021		Total		\$215,000.00	\$149,500.00			\$192,919.50	\$134,146.35	Fund 1	Z240	\$192,919.50	\$134,146.35			\$22,080.50	\$15,353.65	Match		\$22,080.50	\$15,353.65			\$11,000.00	\$745,000.00			\$9,870.30	\$668,488.50			\$1,120.70	\$76,511.50	Footnote: \$ 1,120,500 Total Operations allocation			
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Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, a project's with a major scope change require a formal amendment to complete the required changes. The addition of OR224 to the project and the railroad scope activities along with the cost increase trigger the need for a formal amendment.																																																																																												
Total Programmed Amount:	The total project programming increases from \$1,182, 643 to \$2,151,970																																																																																												
Added Notes:	OTC approval was required to complete the changes and are expected to occur during their January 2019 meeting																																																																																												

Project #3:	OR224 at Lake/Harmony
Lead Agency:	ODOT
ODOT Key Number:	20454
	MTIP ID Number: 70997
Project Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It Region 1 • Projected Fund Type: Pre-amendment = State STBG-Flex • Type: Operations – Safety and Traffic Control • Location: OR-224 • Cross Streets: at Lake/Harmony Rd • Mile Post Limits: 2.40 to 2.50 • Current Status Code: 1 – Pre PE obligation, Consolidation action requiring an amendment • Proposed improvements: Replace overhead flasher with ground mounted advance flashers. • STIP Amendment Number: 18-21-2034 • MTIP Amendment Number: JA19-05-JAN
What is changing?	<p>AMENDMENT ACTION: KEY 20454 SCOPE AND FUDNING OF \$109,078 IS BEING COMBINED INTO KEY 20451</p> <div style="text-align: center;"> <pre> graph TD A["Key 20454 OR224 at Lake/Harmony Scope & Funding of \$109,078 into Key 20451"] --> D["Key 20451 OR8 at River Rd & OR224 at Lake Rd Increases from 1,182,643 to \$2,151,970"] B["Key 20352 Statewide Rail Crossing Program FFY19 \$300,000 of funding into Key 20451"] --> D C["Key 20507 OR213 (82nd Ave) at Madison High School \$560,250 of funding into Key 20451"] --> D </pre> </div> <p>As discussed in Key 20451, OR8 at River Rd & OR224 at Lake Rd, the scope and funding Key 2045 are being combined into Key 20451. This will enable both projects to be delivered under the same contract and provide efficiencies in delivery.</p>

<p>Additional Details:</p>	<p>If the this were a straight project combination effort, where no new funds are added or scope change occurs, the combining could occur via an Administrative Modification, However, the project also includes a funding shortfall resulting in additional funds added to the project from Keys 20352 and 20507, the new funding and updated scope activities trigger the need for a formal amendment.</p> <p>As a result of combining Key 20454 into 20451, Key 20454 is left with \$0 programming dollars and is being removed from the MTIP.</p> <p>Fund Code Translation: Z240 = State STBG-Flex (State Surface transportation Block Grant – Flex) Z001 = NHPP-FAST (National Highway Performance Program – FAST ACT)</p> <table border="1" data-bbox="500 598 1386 913"> <thead> <tr> <th colspan="2">2018-2021 Active STIP</th> <th colspan="2">CLACKAMAS</th> <th colspan="2">2018-2021 Active STIP</th> </tr> </thead> <tbody> <tr> <td colspan="3">Name: OR224 at Lake/Harmony</td> <td colspan="3">Key: 20454</td> </tr> <tr> <td colspan="6">Description: Replace overhead flasher with ground mounted advance flashers. Region: 1</td> </tr> <tr> <td colspan="3">MPO: Portland Metro MPO</td> <td colspan="3">Work Type: OP-SSI</td> </tr> <tr> <td colspan="3">Applicant: ODOT</td> <td colspan="3">Status: PROJECT SCHEDULED FOR CONSTRUCTION</td> </tr> <tr> <th colspan="6">Location(s)</th> </tr> <tr> <th>Mileposts</th> <th>Length</th> <th>Route</th> <th>Highway</th> <th>ACT</th> <th>County(s)</th> </tr> <tr> <td>2.40 to 2.50</td> <td>0.10</td> <td>OR-224</td> <td>CLACKAMAS</td> <td>REGION 1 ACT</td> <td>CLACKAMAS</td> </tr> <tr> <th colspan="6">Current Project Estimate</th> </tr> <tr> <th></th> <th>Planning</th> <th>Prelim. Engineering</th> <th>Right of Way</th> <th>Utility Relocation</th> <th>Construction</th> <th>Other</th> <th>Project Total</th> </tr> <tr> <td>Year</td> <td colspan="3">2020</td> <td colspan="3">2021</td> <td></td> </tr> <tr> <td>Total</td> <td></td> <td>\$55,078.00</td> <td></td> <td></td> <td>\$53,750.00</td> <td></td> <td>\$108,828.00</td> </tr> <tr> <td>Fund 1</td> <td></td> <td>Z240 \$40,466.35</td> <td></td> <td></td> <td>Z001 \$48,409.34</td> <td></td> <td></td> </tr> <tr> <td>Match</td> <td></td> <td>\$5,661.65</td> <td></td> <td></td> <td>\$5,540.66</td> <td></td> <td></td> </tr> <tr> <td colspan="8">Footnote: \$ 109,078 Total Operations allocation</td> </tr> </tbody> </table> <p>Scope and funding is combined into 20451</p>	2018-2021 Active STIP		CLACKAMAS		2018-2021 Active STIP		Name: OR224 at Lake/Harmony			Key: 20454			Description: Replace overhead flasher with ground mounted advance flashers. Region: 1						MPO: Portland Metro MPO			Work Type: OP-SSI			Applicant: ODOT			Status: PROJECT SCHEDULED FOR CONSTRUCTION			Location(s)						Mileposts	Length	Route	Highway	ACT	County(s)	2.40 to 2.50	0.10	OR-224	CLACKAMAS	REGION 1 ACT	CLACKAMAS	Current Project Estimate							Planning	Prelim. Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total	Year	2020			2021				Total		\$55,078.00			\$53,750.00		\$108,828.00	Fund 1		Z240 \$40,466.35			Z001 \$48,409.34			Match		\$5,661.65			\$5,540.66			Footnote: \$ 109,078 Total Operations allocation							
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<p>Why a Formal amendment is required?</p>	<p>Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, Key 20454 is part of the larger combining effort into 20451 which requires a formal amendment. The changes to Key 20454 proceed under the larger formal amendment for Key 20451.</p>																																																																																																						
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<p>Projects 4: OR213 (82nd Ave) at Madison High School</p>	
<p>Lead Agency:</p>	<p>ODOT</p>
<p>ODOT Key Number:</p>	<p>20507</p>
<p></p>	<p>MTIP ID Number: 70981</p>
<p>Project Description:</p>	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It Region 1 • Projected Fund Type: State STBG-FLEX replaced by Local Other and State funds • Type: Operations – Safety • Location: OR-213 • Cross Streets: 82nd Ave at Madison High School • Mile Post Limits: 1.64 to 1,65 • Current Status Code: 1 – Pre PE obligation/Amendment required • Proposed improvements: Replace signal, rebuild and restripe existing crosswalk, add crosswalks and close a driveway. • STIP Amendment Number: 18-21-2034 • MTIP Amendment Number: JA19-05-JAN

Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, de-federalizing a project acts from a fiscal constraint perspective as canceling a project which requires a formal amendment.
Total Programmed Amount:	The total project programming in Key 20507 remains unchanged at \$1,120,500 through the de-federalization action
Added Notes:	OTC approval is required and is planned to occur during their January 2019 meeting

Projects #5:	I-5: MP 303.27 - MP 308.63 I-5: Marine Dr - Fremont Bridge		
Lead Agency:	ODOT		
ODOT Key Number:	20430	MTIP ID Number:	70972
Project Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It Region 1 • Projected Fund Type: HSIP (Federal Highway Safety Improvement Program) and utilizing ADVCON (Advance Construction) as an obligation placeholder • Type: Operations – Safety and Traffic Control • Location: I-5 • Cross Streets: Fremont Bridge north to Marine Drive • Mile Post Limits: 303.27 to 308.63 changed to be 302.80 to 307.30 • Current Status Code: 4 – Completing PS&E/Final Design • Proposed improvements: Install variable speed advisory signs on I-5 northbound and southbound from the Fremont Bridge to Marine Drive • STIP Amendment Number: 18-21-2062 • MTIP Amendment Number: JA19-05-JAN 		
What is changing?	<p>AMENDMENT ACTION: COST INCREASE WITH SCOPE ADJUSTMENTS AND LIMIT CHANGES</p> <p>The project has experienced cost increases due to several factors which include:</p> <ul style="list-style-type: none"> ▪ PE phase requiring an extended design schedule to address agency and consultant needs. ▪ Change in the agency project manager and area manager overseeing the project. ▪ Added effort in completing traffic control plans triggering additional management meetings and advisory committee meetings. ▪ Incorporating design modifications from Maintenance involving security fencing ▪ Added coordination with WASHDOT related to traffic control device extending onto the State of Washington <p>As a result, the project scope is dropping the northernmost ITS site (Hayden Island) in order to stay within budget. Removing this site reduces the construction phase estimate allowing for savings to be applied to the PE phase. The impact of these</p>		



	<p>changes results in changes to the project’s limits, scope and name to keep within the project award. The summary of changes include the following:</p> <ul style="list-style-type: none"> ▪ Hayden Island ITS site is removed from the project scope ▪ The updated construction phase cost decreases from \$6,413,000 to \$6,099,000. ▪ \$314,000 of construction phase funding is transferred to the PE phase. The PE phase increases from \$1,386,500 to \$1,700,500 ▪ The project limits are adjusted from 303.27 to 308.63 to be 302.80 to 307.30. ▪ The project name is updated from its current MP reference of I-5: MP 303.27 - MP 308.63 to be I-5: Marine Dr - Fremont Bridge. ▪ The project’s cost remains unchanged at \$7,799,500. 																																																																																																																																																																																													
<p>Additional Details:</p>	<p>The use of the fund type code ADVCON, Advance Construction, is also being used as an obligation placeholder for the added PE phase and construction phase obligations. However, the financial plan for the project still reflects federal HSIP as the planned funding source for the project.</p> <table border="1" data-bbox="464 722 1370 1173"> <thead> <tr> <th colspan="9">PROJECT FUNDING DETAILS</th> </tr> <tr> <th>Fund Type</th> <th>Fund Code</th> <th>Year</th> <th>Planning</th> <th>Preliminary Engineering</th> <th>Right of Way</th> <th>Other (Utility Relocation)</th> <th>Construction</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td colspan="9">Federal Funds</td> </tr> <tr> <td>HSIP</td> <td>ZS30</td> <td>2017</td> <td></td> <td>\$ 1,386,500</td> <td></td> <td></td> <td></td> <td>\$ 1,386,500</td> </tr> <tr> <td>ADVCON</td> <td>ACPO</td> <td>2017</td> <td></td> <td>\$ 314,000</td> <td></td> <td></td> <td></td> <td>\$ 314,000</td> </tr> <tr> <td>HSIP</td> <td>ZS30</td> <td>2020</td> <td></td> <td></td> <td></td> <td></td> <td>\$ -6,413,000</td> <td></td> </tr> <tr> <td>ADVCON</td> <td>ACPO</td> <td>2019</td> <td></td> <td></td> <td></td> <td></td> <td>\$ 6,099,000</td> <td>\$ 6,099,000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$ -</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$ -</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$ 7,799,500</td> </tr> <tr> <td colspan="9">State Funds</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$ -</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$ -</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>State Total:</td> <td>\$ -</td> </tr> <tr> <td colspan="9">Local Funds</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$ -</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$ -</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Local Total</td> <td>\$ -</td> </tr> <tr> <td colspan="3">Phase Totals Before Amend:</td> <td>\$ -</td> <td>\$ 1,386,500</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -6,413,000</td> <td>\$ 7,799,500</td> </tr> <tr> <td colspan="3">Phase Totals After Amend:</td> <td>\$ -</td> <td>\$ 1,700,500</td> <td>\$ -</td> <td>\$ -</td> <td>\$ 6,099,000</td> <td>\$ 7,799,500</td> </tr> <tr> <td colspan="8">Year Of Expenditure (YOE):</td> <td>\$ 7,799,500</td> </tr> </tbody> </table>	PROJECT FUNDING DETAILS									Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total	Federal Funds									HSIP	ZS30	2017		\$ 1,386,500				\$ 1,386,500	ADVCON	ACPO	2017		\$ 314,000				\$ 314,000	HSIP	ZS30	2020					\$ -6,413,000		ADVCON	ACPO	2019					\$ 6,099,000	\$ 6,099,000									\$ -									\$ -									\$ 7,799,500	State Funds																	\$ -									\$ -								State Total:	\$ -	Local Funds																	\$ -									\$ -								Local Total	\$ -	Phase Totals Before Amend:			\$ -	\$ 1,386,500	\$ -	\$ -	\$ -6,413,000	\$ 7,799,500	Phase Totals After Amend:			\$ -	\$ 1,700,500	\$ -	\$ -	\$ 6,099,000	\$ 7,799,500	Year Of Expenditure (YOE):								\$ 7,799,500
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<p>Why a Formal amendment is required?</p>	<p>Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, a project in the MTIP requires a formal amendment when the limits change more than 0.25 miles. This reflect a significant change to the footprint of the environmental document resulting in the need for the formal amendment. The net change of the project limits decrease from 5.36 miles to 4.50 miles reflecting a 0.50 mile change to the project limits.</p>																																																																																																																																																																																													
<p>Total Programmed Amount:</p>	<p>The total project programming amount remains unchanged at \$7,799,500</p>																																																																																																																																																																																													
<p>Added Notes:</p>	<p>OTC approval was not required for the changes. Approval of the required changes occurred through ODOT’s Change Management Request (CMR) process</p>																																																																																																																																																																																													

<p>Projects #6:</p>	<p>I-405: Fremont (Willamette River) Bridge</p>		
<p>Lead Agency:</p>	<p>ODOT</p>		
<p>ODOT Key Number:</p>	<p>20481</p>	<p>MTIP ID Number:</p>	<p>70973</p>
<p>Project Description:</p>	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It SW Bridge • Projected Fund Type: NHPP-FAST (Federal National Highway Performance Program – FAST Act) • Type: Bridge • Location: I-405/Fremont Bridge 		

- Cross Streets: Just east of Loring St west across the Willamette River to just west of Naito Pkwy
- Mile Post Limits: 3.12 to 3.53
- Current Status Code: 1 – Pre-PE Obligation Activities
- Proposed improvements: Paint bridge approaches; other section as funding allows.
- STIP Amendment Number: 18-21-2166
- MTIP Amendment Number: JA19-05-JAN

AMENDMENT ACTION: COST DECREASE

This amendment will complete OTC requested action to transfer \$10 million from the I-405 Fremont Bridge painting project in Key 20481 to ODOT's Major Bridge Maintenance project grouping bucket in Key 20077. The \$10 million is being transferred from Key 20481's construction phase reducing it from \$26,854,258 to \$16,854,258. The ODOT bridge program has determine the cost reduction can occur to Key 20481.

STIP Amendment Funding Summary

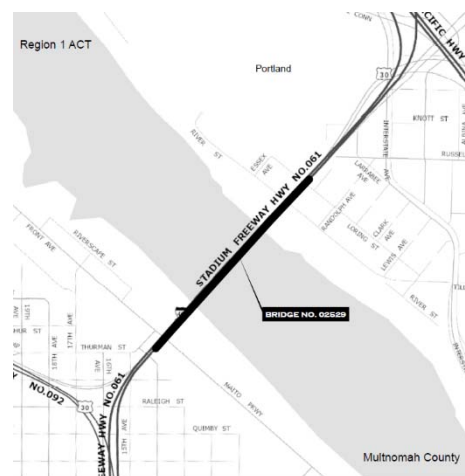
Project	Current Funding	Proposed Funding
Major bridge maintenance FFY19 (KN 20077)	\$10,000,000	\$20,000,000
I-405: Fremont (Willamette River) Bridge (KN 20481)	\$27,794,616	\$17,794,616
TOTAL	\$37,794,616	\$37,794,616

Project to increase funding:

Major bridge maintenance FFY19 (KN 20077)		Cost	
Phase	Year	Current	Proposed
Preliminary Engineering	N/A	\$0	\$0
Right of Way	N/A	\$0	\$0
Utility Relocation	N/A	\$0	\$0
Construction	2019	\$10,000,000	\$20,000,000
TOTAL		\$10,000,000	\$20,000,000

What is changing?

Key 20077 is ODOT's statewide project grouping bucket for required FFY 2019 major bridge maintenance. The fund transfer will support efforts to strengthen Region 1 bridges during FFY 2019.



Fund Code Translation: S010 = ODOT State funds

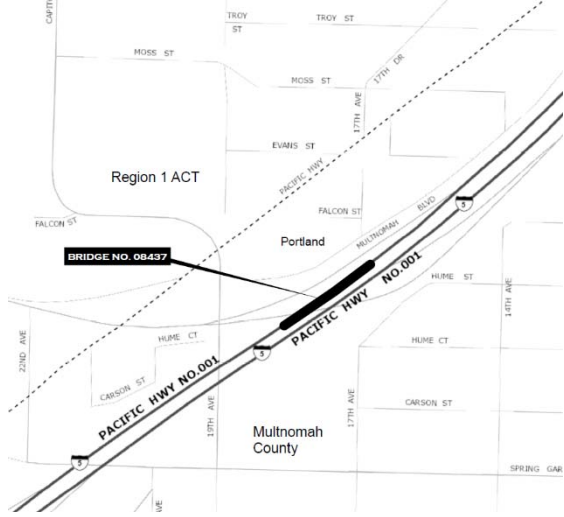
Additional Details:

2018-2021 Active STIP		STATEWIDE		2018-2021 Active STIP			
Name: Major bridge maintenance FFY19			Key: 20077				
Description: Major bridge maintenance funding for Federal fiscal year 2019. Projects will be selected based on requirements of the funds. Region: 6							
MPO: Non-MPO			Work Type: BR-MBM				
Applicant: ODOT			Status: PROJECT SCHEDULED FOR CONSTRUCTION				
Location(s)							
Mileposts	Length	Route	Highway	ACT	County(s)		
		Various	VARIOUS HIGHWAYS	STATEWIDE	STATEWIDE		
Current Project Estimate							
Year	Planning	Prelim. Engineering	Right of Way	Utility Relocation	Construction	Other	Project Total
2019							
Total					\$10,000,000.00		\$10,000,000.00
Fund 1					S010 \$10,000,000.00		
Match							
Footnote:							

In 1990, the State of Oregon established a major bridge maintenance (MBM) program, to specifically address major and emergency bridge repairs that were not selected in the STIP or other funding sources. This type of work is generally determined to be of high enough priority that waiting for the STIP or other funding

	<p>source is not an acceptable solution. This is also identified as work the district maintenance program normally wouldn't be able to accomplish due to maintenance crew budget or staff limits, and to address needs that were not anticipated. One use of MBM funding is to strengthen bridges to address concerns identified through the inspection and load rating processes.</p> <p>The Bridge Engineering Section is in the final phase of completing initial load ratings for every highway bridge. The analysis is being accomplished with a combination of ODOT engineers and consultants. While a basic load rating analysis is sufficient for most bridges, advanced analysis is used for larger, more complicated structures. Advanced analysis can also be used for bridges that show the need for strengthening based on the basic analysis, but do not show signs of distress.</p> <p>There are three major bridges in Portland that are currently having advanced analysis. While the advanced analysis may reduce the amount of strengthening that is required for these bridges to remain in unrestricted service, some strengthening will be required when the analysis is completed. The three major Region 1 bridges identified include the following:</p> <p>Willamette River, Interstate 5 (Marquam) – The steel girders that support the upper deck needs to have bracing added to satisfy the modern specifications.</p> <p>Willamette River, U.S. 30 Bypass (St. Johns) – There are portions of the truss that require bracing to satisfy the modern specifications, and also some connection plates that may require strengthening.</p> <p>Willamette River, Oregon 99 West (Steel) - This bridge is owned by the Union Pacific Railroad. There is a lease agreement with ODOT and TriMet for highway traffic and light rail. This is a unique bridge and the primary issue is the need to coordinate with the railroad to determine the actual loading due to freight trains.</p>
<p>Why a Formal amendment is required?</p>	<p>Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, cost changes for project costing \$1 million or greater require a formal amendment to complete. The cost decrease of \$10 million dollars represents a 35.9% change to the project and is above the 20% threshold.</p>
<p>Total Programmed Amount:</p>	<p>The project's total programming decreases from \$27,794,616 to \$17,794,616</p>
<p>Added Notes:</p>	<p>OTC approval is required for the changes and approval is expected to occur during their January 2019 meeting.</p>

<p>Projects #7: SW Multnomah Blvd over I-5</p>	
<p>Lead Agency:</p>	<p>ODOT</p>
<p>ODOT Key Number:</p>	<p>20484</p>
<p>MTIP ID Number:</p>	<p>70976</p>
<p>Project Description:</p>	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It Region 1 • Projected Fund Type: A combination of federal funds including Redistribution and ADVCON (Advance Construction) are committed to the project currently. • Type: Bridge – structures • Location: SW Multnomah Blvd over I-5 • Cross Streets: Approximately 17th Ave to near 19th Ave • Mile Post Limits: 296.51 to 296.59 • Current Status Code: 4 – Completing PS&E/Final Design • Proposed improvements: Place a structural overlay on the deck; replace or repair leaking joints; and retrofit the bridge rails to meet safety standards.

	<ul style="list-style-type: none"> • STIP Amendment Number: 18-21-2043 • MTIP Amendment Number: JA19-05-JAN
<p>What is changing?</p>	<p>AMENDMENT ACTION: COST INCREASE</p> <p>The Southwest Multnomah Boulevard Bridge over Interstate 5 is a 404 foot long bridge built in 1959 that is in fair condition. The Southwest Multnomah Boulevard over Interstate 5 project will address the extensive deck cracking with a structural concrete overlay, replace or repair leaking joints, and upgrade the bridge rails so that they meet modern safety standards. Overpass protective screening will also be added to deter objects from being thrown from the overpass onto Interstate 5.</p>  <p>The project initially was intended to complete the Preliminary Engineering phase via internal staff and resources. The project PE cost estimate was based on this assumption. External consulting will now be used to complete design requirements. This change has increased the PE phase cost estimate by \$310,900.</p> <p>The construction phase also has increased in cost die to the addition of overpass protective screening and subsequent change to 2020 as the revised delivery date. These changes increase the construction phase by \$656,900.</p> <p>The added funding will originate from a combination of the cancellation of Key 20540 (a Region 5 bridge project), the removal of bridge scope/funding from Key K20298, and \$400K from Statewide Bridge funding buckets in Keys 20082/ K20083.</p>
<p>Additional Details:</p>	<p>As stated above, the PE phase will increase from \$213,000 to \$523,900 which the construction phase increase from \$1,358,000 to \$2,014,900. The overall total project cost increases from \$1,571,000 to \$2,538,800.</p>

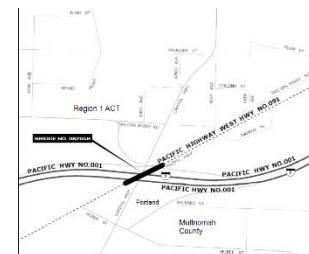
		PROJECT FUNDING DETAILS							
Fund Type	Fund Code	Year	Planning	Preliminary Engineering	Right of Way	Other (Utility Relocation)	Construction	Total	
Federal Funds									
NHPP-FAST	Z001	2017		\$ -191,125					
Redistribution	ZS30	2017		\$ 191,125				\$ 191,125	
ADVCON	ACPO	2017		\$ 278,971				\$ 278,971	
NHPP-FAST	Z001	2020					\$ -1,219,533		
ADVCON	ACPO	2020					\$ 1,807,970	\$ 1,807,970	
							\$ -	\$ -	
							\$ -	\$ 2,278,066	
State Funds									
State	Match	2017		\$ 21,875				\$ 21,875	
State	Match	2017		\$ 31,929				\$ 31,929	
State	Match	2020					\$ -139,467		
State	Match	2020					\$ 206,930	\$ 206,930	
							\$ -	\$ -	
							State Total:	\$ 260,734	
Local Funds									
								\$ -	
								\$ -	
							Local Total:	\$ -	
Phase Totals Before Amend:			\$ -	\$ -213,000	\$ -	\$ -	\$ -1,358,000	\$ 1,571,000	
Phase Totals After Amend:			\$ -	\$ 523,900	\$ -	\$ -	\$ 2,014,900	\$ 2,538,800	
							Year Of Expenditure (YOE):	\$ 2,538,800	


Why a Formal amendment is required? Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, cost changes for project costing \$1 million with a cost change of 20% or greater require a formal amendment. The net cost increase to the project is \$967,800 which represents a 61.6 % increase to the project.


Total Programmed Amount: The total project programming amount increases from \$1,571,000 to \$2,538,800

Added Notes: OTC approval was required for the changes with approval expect to occur during their January 2019 meeting.

Projects #8:	OR99W SB Ramp to I-5 SB (Capitol Highway Interchange)		
Lead Agency:	ODOT		
ODOT Key Number:	20702	MTIP ID Number:	71016
Project Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It SW Bridge plus HB2017 Seismic • Projected Fund Type: Federal ADVCON (Advance Construction) is being used to program the committed funding for later phase obligation flexibility needs. • Type: Bridge – structures • Location: OR-99W • Cross Streets: At SW Capitol Highway interchange • Mile Post Limits: 6.19 to 6.24 • Current Status Code: 1 – Completing Pre-PE Obligation activities • Proposed improvements: Preserve deck with a structural overlay • STIP Amendment Number: 18-21-2043 • MTIP Amendment Number: JA19-05-JAN 		
What is changing?	<p>AMENDMENT ACTION: COST INCREASE</p> <p>The Oregon 99 West southbound ramp to Interstate 5 southbound (Capitol Highway Interchange) is a 270 foot long bridge built in 1959 that is in fair condition. The project will address the top layer of the concrete deck that has required patches where pieces have separated, with a structural concrete overlay. The project will also replace or repair leaking joints, clean and paint steel bearings that are corroded, replace the asphalt near the bridge approaches that is failing, and replace deficient Americans with Disabilities Act (ADA) ramps that are within the project limits.</p>		



<p>Projects #9:</p>	<p>I-5: Barbur Blvd NB Connection Bridge OR99W: Barbur Boulevard Northbound Connection Bridge</p>		
<p>Lead Agency:</p>	<p>ODOT</p>		
<p>ODOT Key Number:</p>	<p>20465</p>	<p>MTIP ID Number:</p>	<p>70998</p>
<p>Project Description:</p>	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: ODOT Awarded Project • Funding: ODOT Fix-It SW Bridge plus HB2017 Bridge Seismic • Projected Fund Type: Federal ADVCON (Advance Construction) is being used to program the committed funding for later phase obligation flexibility needs • Type: Bridge - structures • Location: OR-99W • Cross Streets: OR-99W bridge crossing at I-5 • Mile Post Limits: 7.79 to 7.84 • Current Status Code: 1 – Pre-PE obligation activities • Proposed improvements: Paint structure; remove pack rust. Replace rivets and bolts. • STIP Amendment Number: 18-21-2143 • MTIP Amendment Number: JA19-05-JAN 		
<p>What is changing?</p>	<p>AMENDMENT ACTION: COST INCREASE</p> <p>The Oregon 99 West (Barbur Boulevard) northbound connection bridge over Interstate 5 was built in 1985 and is in satisfactory condition. The portions of the bridge directly over Interstate 5 have painted girders to protect the steel from corrosion. The original paint system is at the end of its service life, with moderate surface corrosion on the lower portions of the girders, and isolated areas where the corrosion has begun to reduce the thickness of the steel.</p>  <p>The cost increase for Key 20465 is similar to Key 20702, OR99W SB Ramp to I-5 SB (Capitol Highway Interchange). The initial estimate for preliminary engineering was based on the entire design being done internally. The design of the paint portion of the project will be done by ODOT's Bridge Preservation Unit. The remainder of the project will be designed by a consultant due to ODOT resources being committed to the delivery of other projects. As a result, the engineering costs have increased.</p> <p>Construction costs have increased due to bid prices that are higher than were accounted for when the project was initially programmed; in addition, the costs of the containment for paint removal/paint application and the disposal of hazardous waste were not included in the original project estimate.</p> <p>ODOT is also changing the name of the project because the location mile points are actually for OR99W, not I-5. There are no changes to the project location or scope, just a correction to the name.</p>		

	<p style="text-align: center;">Fairview and Marine Dr and install a full signal upgrade (including ADA) at NE 238th Ave.</p> <ul style="list-style-type: none"> • STIP Amendment Number: 18-21-2043 • MTIP Amendment Number: JA19-05-JAN
<p>What is changing?</p>	<p>AMENDMENT ACTION: SCOPE CHANGE</p> <p><i>From the OTC Staff Report:</i> The Interstate 84 eastbound McCord Creek Bridge was built in 1962. The deck is in poor condition due to cracking, rutting, exposed reinforcement, and pieces of concrete up to three feet in diameter that have separated from the deck. The deck is only 6 ½ inches thick, and the top 1 ½ inches is contaminated with chlorides due to the use of deicing products. Also, the transition from the bridge approach pavement to the bridge itself is not smooth, causing a noticeable impact for drivers. This bridge has required extensive maintenance work to repair the deck and to minimize the impact. A deck overlay for this bridge was added with funding from House Bill 2017.</p>  <p>While the McCord Creek Bridge is within the limits of this Interstate Maintenance Preservation Project, the extensive work needed to address the poor condition of the deck is not really compatible with the other project work. Grinding the approach pavement to address the impact loading will leave a layer of pavement that is too thin to be structurally sound, and rebuilding the approach pavement is also beyond the scope of the other work in the project. Based on the nature of the work required being much more extensive than the other project work, the McCord Creek Bridge should be removed from this project.</p> <p>The McCord Creek Bridge is being considered for the 2022-2024 STIP and is the top priority bridge project for Region 1. It is within the limits of the Interstate 84: Multnomah Falls – Cascade Locks Interstate Maintenance Preservation Project. The scoping effort will determine the best solution for this bridge, ranging from extensive deck rehabilitation, deck replacement, or perhaps bridge replacement. This bridge will eventually need a seismic retrofit, and it may be most economical to simply replace the bridge instead of doing extensive deck work now, and extensive seismic related work later.</p> <p>As a result, the project scope is changing as follows:</p> <ul style="list-style-type: none"> - The Tooth Rock Tunnel paving work is being removed from the project scope. - The McCord Creek Bridge work is being removed from the project scope

	<ul style="list-style-type: none"> - The \$1,000,000 of HB201 Bridge Seismic funds associated with the McCord Creek Bridge is being relocated to Keys 20465, 20484, and 20702 - The project name changes to now be I-84: Fairview to Marine Drive - The project description is updated to reflect the scope adjustments. 																																																																																																																																																																																																																																																																																																																											
Additional Details:	<p>As stated above, the removal of the \$1,000,000 for the McCord Creek Bridge work decreases the project total from \$5,792,148 to \$4,792,148</p> <table border="1"> <thead> <tr> <th colspan="9">PROJECT FUNDING DETAILS</th> </tr> <tr> <th>Fund Type</th> <th>Fund Code</th> <th>Year</th> <th>Planning</th> <th>Preliminary Engineering</th> <th>Right of Way</th> <th>Other (Utility Relocation)</th> <th>Construction</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td colspan="9">Federal Funds</td> </tr> <tr> <td>NHPP-FAST</td> <td>Z001</td> <td>2019</td> <td></td> <td>\$ -370,660</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>NHPP-FAST</td> <td>Z001</td> <td>2019</td> <td></td> <td>\$ 263,703</td> <td></td> <td></td> <td></td> <td>\$ 263,703</td> </tr> <tr> <td>NHPP</td> <td>M001</td> <td>2019</td> <td></td> <td>\$ 106,957</td> <td></td> <td></td> <td></td> <td>\$ 106,957</td> </tr> <tr> <td>ADVCON</td> <td>ACPO</td> <td>2019</td> <td></td> <td>\$ 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Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, majors cope changes require a formal amendment. Note: The cost decrease as a result of the scope change results in a 17.2% change to the project.																																																																																																																																																																																																																																																																																																																											
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Projects #11:	FY18 TriMet Prevent Maint (TOD) Fund Exchange		
Lead Agency:	TriMet		
ODOT Key Number:	21126	MTIP ID Number:	71020
Project Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Source: Metro RFFA Step I funded project • Funding: Metro Transit Oriented Development (TOD) program • Projected Fund Type: Federal STP>200K *Surface Transportation Program – for urban areas greater than 200,000 people) • Type: Metro TOD program • Location: Region wide • Cross Streets: Not Applicable • Mile Post Limits: Not Applicable • Current Status Code: Obligated and awarded from TrAMS, but from Key 21262 		

	<ul style="list-style-type: none"> Proposed improvements: Enables the annual Transit Oriented Development (TOD) fund exchange to occur STIP Amendment Number: TBD MTIP Amendment Number: JA19-05-JAN
<p>What is changing?</p>	<p>AMENDMENT ACTION: CANCELED PROJECT</p> <p>Each year TriMet receives a STP/STBG allocation from Metro in support of Transit Oriented Development (TOD) activities. Metro’s Transit-Oriented Development Program strategically invests to help more people live, work and shop in neighborhoods served by high-quality transit. Metro’s TOD program stimulates private investment by helping offset the higher costs of compact development. TOD program investments totaling \$16 million have leveraged more than \$697 million in private development activity across 45 completed TOD projects.</p> <p>Key 21126 is a duplicate project to Key 21262. TriMet obligated and received their FFY 2018 TOD funds through Key 21262. Key 21126 appears was added late during the 2018 MTIP when Key 21262 was inadvertently overlooked. During the FY 2018 End-of-Year Project Phase Slips Review, Key 21126 was identified as a duplicate. It is being removed from the MTIP now to avoid any possible double counting of STP find programming.</p> <div data-bbox="932 407 1386 1146" style="background-color: #f0f0f0; padding: 10px;"> <p>Program Accomplishments FY 2017-18 Total</p> <p>Trips 15,094 948,989 Transit-oriented development creates places for people to live and work near high quality transit. Each year, over 900,000 more travel trips are made by transit, rather than by car, as a result of TOD program supported projects.</p> <p>Residential Units 77 3,670 TOD projects increase housing affordability by increasing the supply of housing in areas with lower commuting costs. To date, the TOD program has supported construction of approximately 3,600 housing units. Of these, 781 are set aside for households earning less than the area medium income. Over 850 additional income-restricted units are planned or under construction.</p> <p>Commercial space 2,000 520,213 Developing retail, restaurants and offices in transit served areas enlivens neighborhoods and reduces commuting costs. Mixed-use TOD projects completed to date include 194,780 square feet of retail and 327,433 square feet of office and other commercial space.</p> <p>Acres protected 12 593 All of the TOD projects completed to date required only 59 acres of land compared to the 590 acres that would be needed to develop these projects in areas without transit. Compact development requires less taxpayer funded infrastructure to serve, reduces commuting costs, and helps preserve agricultural and natural areas.</p> </div>
<p>Additional Details:</p>	<p>There was insufficient time to complete a formal amendment during September 2018 and delete Key 21126 from the MTIP. The project had to be carried over into FY 2019 where it now can be deleted.</p>
<p>Why a Formal amendment is required?</p>	<p>Per the FHWA/FTA/ODOT/MPO STIP and MTIP Amendment Matrix, canceling a project from the MTIP requires a formal amendment.</p>
<p>Total Programmed Amount:</p>	<p>The total project programming amount increases from \$3,461,176 to \$0</p>
<p>Added Notes:</p>	<p>Metro Council approval is required to complete the project cancellation from the MTIP. Approval is expected to occur during the Council’s February 7, 2019 meeting.</p>

Note: The Amendment Matrix located on the next page 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
- 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 as well.
 - Programming determined to be reasonable of phase obligation timing and is consistent with project delivery schedule timing.

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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • FHWA project cost increase/decrease: <ul style="list-style-type: none"> • 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.

- 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 January 2019 Formal MTIP amendment will include the following:

<u>Action</u>	<u>Target Date</u>
• Initiate the required 30-day public notification process.....	January 2, 2019
• TPAC notification and approval recommendation.....	January 11, 2019
• JPACT approval and recommendation to Council.....	January 17, 2019*
• Completion of public notification process.....	January 31, 2019
• Metro Council approval.....	February 7, 2019**

Notes:

- * If any notable comments are received during the public comment period requiring follow-on discussions, they will be addressed by JPACT.
- ** This formal amendment is processing the ODOT projects concurrently with OTC required approval. ODOT projects that require OTC approval are scheduled for their January 17, 2019 meeting. The applicable projects are on the OTC consent calendar and are expected to be approved without issue. However, if OTC approval is not received, the applicable projects will be removed from the January 2019 Formal Amendment Bundle.

USDOT Approval Steps:

<u>Action</u>	<u>Target Date</u>
• Metro development of amendment narrative package	February 11, 2019
• Amendment bundle submission to ODOT for review.....	February 12, 2019
• Submission of the final amendment package to USDOT.....	February 12, 2019
• ODOT clarification and approval.....	Late February, 2019
• USDOT clarification and final amendment approval.....	Early to mid-March, 2019

ANALYSIS/INFORMATION

1. **Known Opposition:** None known at this time.
2. **Legal Antecedents:** Amends the 2018-2021 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 17-4817 on July 27, 2017 (For The Purpose of Adopting the Metropolitan Transportation Improvement Program for the Portland Metropolitan Area).
3. **Anticipated Effects:** Enables the projects to obligate and expend awarded federal funds.
4. **Metro Budget Impacts:** None to Metro

RECOMMENDED ACTION:

- TPAC recommends the approval of Resolution 19-4961.
- TPAC approval 1/11/2019.

Attachments

1. Project Location Maps
2. OTC Letters

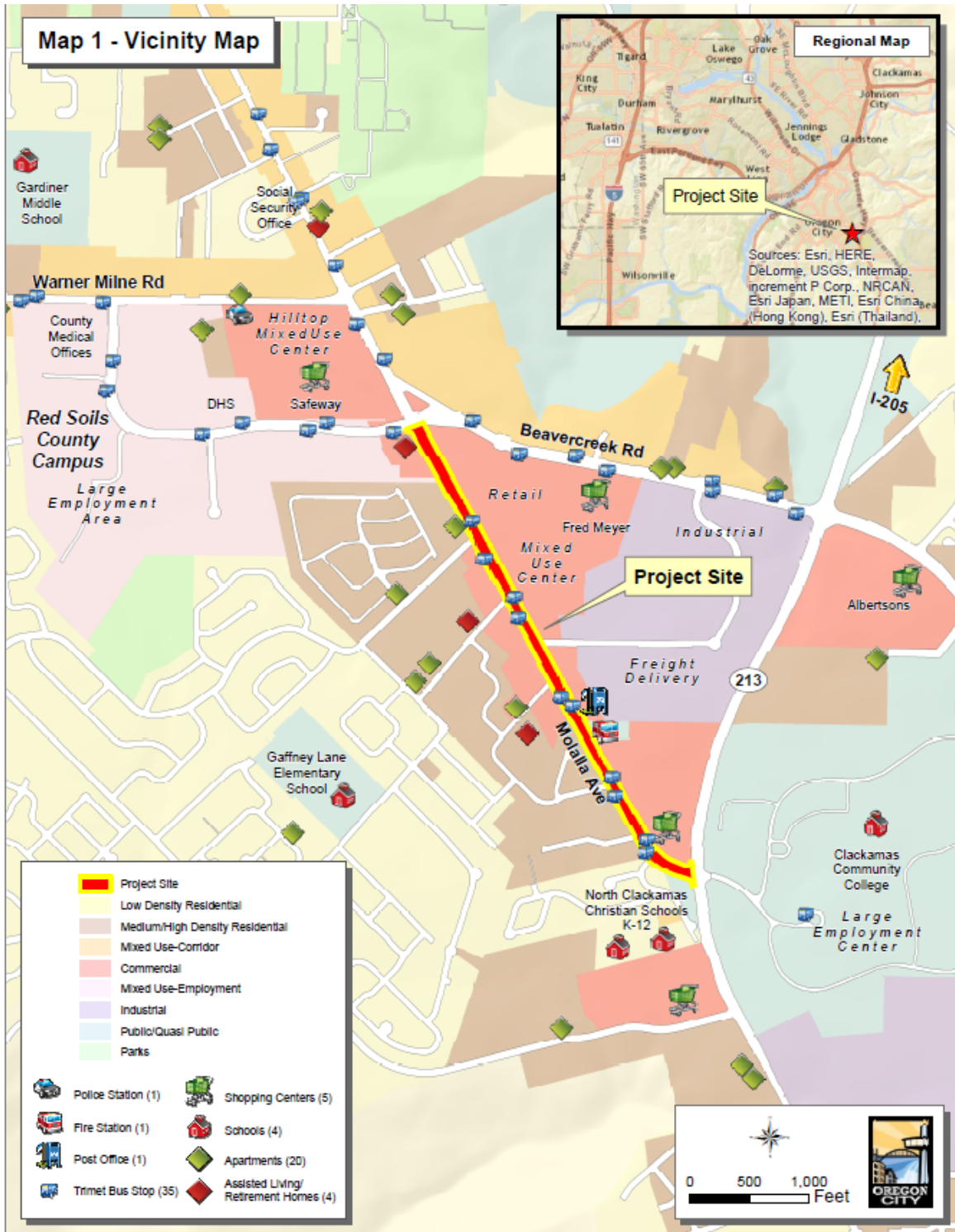
Date: Thursday, January 11, 2019
From: Ken Lobeck, Funding Programs Lead, 503-797-1785
Subject: Attachment 1 to the January 2019 MTIP Formal Amendment Staff Report – Project Location Maps

BACKGROUND

Available project location maps and OTC request letters are included in this attachment to the staff report for reference for their applicable projects. Maps and/or OTC letters are included for:

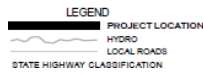
- Key 20810 – Molalla Ave: Beaver Creek Rd to OR213
- Key 20451- OR8 at River Rd & OR224 at Lake Rd
- Key 20454 - OR224 at Lake/Harmony
- Key 20507 - OR213 (82nd Ave) at Madison High School
- Key 20430 - I-5: Marine Dr - Fremont Bridge
- Key 20481 - I-405: Fremont (Willamette River) Bridge
- Key 20484 - SW Multnomah Blvd over I-5
- Key 20702 - OR99W SB Ramp to I-5 SB (Capitol Highway Interchange)
- Key 20465 - OR99W: Barbur Boulevard Northbound Connection Bridge
- Key 20298 - I-84: Fairview - Marine Drive

Key 20810
Molalla Ave: Beaver Creek Rd to OR213

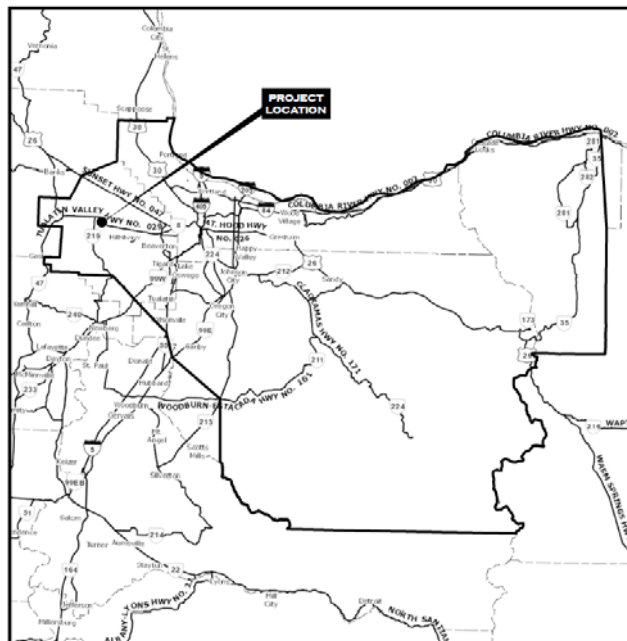


Key 20451
OR8 at River Rd & OR224 at Lake Rd

STIP PROJECT LOCATION
ODOT REGION 1



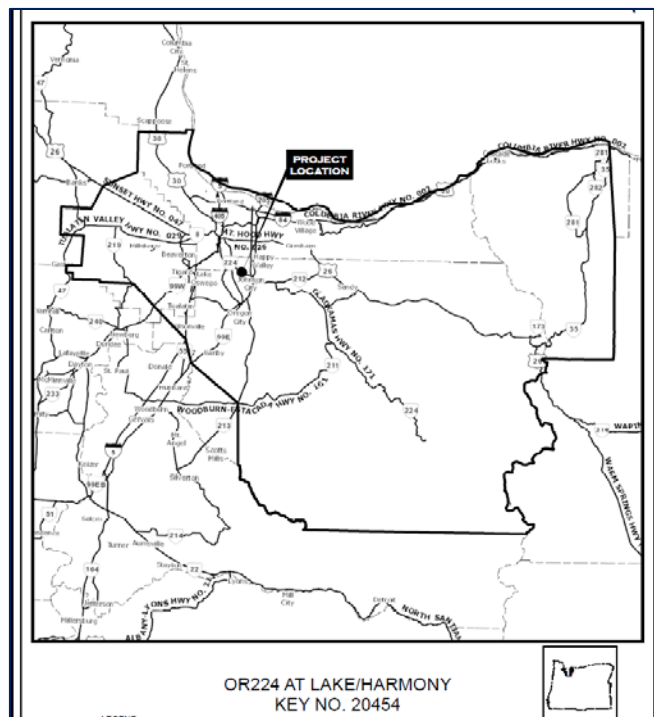
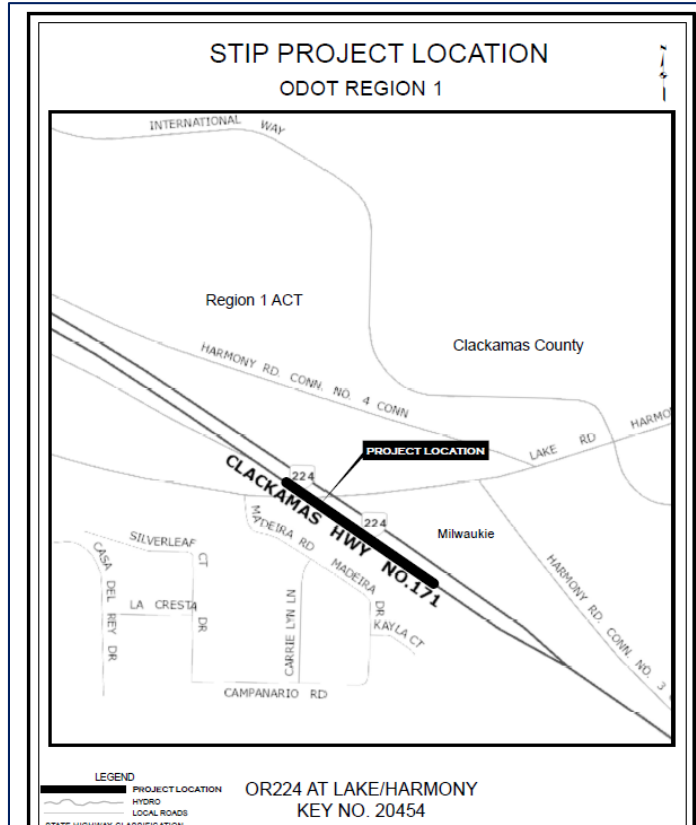
OR8 AT RIVER ROAD
KEY NO. 20451



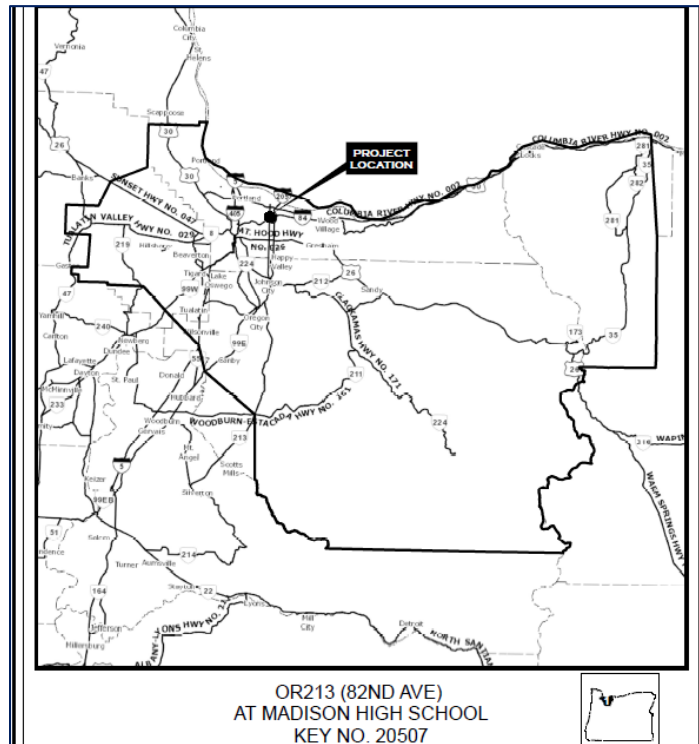
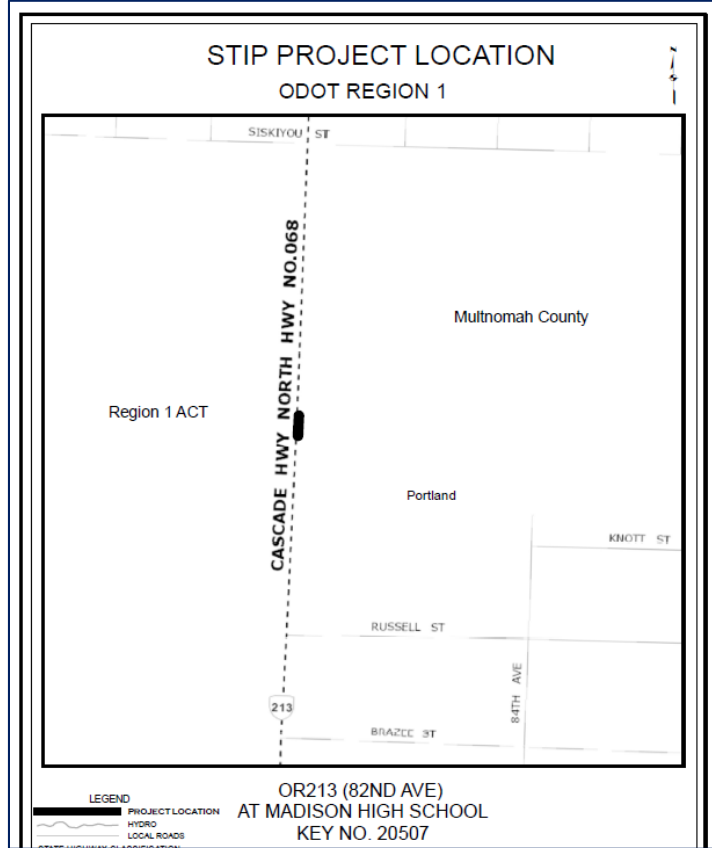
OR8 AT RIVER ROAD
KEY NO. 20451



Key 20454
OR224 at Lake/Harmony

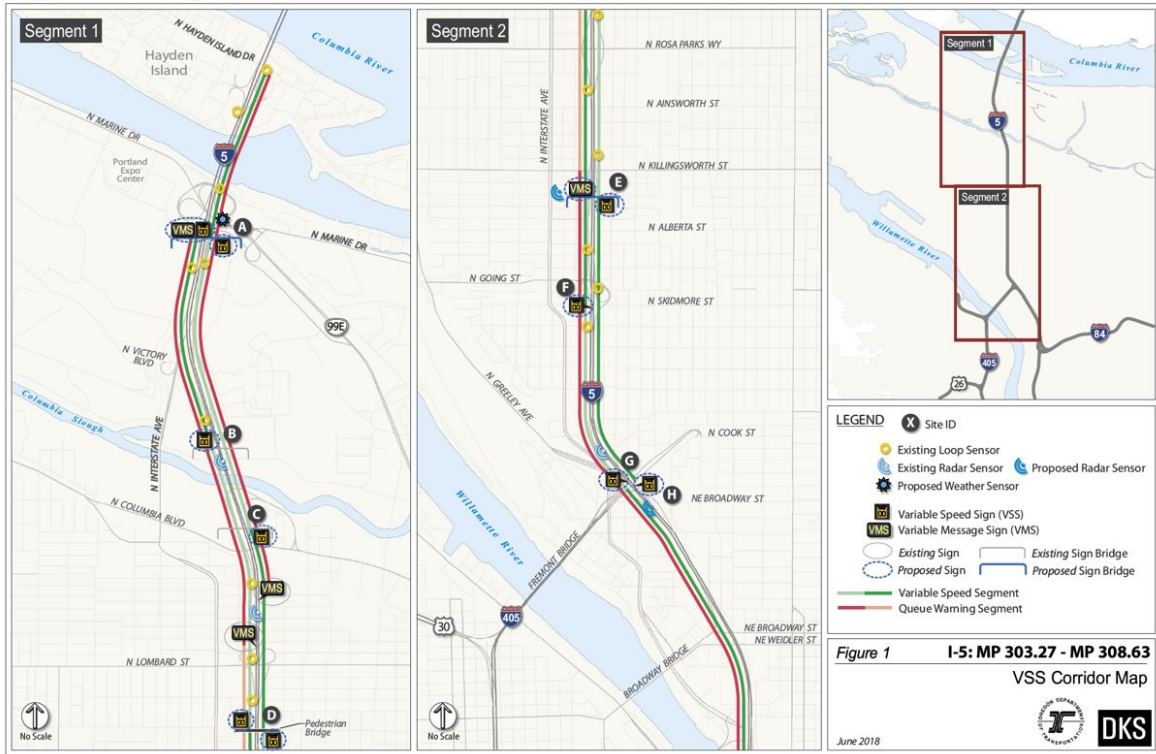


Key 20507
OR213 (82nd Ave) at Madison High School

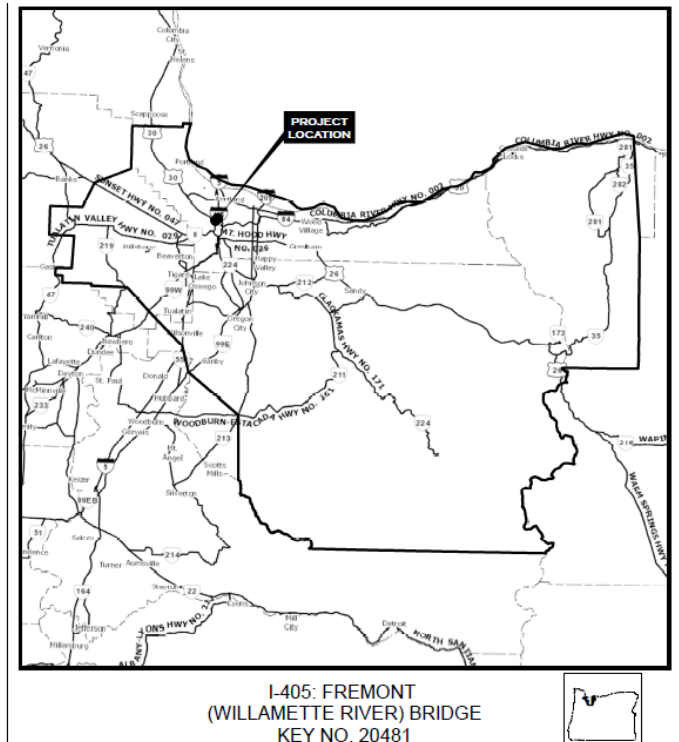
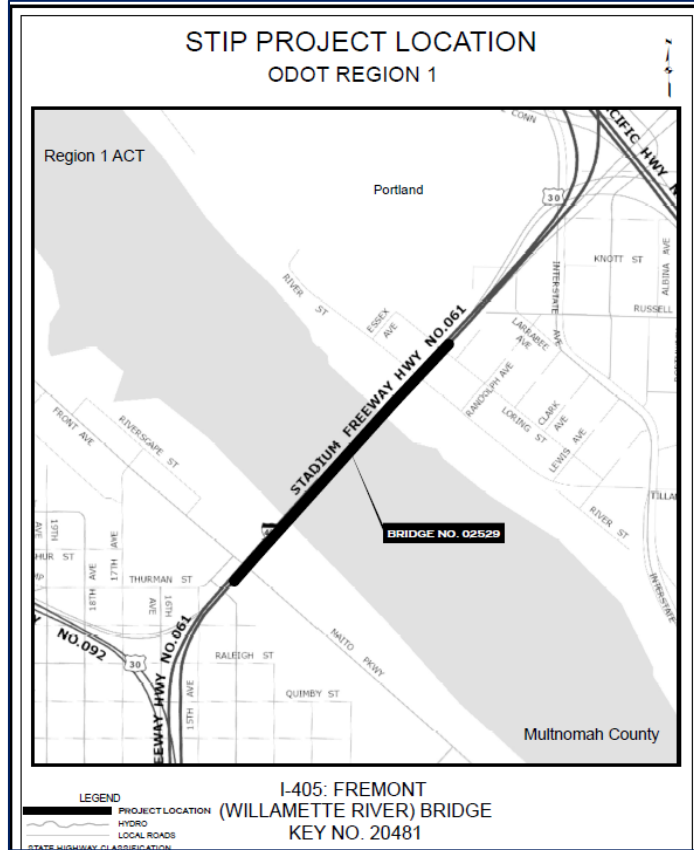


Key 20430
I-5: Marine Dr - Fremont Bridge

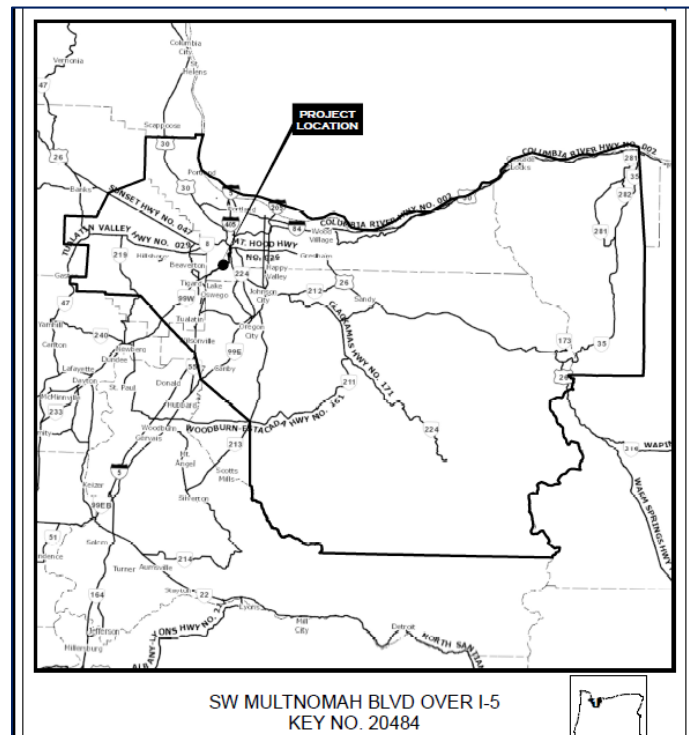
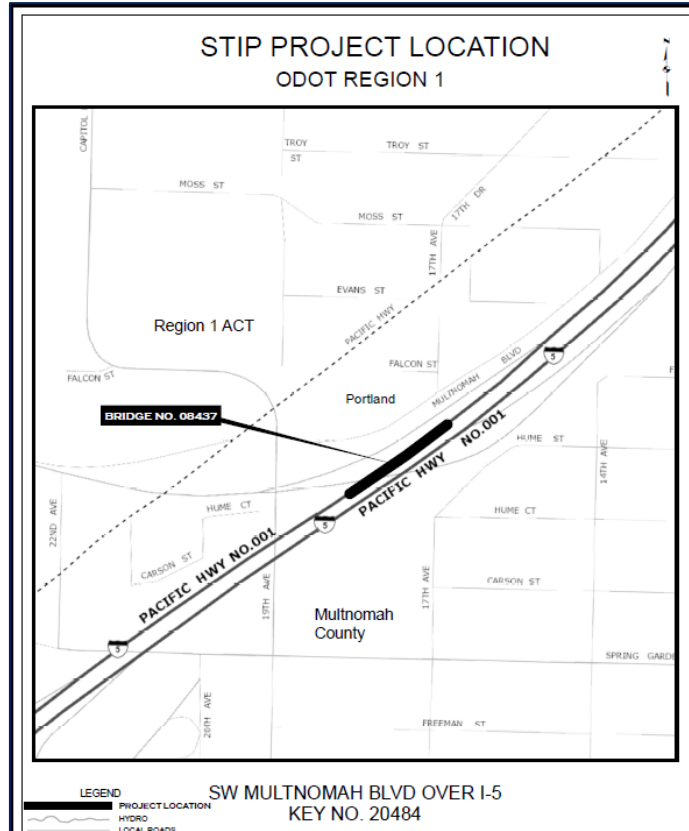
Figure 1. Project Area Overview



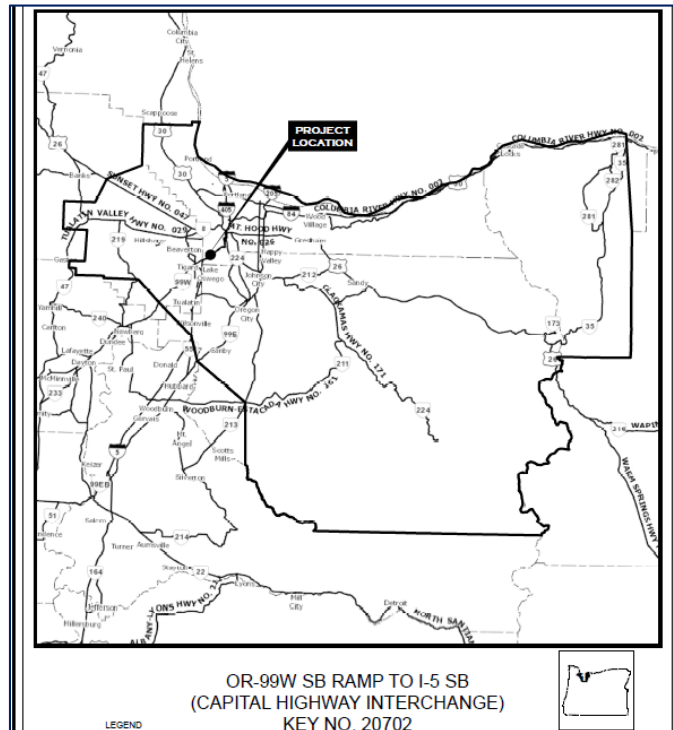
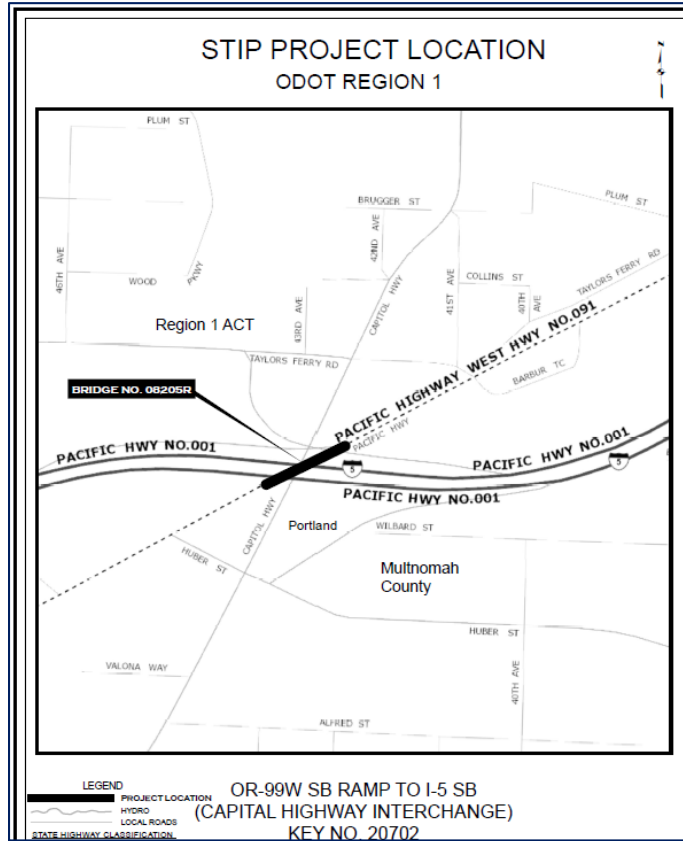
Key 20481
I-405: Fremont (Willamette River) Bridge



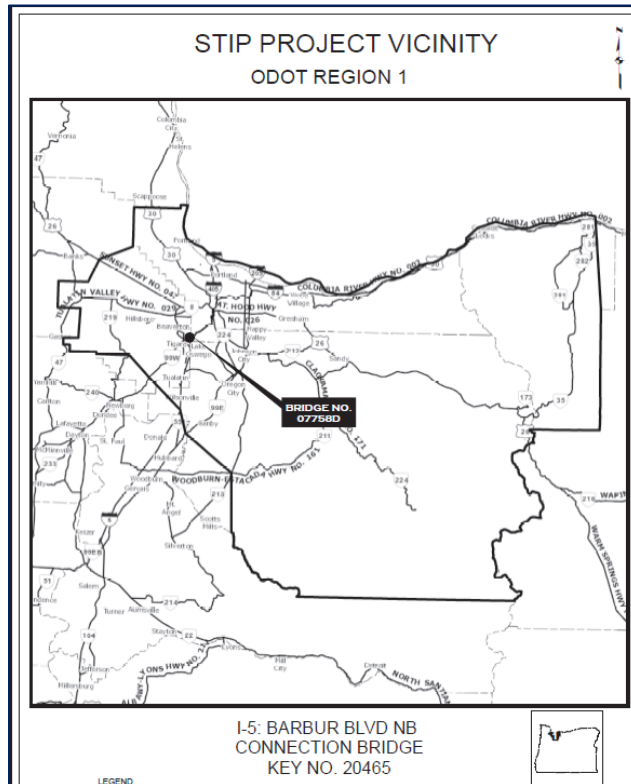
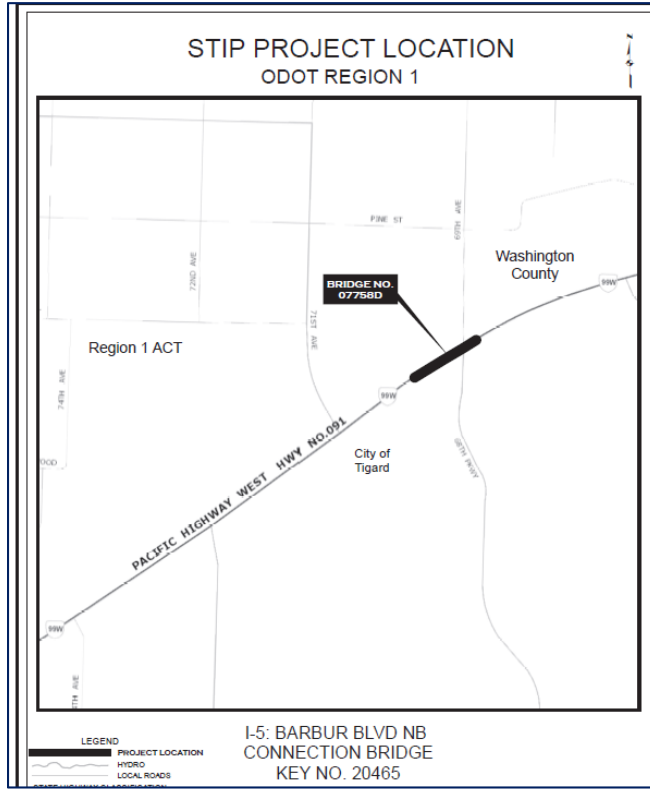
Key 20484
SW Multnomah Blvd over I-5



Key 20702 OR99W SB Ramp to I-5 SB (Capitol Highway Interchange)



Key 20465
OR99W: Barbur Boulevard Northbound Connection Bridge





Oregon

Kate Brown, Governor

Oregon Transportation Commission

Office of the Director, MS 11

355 Capitol St NE

Salem, OR 97301-3871

DATE: January 8, 2019

TO: Oregon Transportation Commission

FROM: Matthew L. Garrett
Director

SUBJECT: **Consent** – Amend the 2018-2021 Statewide Transportation Improvement Program (STIP) to increase funding and combine the *Interstate 5: Barbur Boulevard northbound connection bridge; the Southwest Multnomah Boulevard over Interstate 5, and the Oregon 99 West southbound ramp to Interstate 5 southbound (Capital Highway Interchange) projects.*

Requested Action:

Approve to amend the 2018-2021 Statewide Transportation Improvement Program (STIP) to increase funding and combine the *Interstate 5: Barbur Boulevard northbound connection bridge; the Southwest Multnomah Boulevard over Interstate 5, and the Oregon 99W southbound ramp to Interstate 5 southbound (Capital Highway Interchange) projects* located in Region 1. Funding will come from the removal of a bridge from the Interstate 84: Fairview to Marine Drive and Tooth Rock Tunnel project in Region 1 and the cancellation of the Interstate 84 eastbound over U.S. 395 (Emigrant Avenue Interchange) project located in Region 5.

The removal of the bridge and associated funding from the cancellation of the Interstate 84: Fairview to Marine Drive and Tooth Rock Tunnel project and the cancellation of the Interstate 84 eastbound over U.S. 395 (Emigrant Avenue Interchange) project frees \$2,492,178 to be redistributed. The Oregon Department of Transportation (ODOT) requests the following:

- Transfer \$828,692 to the Interstate 5: Barbur Boulevard northbound connection bridge project.
- Transfer \$567,800 to the Southwest Multnomah Boulevard over Interstate 5 project.
- Transfer \$171,308 of the remaining funds from the Interstate 84: Fairview to Marine Drive and Tooth Rock Tunnel project and \$756,186 from the remainder of the cancelled project in region 5 to the Oregon 99 West southbound ramp to Interstate 5 southbound (Capital Highway Interchange).
- Transfer the remaining \$168,192 to the state bridge program federal fiscal year 2019.
- In addition to the above project redistributions an additional \$400,000 from the bridge overpass protective screening funds, federal fiscal years 2019 and 2020 is transferred to the Southwest Multnomah Boulevard over Interstate 5 project.

The Interstate 5: Barbur Boulevard northbound connection bridge, the Southwest Multnomah Boulevard over Interstate 5, and the Interstate 5 southbound ramp to Interstate 5 southbound (Capital Highway Interchange) projects are to be combined for delivery as one consultant contract for design.

Combining for design will allow ODOT to develop one bid package for similar work in close geographic proximity and will save on administrative costs. In addition, one contract will ensure the design considers possible negative impacts to the travelling public and provides a schedule for construction that is most convenient for delivery of all planned work activities and minimizes traveler impacts.

Project Funding Summary:

Project	Current	Proposed
I-5: Barbur Blvd NB connection bridge	\$1,669,975	\$2,498,667
SW Multnomah Blvd over I-5	\$1,571,000	\$2,538,800
OR-99W SB Ramp to I-5 SB (Capital Highway Interchange)	\$408,000	\$1,335,494
I-84: Fairview – Marine Drive & Tooth Rock Tunnel	\$5,792,148	\$4,792,148
I-84 eastbound over US395 (Emigrant Avenue Interchange)	\$1,512,500	\$20,322
Bridge overpass protective screening FFY 2019 and 2020	\$814,916	\$414,916
State bridge program FFY 2019	\$4,813,386	\$4,981,578
TOTAL	\$16,581,925	\$16,581,925

Projects to be increased and combined:

I-5: Barbur Blvd NB connection bridge (KN 20465)			
		COST	
PHASE	YEAR	Current	Proposed
Preliminary Engineering	2019	\$136,000	\$343,720
Right of Way	N/A	\$0	\$0
Utility Relocation	N/A	\$0	\$0
Construction	2020	\$1,533,975	\$2,154,947
TOTAL		\$1,669,975	\$2,498,667

SW Multnomah Blvd over I-5 (KN 20484)			
		COST	
PHASE	YEAR	Current	Proposed
Preliminary Engineering	2017	\$213,000	\$523,900
Right of Way	N/A	\$0	\$0
Utility Relocation	N/A	\$0	\$0
Construction	2020	\$1,358,000	\$2,014,900
TOTAL		\$1,571,000	\$2,538,800

OR-99W SB Ramp to I-5 SB (Capital Highway Interchange) (KN 20702)			
		COST	
PHASE	YEAR	Current	Proposed

Preliminary Engineering	2019	\$40,000	\$347,500
Right of Way	N/A	\$0	\$0
Utility Relocation	N/A	\$0	\$0
Construction	2020	\$368,000	\$987,994
TOTAL		\$408,000	\$1,335,494

Project to be decreased:

I-84: Fairview – Marine Drive & Tooth Rock Tunnel (KN20298)			
		COST	
PHASE	YEAR	Current	Proposed
Preliminary Engineering	2019	\$751,930	\$401,930
Right of Way	2020	\$2,488	\$2,488
Utility Relocation	N/A	\$0	\$0
Construction	2021	\$5,037,730	\$4,387,730
TOTAL		\$5,792,148	\$4,792,148

Project to be cancelled:

I-84 eastbound over US395 (Emigrant Avenue Interchange) (KN20540)			
		COST	
PHASE	YEAR	Current	Proposed
Preliminary Engineering	2018	\$300,000	\$20,322
Right of Way	2019	\$50,000	\$0
Utility Relocation	2019	\$25,000	\$0
Construction	2020	\$1,137,500	\$0
TOTAL		\$1,512,500	\$20,322

Background – projects to be increased:

Interstate 5: Barbur Boulevard northbound connection bridge

The Oregon 99 West (Barbur Boulevard) northbound connection bridge over Interstate 5 was built in 1985 and is in satisfactory condition. The portions of the bridge directly over Interstate 5 have painted girders to protect the steel from corrosion. The original paint system is at the end of its service life, with moderate surface corrosion on the lower portions of the girders, and isolated areas where the corrosion has begun to reduce the thickness of the steel. The Interstate 5 Barbur Boulevard northbound connection bridge project will replace corroded fasteners, remove the current paint and corrosion, and then apply new paint.

The estimate for preliminary engineering was based on the entire design being done internally. The design of the paint portion of the project will be done by ODOT’s Bridge Preservation Unit. The remainder of the project will be designed by a consultant due to ODOT resources being committed to the delivery of other projects. The construction costs have increased due to bid prices that are higher than were accounted for when the project was initially programmed, and in addition the costs of the

containment for paint removal and paint application, and the disposal of hazardous waste was not included in the original project estimate.

If this request is not approved, there will not be enough funding to complete the programmed work, and the project will be cancelled. The steel girders will continue to corrode requiring costly maintenance and may require strengthening if the project is delayed for a considerable time and could lead to significant mobility impacts.

Southwest Multnomah Boulevard over Interstate 5

The Southwest Multnomah Boulevard Bridge over Interstate 5 is a 404 foot long bridge built in 1959 that is in fair condition. The Southwest Multnomah Boulevard over Interstate 5 project will address the extensive deck cracking with a structural concrete overlay, replace or repair leaking joints, and upgrade the bridge rails so that they meet modern safety standards. Overpass protective screening will also be added to deter objects from being thrown from the overpass onto Interstate 5.

The estimate for preliminary engineering was based on the design being done internally. Due to ODOT resources being committed to the delivery of other projects this project will be designed by a consultant. As a result, the engineering costs have increased. Construction costs have increased by \$400,000 to account for the late addition of overpass protective screening and moving the delivery date to 2020.

If this request is not approved, there will not be enough funding to complete the programmed work, and the project will be cancelled. The deck will continue to deteriorate and will require more extensive preparation when the structural overlay is eventually placed. The bridge rails will not meet modern safety standards and this bridge will continue to lack protective screening.

Oregon 99 West southbound ramp to Interstate 5 southbound (Capital Highway Interchange)

The Oregon 99 West southbound ramp to Interstate 5 southbound (Capital Highway Interchange) is a 270 foot long bridge built in 1959 that is in fair condition. The project will address the top layer of the concrete deck that has required patches where pieces have separated, with a structural concrete overlay. The project will also replace or repair leaking joints, clean and paint steel bearings that are corroded, replace the asphalt near the bridge approaches that is failing, and replace deficient Americans with Disabilities Act (ADA) ramps that are within the project limits.

The estimate for preliminary engineering was based on the design being done internally, and did not fully account for roadway, traffic control, and project management costs. Since this project will be designed by a consultant, the engineering costs have increased. The construction costs have also increased to account for the addition of the cleaning and painting of the steel bearings, replacement of deficient ADA ramps, and for inflation.

If this request is not approved, there will not be enough funding to complete the programmed work, and the project will be cancelled. The deck will continue to deteriorate and will require more extensive preparation when the structural overlay is eventually placed. The steel bearings will continue to

corrode, and may require repairs prior to painting. The deficient ADA ramps will remain in service until they are addressed by another project.

Background – projects to be canceled:

Interstate 84: Fairview to Marine Drive and Tooth Rock Tunnel

The Interstate 84 eastbound McCord Creek Bridge was built in 1962. The deck is in poor condition due to cracking, rutting, exposed reinforcement, and pieces of concrete up to three feet in diameter that have separated from the deck. The deck is only 6 ½ inches thick, and the top 1 ½ inches is contaminated with chlorides due to the use of deicing products. Also, the transition from the bridge approach pavement to the bridge itself is not smooth, causing a noticeable impact for drivers. This bridge has required extensive maintenance work to repair the deck and to minimize the impact. A deck overlay for this bridge was added with funding from House Bill 2017.

While the McCord Creek Bridge is within the limits of this Interstate Maintenance Preservation Project, the extensive work needed to address the poor condition of the deck is not really compatible with the other project work. Grinding the approach pavement to address the impact loading will leave a layer of pavement that is too thin to be structurally sound, and rebuilding the approach pavement is also beyond the scope of the other work in the project. Based on the nature of the work required being much more extensive than the other project work, the McCord Creek Bridge should be removed from this project.

The McCord Creek Bridge is being considered for the 2022-2024 STIP and is the top priority bridge project for Region 1. It is within the limits of the Interstate 84: Multnomah Falls – Cascade Locks Interstate Maintenance Preservation Project. The scoping effort will determine the best solution for this bridge, ranging from extensive deck rehabilitation, deck replacement, or perhaps bridge replacement. This bridge will eventually need a seismic retrofit, and it may be most economical to simply replace the bridge instead of doing extensive deck work now, and extensive seismic related work later.

If this request is not approved, the deck will receive an overlay. The preparation required to remove the concrete that is contaminated with chlorides could go beyond the top 1 ½ inches. This will increase project costs as change orders are processed. Also, the issue of the impact that drivers experience will not be addressed, since a rebuilding of the approaches is beyond the scope of other project work.

Interstate 84 eastbound over U.S. 395 (Emigrant Avenue Interchange)

The Interstate 84 eastbound over U.S. 395 (Emigrant Avenue Interchange) bridge was built in 1967 and is in satisfactory condition. This is the only structure over the Pendleton-John Day Highway, and the clearance in the southbound direction limits load height to 15 feet, 9 inches. This project was programmed to lower the roadway under this bridge to improve vertical clearance. Construction funding was added through HB 2017.

As the design began to lower the roadway, several concerns were identified. First, the slope of U.S. 395 is already at 6.24%. The maximum allowable slope is 7%. During icy conditions, there are times when trucks have great difficulty with the current slope. Lowering the road would increase the slope.

Second, there is another project in the STIP, Interstate 84/U.S. 395B Interchange Improvements to Pendleton that will consider the entire interchange. Lowering the roadway at this interchange and making associated changes to retaining walls and drainage would complicate the design of the interchange improvements and may conflict with the desired outcome. Finally, there is a viable detour available so that oversized loads can use U.S. 395 and not have to pass under this interchange. Based on these factors, ODOT's Region 5 and Bridge agree that this project should be cancelled.

If this request is not approved, the projects will continue as programmed. However, the resulting vertical clearance gains will be offset by the inability of trucks to use U.S. 395 at this location during icy conditions due to an even steeper grade. Also, changes made to the interchange by this project may complicate the design effort of the interchange improvement project, with the potential of having to alter or remove portions of the vertical clearance project.

Options:

With approval, the projects can continue to move forward as planned and the Interstate 84 eastbound over U.S. 395 project will be cancelled.

Without approval, the projects will not have sufficient funds to move forward and each project will be cancelled.

Attachments:

- Attachment 1 - Location and Vicinity Maps

Copies to:

Jerri Bohard	Travis Brouwer	Tom Fuller	Bob Gebhardt
McGregor Lynde	Jeff Flowers	Rian Windsheimer	Craig Sipp
Amanda Sandvig	Arlene Santana	Gabi Garcia	Talena Adams
Kris Strickler	Jane Goode	Bert Hartman	Rachelle Nelson
Cooper Brown			



Oregon

Kate Brown, Governor

Oregon Transportation Commission

Office of the Director, MS 11

355 Capitol St NE

Salem, OR 97301-3871

DATE: January 8, 2019

TO: Oregon Transportation Commission

FROM: Matthew L. Garrett
Director

SUBJECT: **Consent** – Amend the 2018-2021 Statewide Transportation Improvement Program (STIP) to add funds to the *Major Bridge Maintenance, 2019 program*.

Requested Action:

Approve to amend the 2018-2021 Statewide Transportation Improvement Program (STIP) to add funds to the *Major Bridge Maintenance, 2019 program*. The primary purpose of the additional funding is to strengthen major bridges in Region 1. The total estimated cost for these additional projects is \$10,000,000.

Funding for this project will come from the state bridge program funds in the 2018-2021 STIP by reducing the portion of the Fremont Bridge that will be painted in the Interstate 405: Fremont (Willamette River) Bridge project.

STIP Amendment Funding Summary

Project	Current Funding	Proposed Funding
Major bridge maintenance FFY19 (KN 20077)	\$10,000,0000	\$20,000,000
I-405: Fremont (Willamette River) Bridge (KN 20481)	\$27,794,616	\$17,794,616
TOTAL	\$37,794,616	\$37,794,616

Project to increase funding:

Major bridge maintenance FFY19 (KN 20077)			
Phase	Year	Cost	
		Current	Proposed
Preliminary Engineering	N/A	\$0	\$0
Right of Way	N/A	\$0	\$0
Utility Relocation	N/A	\$0	\$0
Construction	2019	\$10,000,000	\$20,000,000
TOTAL		\$10,000,000	\$20,000,000

Project to decrease funding:

I-405: Fremont (Willamette River) Bridge (KN 20481)			
Phase	Year	Cost	
		Current	Proposed
Preliminary Engineering	2019	\$940,358	\$940,358
Right of Way	N/A	\$0	\$0
Utility Relocation	N/A	\$0	\$0
Construction	2021	\$26,854,258	\$16,854,258
TOTAL		\$27,794,616	\$17,794,616

Background:

In 1990, the State of Oregon established a major bridge maintenance (MBM) program, to specifically address major and emergency bridge repairs that were not selected in the STIP or other funding sources. This type of work is generally determined to be of high enough priority that waiting for the STIP or other funding source is not an acceptable solution. This is also identified as work the district maintenance program normally wouldn't be able to accomplish due to maintenance crew budget or staff limits, and to address needs that were not anticipated. One use of MBM funding is to strengthen bridges to address concerns identified through the inspection and load rating processes.

The Bridge Engineering Section is in the final phase of completing initial load ratings for every highway bridge. The analysis is being accomplished with a combination of ODOT engineers and consultants. While a basic load rating analysis is sufficient for most bridges, advanced analysis is used for larger, more complicated structures. Advanced analysis can also be used for bridges that show the need for strengthening based on the basic analysis, but do not show signs of distress.

There are three major bridges in Portland that are currently having advanced analysis. While the advanced analysis may reduce the amount of strengthening that is required for these bridges to remain in unrestricted service, some strengthening will be required when the analysis is completed. This is primarily due to the differences in specifications that were used to design these bridges when compared to current specifications that are used in load rating. Loading has also changed since these bridges were designed, and there is deterioration after decades of service. The strengthening of these bridges will be done so that there is adequate load capacity for the vehicles that are using the bridges. If there were an immediate safety concern, the loads would be restricted or the bridges closed until repairs could be completed.

Below is the list of major bridges in Portland, with a brief description of the load rating issue:

Willamette River, Interstate 5 (Marquam) – The steel girders that support the upper deck needs to have bracing added to satisfy the modern specifications.

Willamette River, U.S. 30 Bypass (St. Johns) – There are portions of the truss that require bracing to satisfy the modern specifications, and also some connection plates that may require strengthening.

Willamette River, Oregon 99 West (Steel) - This bridge is owned by the Union Pacific Railroad. There is a lease agreement with ODOT and TriMet for highway traffic and light rail. This is a unique bridge and the primary issue is the need to coordinate with the railroad to determine the actual loading due to freight trains.

In addition to these major bridges in Region 1 that are very important from a statewide perspective, there are ten bridges throughout the state that are also in the final stages of advanced analysis. These bridges may also require strengthening. Coordination has taken place with regions so resources can be made available to design the strengthening and to have the strengthening completed through contract or with district bridge maintenance crews.

Options:

With approval, the \$10 million that is currently programmed for MBM can be used to address safety, preservation, and strengthening needs for bridges statewide.

Without approval, the funding for strengthening these bridges will come from the existing MBM program for 2019. This will significantly reduce the ability of that program to address other safety, preservation, and strengthening needs. The MBM program was increased from \$8.2 million to \$10 million starting in 2019, in recognition of the need for bridge maintenance, and the effectiveness of the program.

Attachments:

- Attachment 1 – Location and Vicinity Maps

Copies to:

Jerri Bohard	Travis Brouwer	Tom Fuller	Kristopher Strickler
Bob Gebhardt	McGregor Lynde	Rian Windsheimer	Gabi Garcia
Talena Adams	Arlene Santana	Amanda Sandvig	Jeff Flowers
Bert Hartman	Rachelle Nelson	Cooper Brown	

4.2 Consideration of November 15, 2018 Minutes

Consent Agenda

Joint Policy Advisory Committee on Transportation
Thursday, January 17, 2018
Metro Regional Center, Council Chamber



600 NE Grand Ave.
Portland, OR 97232-2736
oregonmetro.gov

JOINT POLICY ADVISORY COMMITTEE ON TRANSPORTATION (JPACT)
Meeting Minutes
November 15, 2018
Metro Regional Center, Council Chamber

MEMBERS PRESENT

Shirley Craddick
Nina DeConcini
Craig Dirksen (*Chair*)
Tim Knapp
Anne McEnerny-Ogle
Roy Rogers
Bob Stacey
Chloe Eudaly
Carley Francis

AFFILIATION

Metro Council
Oregon Department of Environmental Quality (ODEQ)
Metro Council
City of Wilsonville
City of Vancouver
Washington County
Metro Council
City of Portland
Washington State Department of Transportation

MEMBERS EXCUSED

Jeanne Stewart
Jessica Vega Pederson
Paul Savas

AFFILIATION

Clark County
Multnomah County
Clackamas County

ALTERNATES PRESENT

Emerald Bogue
Jef Dalin
Mark Gamba
Mandy Putney
Bernie Bottomly

AFFILIATION

Port of Portland
City of Wood Village
City of Milwaukie
Oregon Department of Transportation
TriMet

OTHERS PRESENT: Steve Witter, Dave Unsowrth, Inessa Vitko, Kelly Betteridge, Tom Mills, Doug Kelsey, Lisa Wilson, and Todd Juhasz

STAFF: Margi Bradway, Nathan Sykes, Ernest Hayes, Jamie Snook, Malu Wilkinson, Chris Ford, Sara Farrokhzadian, Sima Anekonda

1. CALL TO ORDER, DECLARATION OF A QUORUM & INTRODUCTIONS

JPACT Chair Craig Dirksen called the meeting to order at 7:33 AM. He asked members, alternates and meeting attendees to introduce themselves.

2. CITIZEN COMMUNICATION ON JPACT ITEMS

There were none.

3. UPDATES FROM THE CHAIR AND COMMITTEE MEMBERS

Chair Dirksen stated that the December JPACT meeting was cancelled. He said that the January 17, 2019 JPACT meeting would provide an overview of 2019 JPACT discussion items as well as consider transportation-related issues that may be considered for the next legislative session.

4. CONSENT AGENDA

MOTION: Commissioner Roy Rogers moved and Councilor Bob Stacey seconded to approve the consent agenda.

ACTION: With all in favor, the motion passed.

5. ACTION ITEMS

5.1 Southwest Corridor LPA – Recommendation to Metro Council

Chair Dirksen discussed his involvement in identifying a transit solution for the Southwest Corridor. He summarized the role of light rail and thanked committee members and community members for their commitment to developing a preferred alternative. He then introduced Mr. Chris Ford and Ms. Malu Wilkinson from Metro.

Key elements of the presentation included:

Mr. Chris Ford stated that Metro identified the Southwest Corridor and the Powell Division Corridor as a priority for transit investment. He explained that the proposed project would include the following: an extension of the Green line from PSU, a 12 mile extension, and provide 43,000 rides per day after 10 years. He added that the project would also provide transit through OHSU, Hillsdale, Multnomah Village, PCC, Tigard, and Tualatin.

Mr. Ford articulated that one of the desired outcomes for the SW Corridor project was to serve the 2040 Growth Concept as well as consider how outputs would be invested. He stated that the Metro region was unique because land use planning and transportation worked together. He stated that it was expected that the number of residents in the SW Corridor would increase by 70,000 by 2035. He asked JPACT to consider how to cope that level of growth while also maintaining adequate level of transportation services. He emphasized that transportation investments were crucial in responding to this amount of growth. Mr. Ford mentioned that the SW Corridor was a place of work and explained that a vast majority of people who worked there, commuted from other cities. He then recalled that 93% of workers in Tualatin live outside of the city. He stated that that there were many jobs in Tualatin, Tigard and Beaverton which would add to congestion. Mr. Ford highlighted that the SW Corridor Plan would build light rail and other projects to help workers commute in a timely manner. Mr. Ford noted that projection showed that by 2035, there would be more than 255,000 people working in the corridor.

Mr. Ford reminded JPACT that Metro passed a bond measure related to housing and that TriMet made a commitment towards housing development. He explained that Portland and Tigard developed an Equitable Housing project together which folded into the overall SW Equitable Development Strategy. He explained that the overall strategy would include actions to support housing choices along with job creation, small business support, and workforce development. Mr. Ford then highlighted the Immigrant and Refugee Community Organization's partnership with OHSU for job training to move qualifying SWC residents from lower-wage, lower skilled jobs to middle skill health care roles. He recognized that the Equitable Development Strategy was an ongoing process.

Mr. Ford explained that the project's benefits would be expressed through ridership during afternoon hours. He explained that the SW Corridor provided community opportunities and highlighted jobs located in Portland, Tigard, and Tualatin. He stated that the SW Corridor would act as a link between Portland, Tigard, and Tualatin. He stated that Barbur Boulevard did not have sidewalks and yet it was the main connection in that area. Mr. Ford detailed that Barbur Boulevard did not adequately serve the community and emphasized the need to rebuild the infrastructure.

Mr. Ford recalled that planning efforts began in 2011 with land use and that work was directed by a Steering Committee. He displayed a map which depicted the SW Corridor and clarified how it connected with the preferred alternative. Mr. Ford emphasized that the SW Corridor was a revolutionary concept and described that the plan utilized public involvement to ensure diverse voices were included. He added that the Steering Committee was appointed by the Metro Council and outlined what areas needed to be linked to one another. Mr. Ford explained that the committee met monthly to learn about the plan's technical aspect and planning trade-offs. He highlighted that the committee voiced support for the proposed alternative then continued to detail aspects of the public review process. He added that certain public engagement meetings were hosted in both Spanish and English and allowed participants to provide testimony. He stated that testimony was received immediately to ensure those individuals were heard.

Mr. Ford stated that major decisions considered tunnels, BRT, or light rail. He then stated that the Preferred Alternative recommended by the SW Corridor Steering Committee was based on purpose and need, draft EIS, public and agency input, and FTA rating criteria. Mr. Ford highlighted the following improvements that SW Corridor plan would make to Inner Portland: an extension of PCC to South Portland onto Barbur Boulevard, a connection to Marquam Hill, shared transit ways, replaced Newbury and Vermont viaducts, continuous bike lanes and sidewalks on Barbur, and separate Ross Island Bridgehead project. He then listed improvements to Outer Portland would include another shuttle connection to PCC Sylvania, a Barbur to Barbur transit center, I-5 crossings, and auto lanes on Barbur.

Mr. Ford described changes that would take place in Tigard and Tualatin. He stated that there would be a cross under Barbur and 99W, alignment and station of Hall Boulevard, a Hunziker O and M facility, and a terminus at Bridgeport. Mr. Ford stated that the plan would require immense inter-agency cooperation.

Mr. Ford outlined next steps for the plan. He explained that in 2019, SW Corridor would enter into project development which included a new Steering Committee, public meetings and design workshops, updated designs, continued work with SWEDS, and a complete

environmental overview. He clarified that the project would not receive federal funds until 2022 and would maintain itself until 2027. Mr. Ford highlighted the overall LRT schedule and stated the SW Corridor project collaborated with partners.

Mr. Ford requested action from JPACT.

Member discussion included:

- Councilor Stacey commented on the length of the project and stated that this project had been decades in the making. He thanked staff for their commitment to community engagement and expressed excitement over TriMet's management of a new steering committee. He highlighted the desire to protect existing businesses. He spoke to the investments made by Tigard, Portland, and Metro staff in the Equitable Development Strategy were realized by keeping businesses going and to protect the affordable housing supply. Councilor Stacey also expressed that the \$650 million dedicated to affordable housing needed to be utilized for this corridor.
- Commissioner Roy Rogers expressed gratitude for the efforts being made on the project and praised staff for their involvement. He stated that Mr. Ford along with the TriMet staff had done great work on this matter. He added that there was still more work to be completed.
- Commissioner Chloe Eudaly congratulated the staff that worked on this project. She announced that the Portland City Council unanimously approved the LPA with no meaningful changes made to it. She stated that she was pleased to support this and thanked Councilor Stacey for his work on affordable housing. She stated that affordable housing was essential to this project in order to protect people from gentrification and displacement. She added that she looked forward to being on the SW Corridor Steering Committee.
- Ms. Mandy Putney passed out a letter in support of the LPA and Barbur Boulevard transfer. She stated that ODOT was an active participant and supported the project moving forward.
- Mr. Bottomly echoed the comments that were already made and thanked Chair Dirksen for his leadership and Councilor Stacey for his contribution. He then recognized various staff members who aided in the development of this project. He stated that this was a complicated project which required an immense amount of effort. He thanked Commissioner Eudaly, stating that she had already left her imprint on the project by incorporating affordable housing into the design. He stated that a milestone had been reached then summarized the project's planning process. He added that there was still more work to be accomplished. He thanked TriMet for taking the lead on this project. He described the ways in which the project would rebuild infrastructure, highlighting the construction of store sewers Barbur Boulevard. He mentioned that the project would be complicated and costly and emphasized that this project would rebuild a whole quadrant of the city. Mr. Bottomly stated that there was a competitive process at the federal level.
- Councilor Craddick thanked everyone that worked on this project. She was impressed with how this project had evolved over the years. She recognized that an entire community was involved in an effort to rebuild an entire portion of the City. Councilor Craddick added that trains were becoming more crowded and that transit was the best way to travel.

- Mayor Knapp announced that cities of Clackamas County supported this project. He discussed the challenges of not having transit connection from Bridgeport to Tualatin, stating that it had a negative impact on workers and other commuters. Chair Dirksen responded to Mayor Knapp and mentioned that one of the outcomes of the SW Corridor plan was to identify the need for transit between Sherwood and Tualatin. He said that it resulted in a new transit line that runs from Sherwood to the West Station in downtown Tualatin. Chair Dirksen then stated that when this project was completed, the line would then be extended to the terminus at Bridgeport Village. Mayor Knapp stated that Bridgeport was extremely congested then asked where drivers would park after exiting I-5. Chair Dirksen clarified the intended location of the station was near an existing park and ride and transfer station. Chair Dirksen added the station's design was still undergoing consideration to ensure it had minimal impact on existing businesses in the area. Mr. Bottomly reported that the purposed park and ride at Bridgeport would provide 900 spaces and noted that there was opportunity for increased bus service. Mayor Knapp remarked that Cities of Clackamas County were not being well served by public transportation and detailed methods to better serve this community. Mayor Knapp stated that transit lines needed to be extended beyond Bridgeport in order to connect with other transit systems in the metropolitan area. Chair Dirksen referenced the plan's future endeavors.

MOTION: Commissioner Roy Rogers moved, and Mayor Tim Knapp seconded, to recommend adoption of Resolution 18-4915 to the Metro Council

ACTION: The motion passed with all in favor.

6. INFORMATION/DISCUSSION ITEMS

6.1 State Transit Fund Update

Key elements of the presentation included:

Mr. Tom Mills stated that the HB 2017 requirements went into effect as of July, 2018 and added that these funds would accessed in April, 2019. He explained that the State of Oregon had requirements on how funding should be spent. He said that plan needed to include description of amounts used for the follow: increased frequency to low-income areas, natural gas or electric buses, fare reduction for low-income, expansion of bus routes and service to low-income areas, improved connections inside and outside districts, reduced fragmentation of service, and minimum of 1% of funding for student transportation.

Mr. Mills stated that a diverse Transit Advisory Committee was created and mentioned Councilor Bob Stacey's and Commissioner Paul Savas' involvement. He said that Committee devised a plan after a year of work. He added that funding for the low-income fair program was already in effect. He recalled that the Committee set aside STIF funding for buses and capital improvements. Mr. Mills detailed the breakdown of the STIF Funding Allocation and noted that the funding for regional coordination addressed requests to bridge inner and outer districts. He added that \$1 million dollars would be put towards improved senior and disabled transportation. Mr. Mills conveyed that there was a gap in transportation services for senior and disabled individuals that would often be filled by non-profit providers. He discussed funds that were set aside for an electric bus program then added that this program would require

infrastructure support as well. He stated that aspects of the final STIF Funding would be allocated to school transportation and system capital in general. He then continued to list costs for the electric bus program, accessible bus stops, the ETC Transit Priority, and Security.

Mr. Mills acknowledged that community workshops were held prior to development. He explained that the community comments were categorized as: top tier priorities, second tier priorities, and third tier priorities. Mr. Mills explained that working with the Committee sparked discussion of how the TriMet bus service could be improved. Mr. Mills provided JPACT with the FY19-23 STIF Service Plan map and stated and detailed how it was organized. He added that the improvements pictured on the map include STIF funds along with services funded through the payroll tax increase.

Mr. Mills shared that the regional coordination projects underwent a solicitation process that asked communities to apply for projects. He then described Regional Coordination Projects using a map which outlined how each project was funded.

Mr. Mills discussed the outreach process for PTIP. He stated that the PTIP outreach process began online and utilized: email, Riders Club, and social media. Mr. Mills then informed that seven open house meetings were held and had 288 attendees. He added that IRCO and other community based organizations helped design the open house exercise and promoted the workshop.

Mr. Mills stated that the Advisory Committee approved the plan 24-2. He explained that Advisory Committee advocates for TriMet urged: more transit coverage in the region, especially to high schools, more regional coordination services, increased senior and disabled transportation, a region-wide youth pass program, and a level of service study for the district.

Member discussion included:

- Mayor Gamba complimented TriMet on the decision to move to an electric bus system. He then sought clarification on compressed natural gas (CNG) and hydrogen. Mr. Mills stated that TriMet considered using CNG or hydrogen for the bus system as an alternative. Mr. Bottomly added that TriMet adopted a 5-year electric bus pilot bus project which would bring on at least 60 battery powered busses. He clarified that TriMet staff were also directed to also consider two other alternatives related to renewable natural gas. Mr. Bottomly stated that hydrogen technology was a potentially lower cost solution, but posed the question as to how hydrogen would be generated. Mr. Bottomly said that the emissions of CNG were still being analyzed. Mayor Gamba asked if partnering with companies would better serve peripheral areas. Mr. Mills stated that it was better and more efficient to work with non-profit providers.
- Commissioner Eudaly supported the allocation to increase efficiency in the transit network. She thanked TriMet for their commitment to providing a low income fair option. She also expressed disappointment that TriMet did not meet the community's goals by not providing youth passes.

6.2 Enhanced Transit Corridor Plan Update

Key elements of the presentation included:

Ms. Jamie Snook described the public's concerns regarding transportation. She stated that transit travel times increased and mentioned the need for better transit reliability. Ms. Snook reported that the average speed for buses traveling through traffic have decreased over time and also highlighted transit delays during peak congestion times.

Ms. Snook stated that the goal of the ETC pilot program was to: develop a regional program to improve transit speed and reliability, build partnership, and develop a collaborative process. Ms. Snook stated that the ETC Pilot Program would increase transit capacity, speed and reliability. She then described funding opportunities for the pilot program including building a set of Enhanced Transit projects as well as develop a pipeline of Enhanced Transit projects. Ms. Snook discussed the need for the following improvements: dedicated transit lanes, business access and transit lanes and queue jump, pro-time transit lanes, bus on shoulder, and near level and all-door boarding.

Ms. Snook outlined the pilot program implementation which would: provide technical assistance in project development for local implementation in near term, provide technical assistance in concept design for future implementation, and develop a pipeline of potential projects.

Ms. Kelly Betteridge stated that a data driven process was conducted and segmented current and future frequent service network into three categories: reliability, ridership, and dwell time. She stated that jurisdictional partners were engaged to understand what details required further discussion. She mentioned that workshop were held in order to identify problems and determine how partners could be utilized. Ms. Betteridge stated that TriMet had accumulated an immense amount of data covering the existing transportation system.

Ms. Snook stated that a series of fourteen workshop were held and partners were asked for interest responses. Ms. Snook highlighted that 38 applications were received which indicated the immense amount of interest. Ms. Snook also provided a map which illustrated work shopped ETC segments and potential ETC segments. She stated that the project was partnering with City of Portland for future funding. Ms. Snook then provided maps which showed ETC's design concepts for the City of Portland, City of Hillsboro, City of Beaverton, and City of Oregon City.

Ms. Snook outlined the following process and expectations for ETC: develop and agree on individual scope for each project, expedited schedules, and measure the transit reliability and travel time benefits of improvements.

Ms. Betteridge described major projects occurring on Burnside and the Steel Bridge. She stated that there was an opportunity to improve mobility on existing lanes. She then discussed the improvements were moving at a smaller level, however the impact was regional. She mentioned that the ETC program was recommended to receive \$410 million funds in HB 2017. She stated that staff was working with project sponsors to determine how funds are spent. Ms. Betteridge discussed that projects that dealt with leveraging existing funding, demonstrated a substantial benefit, and could be implemented quickly would be prioritized.

Ms. Snook depicted two different tracts for the implementation timeline: Fast track design to IFC and concept development.

Member discussion included:

- Councilor Bob Stacey expressed that he was a transit rider and a regular commuter. He detailed his experiences with using transit. He asked would could be done to reduce time on public transit.
- Commissioner Eudaly stated that Portland strongly supported the ETC. She then thanked Metro and TriMet for their work and added that Portland had already proposed transit improvements. She touched on the relationship between affordable housing and transit and emphasized the importance of increasing services to individuals with disabilities.
- Councilor Craddick stated that more people needed to use transit in order to meet the Climate Smart goals. She added that transit needed to be more reliable, dependable, and faster to encourage more people to use public transportation. Councilor Craddick said that the Metro Council would approve the expansion of four cities, and encouraged those cities to consider enhanced transit options. She advocated that this plan become a part of future planning for new areas in the urban growth boundary.
- Mr. Bottomly recognized former Portland City Commissioner Steve Novick for bringing about this idea. He recognized the ways in which Regional Flexible Funds Allocations could be used then acknowledged how \$5 million was used to develop the concept for this plan and encouraged engagement from local jurisdictions. Mr. Bottomly stated that this initial investment resulted in the allocation of \$10 million from the HB 2017 bill. He emphasized that \$10 million would not be enough to make this was an ongoing regional project. He said that future RFFA funds needed to be utilized and that local jurisdiction need to partner with TriMet or Metro to ensure the ETC was included in their own road projects. He noted that rail projects needed to accommodate growth. Chair Dirksen expressed that larger projects require a system that allows for continuous refinement and improvement.
- Mayor Gamba stated that these projects were vital to increasing mode share. He encouraged that this work be included in the upcoming bond.

ADJOURN

JPACT Chair Dirksen adjourned the meeting at 9:04 AM.

Respectfully Submitted,



Sima Anekonda
Recording Secretary

ATTACHMENTS TO THE PUBLIC RECORD FOR THE MEETING OF NOVEMBER 15, 2018

ITEM	DOCUMENT TYPE	DOC DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
5.1	Presentation	11/15/18	SW Corridor Light Rail Preferred Alternative	111518j-01
5.1	Handout	11/15/18	Resolution No. 18-4915	111518j-02
5.1	Handout	11/15/18	Memo: Southwest Corridor LPA – Recommendation to Metro Council	111518j-03
5.1	Handout	11/15/18	Resolution No. 4533	111518j-04
5.1	Handout	11/15/18	Resolution No. 37393	111518j-05
5.1	Handout	11/15/18	Resolution No. 18-47	111518j-06
5.1	Handout	11/15/18	Letter from Oregon Department of Transportation	111518j-07
6.1	Presentation	11/15/18	FY2019-2023 Statewide Transportation Improvement Fund (STIF) Plan	111518j-08
6.2	Presentation	11/15/18	Regional ETC Pilot Program update	111518-09

5.2 Climate Smart Findings in the 2018 Regional Transportation Plan

Information/Discussion Item

Joint Policy Advisory Committee on Transportation
Thursday, January 17, 2018
Metro Regional Center, Council Chamber

Memo

Date: January 10, 2019
To: Joint Policy Advisory Committee on Transportation (JPACT) and interested parties
From: Margi Bradway, Planning and Development Deputy Director
Kim Ellis, RTP Project Manager
Subject: Climate Smart Strategy and the 2018 Regional Transportation Plan

PURPOSE

Adopted by the Metro Council in December 2018, the 2018 Regional Transportation Plan is a key tool for the greater Portland region to implement the adopted Climate Smart Strategy. The purpose of this agenda item is to report on key Climate Smart Strategy implementation activities since 2014 and analysis conducted as part of the 2018 Regional Transportation Plan update that demonstrates the region is making satisfactory progress implementing the strategy.

METRO'S LEGISLATIVE MANDATE

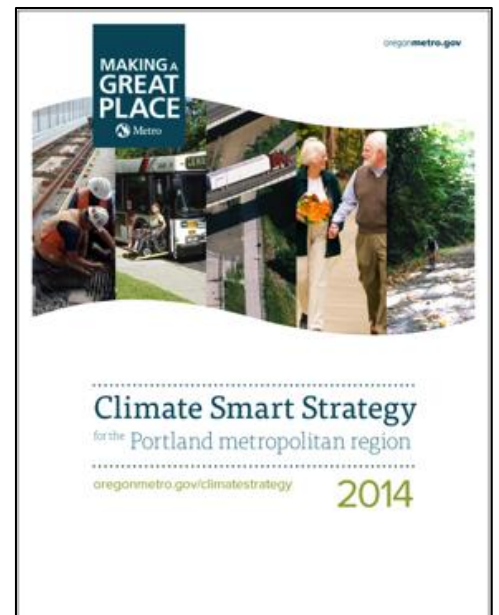
Oregon has been a leader in addressing the global climate crisis, and Metro continues to support the state's strong commitment to reducing greenhouse gas (GHG) emissions. In HB 3543 (2007), the Oregon Legislature adopted statewide GHG reduction targets for all sectors. In HB 2001 (2009) and SB 1059 (2010), the Legislature directed the Land Conservation and Development Commission (LCDC) to adopt targets for reducing transportation-related GHG emissions in metropolitan areas consistent with the overall target from HB 3543. Those regional targets, first adopted in 2011, were updated in January 2017.

Metro was directed by HB 2001 and by LCDC rules to develop a plan for meeting its regional GHG reduction target in coordination with the Oregon Department of Transportation (ODOT). After a vigorous and collaborative regional process, this plan – known as the Climate Smart Strategy – was adopted by Metro with broad, unanimous regional support in 2014 and approved by LCDC in 2015.

IMPLEMENTING CLIMATE SMART STRATEGY

Since 2015, Metro and regional partners have actively worked to implement the Climate Smart Strategy. A list of Metro implementation activities follows.

- Expanded Community Planning and Development Grant program criteria and eligibility to include Climate Smart policies and actions in local plans (2015)
- Advocated for increased funding for transit operations, transportation investment, transition to cleaner, low-carbon fuels and more fuel-efficient vehicles, cap-and-invest program and other Climate Smart Strategy actions in legislative agendas (2015-ongoing)



The 2018 Regional Transportation Plan is a key tool for the greater Portland region to implement the adopted Climate Smart Strategy.

For more information, visit:
oregonmetro.gov/climatesmart

- Expanded Regional Travel Options Grant Program criteria and emphasis on climate smart investments and actions for FY 15-17 and FY 17-19 grant cycles (2015-17)
- Increased funding for effective Climate Smart investments, including optimizing built road capacity, bike and pedestrian safety retrofits, and new MAX and enhanced transit service through 2019-21 regional flexible fund allocation process (April 2017)
- Adopted new Regional Travel Options Strategy that further advances Climate Smart Strategy investments and related activities, including trip reduction services for commuters, vanpools and carpools, Safe Routes to Schools and tools to connect people to demand-responsive transit options (May 2018)
- Initiated activities to support regional efforts to secure needed funding to build planned transportation investments needed to serve our growing and changing region (2018)
- Adopted 2018 Regional Transportation Plan and supporting Regional Transit Strategy, Regional Transportation Safety Strategy, Regional Freight Strategy and Emerging Technology Strategy that further advance Climate Smart Strategy investments and related policies and actions to reduce greenhouse gas emissions from all vehicles (Dec. 2018)

CLIMATE SMART STRATEGY AND THE 2018 REGIONAL TRANSPORTATION PLAN

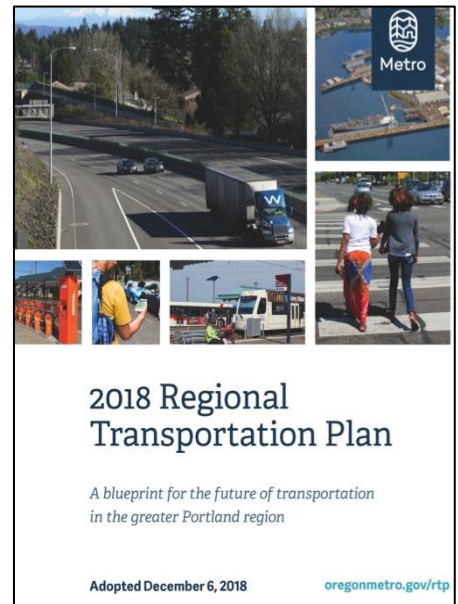
[Appendix J of the 2018 RTP](#) summarizes the projects and programs adopted in the region's Climate Smart Strategy and 2018 RTP and their relative greenhouse gas emissions reduction potential. The appendix also summarizes key findings from monitoring and analysis conducted through the 2018 RTP update.

Analysis of the 2018 Regional Transportation Plan found the plan's projects and programs makes satisfactory progress towards implementing the Climate Smart Strategy and, if fully funded and implemented by 2040, can reasonably be expected to meet the state-mandated targets for reducing per capita greenhouse gas emissions from passenger cars and small trucks (light-duty vehicles) for 2035 and 2040. By 2040, the plan, together with advancements in fleet and technology, is expected to reduce annual per capita greenhouse gas emissions from passenger cars and passenger trucks by 46 percent (compared to 2015 levels).

FUNDING TO ACHIEVE CLIMATE SMART OUTCOMES

Responsibility for implementation of the Climate Smart Strategy and the 2018 RTP does not rest solely with Metro. While the region is on the right track, continued partnerships, collaboration and increased funding from all levels of government will be essential. While the plan creates a path for greenhouse gas emissions reduction, the findings also demonstrate that more investment, actions and resources will be needed to ensure the region achieves the mandated greenhouse gas emissions reductions. This will require a continued commitment in the region to fully fund the projects and programs in the 2018 RTP.

The Climate Smart Strategy also demonstrated that investment in those projects and programs with the greatest potential to reduce greenhouse gas emissions should be a priority. This means that funding of individual projects and programs in the 2018 RTP should be prioritized with an understanding of their potential to move the region toward its climate goals.



For more information on the 2018 RTP, visit: oregonmetro.gov/rtp



APPENDIX J

2018 Regional Transportation Plan

Climate Smart Strategy implementation and monitoring

December 6, 2018

oregonmetro.gov/rtp

Metro respects civil rights

Metro fully complies with Title VI of the Civil Rights Act of 1964 that requires that no person be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination on the basis of race, color or national origin under any program or activity for which Metro receives federal financial assistance.

Metro fully complies with Title II of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act that requires that no otherwise qualified individual with a disability be excluded from the participation in, be denied the benefits of, or be subjected to discrimination solely by reason of their disability under any program or activity for which Metro receives federal financial assistance.

If any person believes they have been discriminated against regarding the receipt of benefits or services because of race, color, national origin, sex, age or disability, they have the right to file a complaint with Metro. For information on Metro's civil rights program, or to obtain a discrimination complaint form, visit oregonmetro.gov/civilrights or call 503-797-1536.

Metro provides services or accommodations upon request to persons with disabilities and people who need an interpreter at public meetings. If you need a sign language interpreter, communication aid or language assistance, call 503-797-1700 or TDD/TTY 503-797-1804 (8 a.m. to 5 p.m. weekdays) 5 business days before the meeting. All Metro meetings are wheelchair accessible. For up-to-date public transportation information, visit TriMet's website at trimet.org.

Metro is the federally mandated metropolitan planning organization designated by the governor to develop an overall transportation plan and to allocate federal funds for the region.

The Joint Policy Advisory Committee on Transportation (JPACT) is a 17-member committee that provides a forum for elected officials and representatives of agencies involved in transportation to evaluate transportation needs in the region and to make recommendations to the Metro Council. The established decision-making process assures a well-balanced regional transportation system and involves local elected officials directly in decisions that help the Metro Council develop regional transportation policies, including allocating transportation funds.

Regional Transportation Plan website: [**oregonmetro.gov/rtp**](http://oregonmetro.gov/rtp)

The preparation of this strategy was financed in part by the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration. The opinions, findings and conclusions expressed in this strategy are not necessarily those of the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration.

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PURPOSE

Climate change is the defining challenge of this century. Global climate change poses a growing threat to our communities, our environment and our economy, creating uncertainties for the agricultural, forestry and fishing industries as well as winter recreation. Documented effects include warmer temperatures and sea levels, shrinking glaciers, shifting rainfall patterns and changes to growing seasons and the distribution of plants and animals. Warmer temperatures will affect the service life of transportation infrastructure, and the more severe storms that are predicted will increase the frequency of landslides and flooding. Consequent damage to roads and rail infrastructure will compromise system safety, disrupt mobility and hurt the region's economic competitiveness and quality of life.

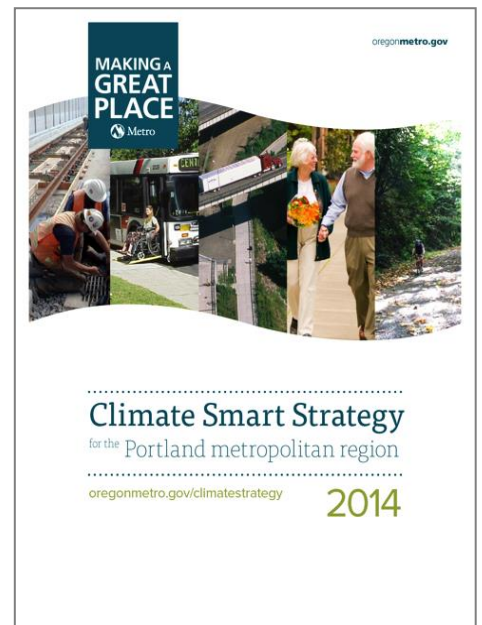
Recognizing the significant impact the transportation sector has on overall greenhouse gas emissions, there are a number of actions that can be pursued to lessen the carbon footprint of transportation. This appendix summarizes the key mitigation approaches adopted in the region's Climate Smart Strategy as well as implementation activities since 2014 and monitoring and analysis conducted through the 2018 Regional Transportation Plan update.

CLIMATE SMART STRATEGY (2014)

As directed by the Oregon Legislature in 2009, the Metro Council and the Joint Policy Advisory Committee on Transportation (JPACT) developed and adopted a regional strategy to reduce per capita greenhouse gas emissions from cars and small trucks (light-duty vehicles) by 2035 to meet state targets. Adopted by the Metro Council and JPACT in December 2014 with broad support from community, business and elected leaders, the Climate Smart Strategy relies on policies and investments that have already been identified as local priorities in communities across the greater Portland region. Adoption of the strategy affirmed the region's shared commitment to provide more transportation choices, keep our air clean, build healthy and equitable communities, and grow our economy – all while reducing greenhouse gas emissions.

As part of the process, Metro, in partnership with the Oregon Department of Transportation, conducted a detailed modeling analysis of various greenhouse gas scenarios and identified the types of transportation-related mitigation strategies that would have the greatest potential for reducing greenhouse gas emissions in the long term. This informed the final strategy.

The analysis of the adopted strategy demonstrated that with an increase in transportation funding for all modes, particularly transit operations, the region can provide more safe and reliable transportation choices, keep our air clean, build healthy and equitable communities and grow our economy while reducing greenhouse gas emissions from light-duty vehicles as directed by the Oregon Legislature. It also showed that a lack of investment in needed transportation infrastructure will result in falling short of our greenhouse gas emissions reduction goal and other desired outcomes. The Land Conservation and Development Commission approved the region's strategy in May 2015.



The 2018 Regional Transportation Plan is a key tool for the greater Portland region to implement the adopted Climate Smart Strategy.

For more information, visit <http://www.oregonmetro.gov/climatesmart>

Strategies Evaluated and Findings

Climate Smart Strategy | Largest potential carbon reduction impact*



Vehicles and Fuels (Investment)

- Newer, more fuel efficient vehicles
- Low- and zero-emission vehicles
- Reduced carbon intensity of fuels



Pricing (Policy)

- Carbon pricing
- Gas taxes
- Per-mile road usage charges (e.g., OReGO)
- Parking management and pricing
- Pay-as-you-drive private vehicle insurance



Community Design (Policy with Investment)

- Walkable communities and job centers facilitated by compact land use in combination with walking, biking and transit connections



Transit (Investment)

- Expanded transit coverage
- Expanded frequency of service
- Improvements in right-of-way to increase speed and reliability of buses and MAX

Climate Smart Strategy | Moderate potential carbon reduction impact*



Active Transportation (Investment)

- New biking and walking connections to schools, jobs, downtowns and other community places



Travel Information and Incentives (Investment)

- Commuter travel options programs
- Household individualized marketing programs
- Car-sharing and eco-driving techniques



System Management and Operations (Investment)

- Variable message signs and speed limits
- Signal timing and ramp metering
- Transit signal priority, bus-only lanes, bus pull-outs
- Incident response detection and clearance

Climate Smart Strategy | Low potential carbon reduction impact*



Street and Highway Capacity (Investment)

- New lane miles (e.g. general purpose lanes, auxiliary lanes)

Source: *Understanding Our Land Use and Transportation Choices Phase 1 Findings* (January 2012), Metro.

Climate Smart Strategy Implementation Since 2014

Responsibility for implementation of the Climate Smart Strategy does not rest solely with Metro. Continued partnerships, collaboration and increased funding from all levels of government will be essential. To that end, the Climate Smart Strategy also identified actions that can be taken by the state, Metro, cities, counties and others to enable the region to monitor performance and report on progress in implementation. An overview of Metro implementation activities follows.

Metro implementation actions taken since adoption of Climate Smart Strategy

- Expanded Community Planning and Development Grant program criteria and eligibility to include Climate Smart policies and actions in local plans (2015)
- Advocated for increased funding for transit operations, transportation investment, transition to cleaner, low-carbon fuels and more fuel-efficient vehicles, cap-and-invest program and other Climate Smart Strategy actions in legislative agendas (2015-ongoing)
- Expanded Regional Travel Options Grant Program criteria and emphasis on climate smart investments and actions for FY 15-17 and FY 17-19 grant cycles (2015-17)
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CLIMATE SMART STRATEGY MONITORING

The Climate Smart Strategy and the more recent update to the Regional Transportation Plan presented opportunities for the region to work together to demonstrate leadership on reducing greenhouse gas emissions while addressing the need to identify funding to implement adopted local and regional plans. The Climate Smart Strategy adopted by JPACT and the Metro Council in 2014 included a set of performance measures and performance monitoring targets for tracking implementation and progress. The purpose of the performance measures and targets is to monitor and assess whether key elements or actions that make up the strategy are being implemented, and whether the strategy is achieving expected outcomes.

The 2018 Regional Transportation Plan addresses most aspects of transportation-related data reporting required under Oregon Revised Statutes (ORS) 197.301(i) (metropolitan service district performance measures) and Climate Smart Strategy monitoring required under Oregon Administrative Rules (OAR) 660-044-0060. The 2018 Urban Growth Report reports data required under ORS 197.296 and addresses most aspects of land use-related data required under ORS 197.301, including ORS 197.301(a) through (g). Metro delivers biennial reports to the Department of Land Conservation and Development (DLCD) that address ORS 197.301(h) and (i).

Climate Smart Strategy performance measures, monitoring targets and analysis tools

The Climate Smart Strategy performance measures and targets adopted for monitoring implementation were drawn from the Regional Transportation Plan and the Urban Growth Report that, together, track existing land use and transportation policies and expected outcomes. The Climate Smart Strategy performance monitoring targets are not policy targets, but instead reflect a combination of the planning assumptions used to evaluate the Climate Smart Strategy and outputs from the evaluation of the adopted strategy using a metropolitan version of ODOT's GreenSTEP software package (now called VisionEval).

The Climate Smart Strategy performance measures and monitoring targets were adopted with an acknowledgement that they will be reviewed during development of the 2018 Regional Transportation Plan to address new information, such as federal transportation performance-based planning rulemaking. At the time of adoption, Metro also anticipated transitioning from using ODOT's GreenSTEP software tool (VisionEval) to the Environmental Protection Agency's MOVES model for forecasting on-road mobile source greenhouse gas emissions in the region. This transition was anticipated because Metro maintains and implements MOVES to conduct federally-required air quality and other on-road vehicle emissions analysis, and does not have the expertise nor the resources necessary to maintain and implement VisionEval on an on-going basis. Further, significant methodological differences in how VisionEval and MOVES estimate on-road vehicle emissions do not allow for direct comparison of forecasted on-road vehicle emissions results.

More detailed information about the fleet and technology assumptions used in the 2018 RTP on-road vehicle emissions analysis and a comparative assessment of VisionEval and MOVES emissions estimation methodologies is provided in **Table 1** of this appendix.

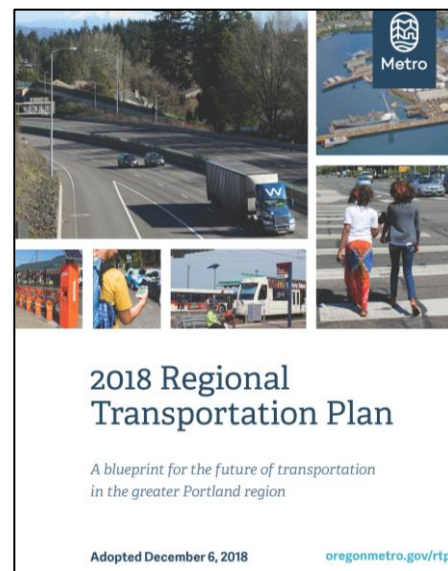
2018 Regional Transportation Plan

As required by the Land Conservation and Development Commission, the Climate Smart Strategy includes a set of performance monitoring targets for tracking progress through periodic updates to the Regional Transportation Plan (now every five years). The performance monitoring targets are not policy targets, but instead reflect a combination of the planning assumptions used to evaluate the Climate Smart Strategy and outputs from the evaluation to monitor and assess whether key elements or actions that make up the strategy are being implemented.

The measures and performance monitoring targets were reviewed before being incorporated in **Table 2** of this appendix. Table 2 documents progress implementing the strategy since 2014, using observed data sources to the extent possible for the 2015 Base Year, and expected progress that would be achieved if planned projects included in the 2018 Regional Transportation Plan financially constrained list are fully implemented by 2040.

Key findings from the 2018 Regional Transportation Plan

The 2018 Regional Transportation Plan makes satisfactory progress towards implementing the Climate Smart Strategy and, if fully funded and implemented, can reasonably be expected to meet the state-mandated targets for reducing per capita greenhouse gas emissions from cars and small trucks (light-duty vehicles) for 2035 and 2040.



For more information, visit <http://www.oregonmetro.gov/rtp>

Key findings include:

1. The RTP exceeds most Climate Smart Strategy performance monitoring targets as shown in Table 2.

- By 2040, the plan is expected to **exceed the target for transit service hours** resulting from significantly expanded coverage and frequency of transit service throughout the region.
- By 2040, the plan is expected to **exceed the target for households living in walkable mixed-use areas.**
- By 2040, the plan is expected to **exceed the target for new housing built through infill and redevelopment** in the urban growth boundary.
- By 2040, the plan is expected to **exceed the target for trips made biking** each day and **makes progress toward the target for trips made walking** each day.
- By 2040, the plan is expected to **exceed the target for miles of biking each day** per capita and **make progress toward the target for miles walking each day per capita.**
- By 2040, the plan is expected to **exceed the target for work trips occurring in areas with actively managed parking** and **makes progress toward the target for non-work trips.**

2. The RTP makes progress toward the Climate Smart Strategy performance monitoring targets, but is not expected to meet regional policy targets for vehicle miles of travel, mode share and completion of the active transportation network by 2040, as shown in Chapter 7 of the plan.

- By 2040, the plan is expected to **achieve a 4 percent reduction in daily vehicle miles traveled (VMT)** per person, making progress toward the 10 percent per capita VMT reduction target in the RTP.
- By 2040, the plan is expected to **complete 69 percent of the planned regional sidewalk network and 63 percent of the planned on-street regional bikeway network.** Significant gaps will remain within 2040 centers and on arterial roadways in the region.
- By 2040, **all designated 2040 regional centers** are expected to experience relatively large increases in biking, walking, transit and shared ride mode share, and **meet or exceed their respective mode share targets.**
- By 2040, **the plan is not expected to achieve RTP policy targets to triple biking, walking and transit mode share region-wide.** However, the City of Portland is expected to experience a relatively large increase in biking, walking and transit mode share for travel within the City of Portland, increasing from 26 percent to 32 percent between 2015 to 2040.

Other parts of the region are expected to experience more modest increases in biking, walking and transit mode share. East Multnomah County (outside the city of Portland) biking, walking and transit mode share is expected to grow from 13.6 percent in 2015 to 15.1 percent in 2040. Urban Clackamas County biking, walking and transit mode share is expected to grow from 12 percent in 2015 to nearly 14 percent in 2040. Urban Washington County biking, walking and transit mode share is expected to grow from 11 percent in 2015 to 13 percent in 2040.

3. The RTP supports state goals to reduce greenhouse gas emissions from all sources and is expected to meet state-mandated targets for reducing per capita greenhouse gas emissions from cars and small trucks for 2035 and 2040.

- By 2040, the plan, together with advancements in fleet and technology, is expected to **reduce total annual greenhouse gas emissions from all on-road vehicles by 19 percent** (compared to 2015 levels) and **annual per capita greenhouse gas emissions from all on-road vehicles by 40 percent** (compared to 2015 levels).
- By 2040, the plan, together with advancements in fleet and technology, is expected to **reduce total annual greenhouse gas emissions from passenger cars and passenger trucks by 27 percent** (compared to 2015 levels) and **reduce annual per capita greenhouse gas emissions from passenger cars and passenger trucks by 46 percent** (compared to 2015 levels).

The above findings are all described in Chapter 7 of the 2018 RTP. Due to differences in emissions analysis tools, the 2018 RTP greenhouse gas emissions estimates are not directly comparable to the state-mandated greenhouse gas emissions reduction targets that were set using VisionEval. However, the findings above demonstrate the region is making satisfactory progress implementing the Climate Smart Strategy. The findings also demonstrate that more investment, actions and resources will be needed to ensure the region achieves the mandated greenhouse gas emissions reductions defined in OAR 660-044-0060. In particular, additional funding and prioritization of Climate Smart Strategy investments and policies that substantially reduce greenhouse gas emissions will be needed.

Overview of Fleet and Technology Assumptions Used in 2018 Regional Transportation Plan Emissions Analysis

This section provides an overview of the fleet and technology assumptions used in the 2018 RTP on-road vehicle emissions analysis. The emissions reported are for vehicle travel occurring within the federally-designated metropolitan planning area boundary (MPA) regardless of where trips begin or end. The on-road vehicle emissions estimates published in association with the 2018 RTP update were produced within a software framework that combines the regional transportation model with EPA's MOVES model, version MOVES2014a. A newer version of MOVES (MOVES2014b) has since been released, but it should be noted that the improvements incorporated into this update pertain almost exclusively to estimates of non-road emissions and are, therefore, not relevant to this analysis.

Metro's current implementation of MOVES was developed for air quality conformity purposes in accordance with all pertinent EPA guidance included in the document, "Using MOVES to Prepare Emission Inventories in State Implementation Plans and Transportation Conformity: Technical Guidance for MOVES2010, 2010a and 2010b" (April 2012). The sections below describe several key assumptions regarding the regional on-road vehicle fleet and its emissions characteristics.

Fleet composition

The MOVES input files representing the makeup and age of the fleet (Source Type Population, Age Type Distribution) were developed using:

1. passenger car and light truck registration data from an Oregon Department of Motor Vehicles fleet database provided by Oregon Department of Environmental Quality; and
2. a MOVES run at the national scale to develop estimates for non-passenger vehicles.

These are assumed to be constant over time.

Fuels

The MOVES input files representing the fuels in use in the region (Fuel Formulation, Fuel Supply) were provided by Oregon DEQ and account for the Oregon Clean Fuels Program.

Fuel economy

The assumed average fuel economy of the fleet is based on federal regulations in place at the time of release of the current version of MOVES, July 2014.¹ Most notable among these are:

- Tier 3 emission standards that phase in beginning in 2017 for cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty trucks, and Tier 3 fuel standards that require lower sulfur gasoline beginning in 2017.
- Heavy-duty engine and vehicle greenhouse gas regulations that phase in during model years 2014-2018.
- The second phase of light-duty vehicle greenhouse gas regulations that phase in for model years 2017-2025 cars and light trucks.

While no additional fuel economy improvements are assumed beyond model year 2025, the average fuel economy of the fleet is assumed to increase continually due to anticipated fleet turnover.

Metro will monitor future changes to federal greenhouse gas regulations and Corporate Average Fuel Economy (CAFE) standards in collaboration with DLCD, DOE, DEQ and ODOT to identify and recommend any necessary adjustments for future analysis.

Inspection/maintenance programs

Metro's emissions estimates account for the presence of vehicles in the region subject to Oregon and Washington's inspection/maintenance programs as well as non-inspected vehicles.

Hybrid/electric vehicles

Metro's emissions estimates do not account for the presence of hybrid, electric, or hybrid electric vehicles in the region. No reliable base year data were available at the time to inform development of fleet composition inputs and, with respect to future year estimates, EPA conformity-related guidance does not allow for assumed increases in market penetration of vehicles powered by "alternate fuels" absent specific regulatory requirements.

Metro will work with DLCD, DOE, DEQ and ODOT to better account for these vehicles in future analysis consistent with [Oregon's Electric Vehicle Strategy](#) and [Executive Order No. 17-21](#), signed by Governor Brown on November 6, 2017.²

California LEV/ZEV standards

Metro's emissions estimates account for Oregon's adoption of the California low emission vehicle (LEV) standards and zero emission vehicle (ZEV) program.³

The latest zero emission regulations apply to new cars and light-duty trucks and will significantly

¹ Information derived from "EPA Releases MOVES2014 Mobile Source Emissions Model, Questions and Answers," July 2014.

² Information about the strategy can be found at: www.goelectric.oregon.gov/our-strategy

³ Information about Oregon's Low Emission Vehicles Regulations can be found at: www.oregon.gov/deq/aq/programs/Pages/ORLEV.aspx

increase the number of emission-free vehicles delivered to Oregon beginning with the 2018 model year. It is difficult to predict how many zero emission vehicles the rules will bring to Oregon. At the same time Oregon's Environmental Quality Commission adopted the zero emission vehicle rules, the commission also adopted California's Low Emission Vehicle III regulations. These rules mirror regulations adopted nationwide by the U.S. Environmental Protection Agency. Both state and federal rules require the greenhouse gas emissions of new light-duty vehicles to average an equivalent of 54.5 miles per gallon by 2025.

Metro will monitor future changes to these standards in collaboration with DLCD, DOE, DEQ and ODOT to identify and recommend any necessary adjustments for future analysis.

Comparative Evaluation of VisionEval and MOVES Emissions Estimation Methodologies

The greenhouse gas emissions targets were set for the Portland metropolitan region using ODOT's VisionEval (previously called GreenSTEP or RSPM) software tool. Given that methodological differences exist between VisionEval and Metro's approach that combines the regional transportation model (RTM) with MOVES (henceforth referred to as "RTM + MOVES"), it is important to compare and contrast key assumptions and inputs.

At the most fundamental level, VisionEval and RTM + MOVES operate at different analytical scales and have different core sensitivities. The level of analysis at which VisionEval is situated can be described as strategic, wherein certain input data and behavioral responses are handled in a relatively generalized fashion in order to facilitate analysis of a wide range of potential policies and scenarios within reasonable setup and run times. VisionEval is intended primarily for assessment of aspirational policies, as well as exploration of potential effects of major shifts in travel preferences and behavior, that would be needed to reach statewide greenhouse gas emissions reduction goals (i.e. "what would it take?").

VisionEval relies on a combination of national data sources, such as the National Household Travel Survey and U.S. Census data and peer-reviewed research in establishing its central logic and assumptions regarding household travel choices. It represents regional transportation system performance by way of aggregate metrics rather than network-level simulations. VisionEval estimates potential effects of a number of policy mechanisms and emerging technologies, including transportation demand management and individualized marketing programs, eco-driving initiatives and participation, car sharing, pay-as-you-drive insurance and system management and operations strategies that can reduce system delays, such as ramp metering, incident response, variable speed limits and traffic signal optimization.

In contrast, RTM + MOVES operates at a more targeted scale and is intended primarily for analysis of proposed transportation projects at the regional and corridor levels. The regional transportation model includes auto, transit, freight and bicycle networks that explicitly represent travel conditions based on specified packages of projects as well as policies related to parking charges, transit fares, and land use characteristics. The model uses a robust regional household travel survey, last completed in 2011 in partnership with ODOT and other Oregon metropolitan planning organizations, as the basis for its representations of traveler preferences and sensitivities.

In accordance with established national best practice on appropriate use of models of this type, a fundamental assumption in RTM + MOVES is that attitudes influencing travel decision-making remain constant over time. Further, without observed data as scientific evidence, it is not considered appropriate to estimate effects of previously nonexistent policies, programs, or travel modes in the regional transportation model. As a result, RTM+MOVES does not currently account for the types of policies, programs and technological advances discussed previously that were assumed in VisionEval when setting the region's greenhouse gas emission reduction targets for 2035 and 2040.

MOVES, for its part, is configured for use in conformity determinations in the current RTM + MOVES framework, resulting in a series of fleet and technology assumptions that are collectively somewhat conservative when compared to VisionEval. The fleet mix and vehicle age distributions do not change over time, hybrid and/or electric vehicles are not currently accounted for and assumptions regarding average fuel economy are limited to standards and policies set forth in existing federal and state legislation.

Table 1 outlines key inputs to, and fundamental definitional differences between, the VisionEval and RTM + MOVES tool sets where the analysis of greenhouse gas emissions reduction strategies is concerned.

Table 1. Comparison of Key Greenhouse Gas Emissions Estimation Assumptions and Inputs

	Year	VisionEval / RSPM	Regional Transportation Model + MOVES	
Model version(s)		RSPM v3.0	Kate v2.0 (transportation model), MOVES2014a	
Vehicle activity captured		VMT from households that live within the MPA boundary regardless of where driving occurs	All VMT occurring within the MPA boundary regardless of where trips begin and end	
GHG emissions captured		Fuel production, including EV/PHEV electricity generation, and vehicle operation (“well to wheel”)	Vehicle operation (“tank to wheel”)	
Vehicles analyzed		Light-duty- vehicles only	Passenger vehicles, light-duty trucks and freight trucks	
Fleet mix			Passenger vehicles	All vehicles
	2010	54.5% passenger car 45.5% light truck	58.0% passenger car	49.3% passenger car
	2015	-	42.0% passenger truck	47.6% light truck
	2027	-		3.1% freight truck
	2035	70% passenger car 30% light truck	(assumed to be constant over time)	(assumed to be constant over time)
2040	-			
Average vehicle age (age distributions available upon request)	2010	10.5 years light-duty vehicle	9.5 years passenger car	
	2015	-	9.7 years passenger truck	
	2027	-		
	2035	8.4 years light-duty vehicle	(assumed to be constant over time)	
	2040	-		
Fuel mix VisionEval: 2035 shares unavailable but are assumed to reflect a 10% reduction in carbon intensity from 2015 and a 4.4% share of electric and plug-in hybrid electric vehicles	2010	88% gas, 2.2% diesel, 9.8% ethanol	-	
	2015	-	97.7% gas, 0.7% diesel, 1.6% E-85	
	2027	-	91.3% gas, 1.1% diesel, 7.6% E-85	
	2035	-	-	
	2040	-	86.9% gas, 1.5% diesel, 11.6% E-85	

	Year	VisionEval / RSPM	Regional Transportation Model + MOVES	
Average fuel economy (miles/gallon) MOVES: internal combustion engines only VisionEval: internal combustion, electric and hybrid engines			Passenger vehicles	All vehicles
	2010	21.8	-	-
	2015	-	20.9	18.3
	2027	-	28.3	23.7
	2035	54.0	-	-
	2040	-	35.9	28.4
Fuel carbon intensity MOVES: grams CO ₂ /Mj VisionEval: grams CO ₂ Equivalent/Mj	2010	90.4	71.82 gas, 73.98 diesel, 71.09 E-85	
	2015	-	(baseline national average; values specific to local fuels and modeled years unavailable)	
	2027	-		
	2035	72.3		
	2040	-		
Average GHG emissions rate (grams CO ₂ Equivalent/mile) Rates are fleet-wide composites			Passenger vehicles	All vehicles
	2010	504	-	-
	2015	-	419	487
	2027	-	303	368
	2035	168	-	-
	2040	-	234	303

Source: ODOT and Metro

Recommendations for future performance monitoring

To monitor and assess implementation of the Climate Smart Strategy, Metro will continue to use observed data sources and existing regional performance monitoring and reporting processes to the extent possible. These processes include regularly scheduled updates to the Regional Transportation Plan and Urban Growth Report and reporting in response to ORS 197.301 and ORS 197.296. When observed data is not available, data from regional or state models may be reported.

If future assessments find the region is deviating significantly from the Climate Smart Strategy performance monitoring targets, then Metro will work with local, regional and state partners to consider the revision or replacement of policies and actions to ensure the region remains on track with meeting adopted targets for reducing greenhouse gas emissions.

In addition, Metro staff will monitor future changes to fleet and technology assumptions in collaboration with DLCD, DOE, DEQ and ODOT and continue to improve emissions analysis methods, data and tools through its air quality and climate change program.

Table 2. Climate Smart Strategy Implementation and Performance Monitoring

This table documents expected progress implementing the Climate Smart Strategy, using observed data sources to the extent possible for the RTP 2015 Base Year, and expected progress that would be achieved by 2040 if planned projects included in the 2018 RTP financially constrained list are fully implemented together with anticipated improvements in fleet and technology. Fleet and technology assumptions used in the analysis are described in the previous section.

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2018 RTP Base year (2015)	2018 RTP Constrained (2040)	2018 RTP Strategic (2040)
1. Implement the 2040 Growth Concept and local adopted land use and transportation plans					
a. Share of households living in a walkable mixed used development in the UGB ¹	26%	37%	41%	47%	48%
b. New residential units built through infill and redevelopment in the UGB	58%	65%	76%	78%	78%
c. New residential units built on vacant land in the UGB	42%	35%	24%	22%	22%
d. Acres of urban reserves	Not applicable	12,000	Not applicable	4,739	4,739
e. Daily vehicle miles per capita ²	19	17	13	12.4	12.3
2. Make transit convenient, frequent, accessible and affordable					
a. Daily transit service revenue hours (excluding C-TRAN service hours)	4,900	9,400	5,700	9,500	11,700
b. Share of households within 1/4-mile all day frequent transit service ³	30%	37%	48%	65%	71%
c. Share of low-income households within 1/4-mile all day frequent transit service ³	39%	49%	59%	74%	79%
d. Share of employment within 1/4-mile all day frequent transit service ³	41%	52%	58%	76%	82%
3. Make biking and walking safe and convenient					
a(1). Daily trips made walking	505,000	768,000	461,000	650,000	647,000
a(2). Daily trips made biking	179,000	280,000	232,000	348,000	344,000
b(1). Per capita biking miles per week	2.1	3.4	3.5	4.2	4.2
b(2). Per capita pedestrian miles per week	1.3	1.8	1.4	1.4	1.4
c(1 and 2). See 4a(2) and 4a(3) below	See 4a(2) and 4a(3) below				
d(1). New miles of bikeways ⁴	623 existing miles	421	760 existing miles	243	320
d(2). New miles of sidewalks (on at least one side of street) ⁴	5072 existing miles	Data not available	5072 existing miles	360	500
d(3). New miles of regional trails ⁴	229 existing miles	140	250 existing miles	174	253
4. Make streets and highways safe, reliable					
a(1). Fatal and severe injury crashes - motor vehicles ⁵	398	199	406	No forecast data	No forecast data
a(2). Fatal and severe injuries - pedestrians ⁵	63	32	78	No forecast data	No forecast data
a(3). Fatal and severe injuries - bicyclists ⁵	35	17	35	No forecast data	No forecast data
b. Change in travel time and reliability in regional mobility corridors	Data not available	Not evaluated	Data not available	No forecast data	No forecast data
c. Share of freeway lanes blocking crashes cleared within 90 minutes	Data not available	100%	Data not available	No forecast data	No forecast data
5. Use technology to actively manage the transportation system					
a. Share of arterial delay reduced by traffic management strategies	10%	35%	Data not available	No forecast data	No forecast data
b. Share of regional transportation system covered with system management/TSMO	Data not available	Data not available	Data not available	No forecast data	No forecast data
6. Provide information and incentives to expand the use of travel options					
a. Share of households participating in individual marketing	9%	45%	9%	No forecast data	No forecast data
b. Share of workforce participating in commuter programs	20%	30%	20%	No forecast data	No forecast data

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2018 RTP Base year (2015)	2018 RTP Constrained (2040)	2018 RTP Strategic (2040)
7. Manage parking to make efficient use of vehicle parking and land dedicated to parking					
a(1). Share of work trips occurring in areas with actively managed parking	13%	30%	25%	32%	32%
a(2). Share of nonwork trips occurring in areas with actively managed parking	8%	30%	7%	23%	23%
8. Support transition to cleaner, low carbon fuels, efficient fuels and pay-as-you-go insurance					
a(1). Share of registered passenger cars that are electric or plug-in-hybrid electric	1%	8%	Data not available	Not evaluated	Not evaluated
a(2). Share of registered light trucks that are electric or plug-in-hybrid electric	1%	2%	Data not available	Not evaluated	Not evaluated
b. Share of households using pay-as-you-go insurance	1%	40%	Data not available	Not evaluated	Not evaluated
9. Secure adequate funding for transportation investments					
a. Address local, regional, and state transportation funding gap	Not evaluated		Regional funding discussions are under way		
10. Demonstrate leadership on climate change					
a. Region-wide annual tons per capita greenhouse gas emissions (MTCO _{2e}) from all on-road vehicles within the metropolitan planning area boundary	Not evaluated		3.28	1.95	1.94
b. Region-wide annual tons per capita greenhouse gas emissions (MTCO _{2e}) from passenger vehicles within the metropolitan planning area boundary ⁶	Not evaluated		2.61	1.40	1.39

Table Notes

- 1 Climate Smart Strategy values are derived from ODOT's GreenSTEP model (VisionEval).
- 2 Direct comparisons between Climate Smart Strategy values and 2018 RTP values should not be made because different analytic tools have been used to derive these values. Climate Smart Strategy values are derived from ODOT's GreenSTEP model (VisionEval); 2018 RTP values are derived from Metro's regional travel model.
- 3 2018 RTP values reflect households within 1/4-mile bus, 1/3-mile streetcar, and 1/2-mile light rail.
- 4 Climate Smart target reflects number of miles of new bikeways and trails for projects identified as 'active transportation' projects in the 2014 RTP. RTP 2040 Constrained and Strategic miles of new bikeways, sidewalks and trails reflect all miles of bikeways, sidewalks and trails from any investment category that includes these elements, and irrespective if the project helps complete the regional active transportation network.
- 5 Climate Smart Strategy target reflects the 50% reduction target adopted in 2014 RTP. The 2018 RTP includes a target of zero fatal and severe injury crashes by 2035. The region does not currently have a safety predictive model to forecast this information, but will track progress toward the target through periodic RTP updates as required by federal transportation performance management requirements. Data shown for 2018 RTP Base Year (2015) reflects the annual average number of fatal and severe injury crashes reported by the Oregon Department of Transportation for the years 2011-2015.
- 6 Direct comparisons between Climate Smart Strategy values and 2018 RTP values should not be made because different analytic tools. Climate Smart Strategy values are derived from ODOT's GreenSTEP model (VisionEval) and include passenger cars, passenger trucks and light commercial vehicles; 2018 RTP values are derived from Metro's regional travel demand model and EPA-approved MOVES2014a model and include passenger cars and passenger trucks.

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 Bob Stacey, Metro
 Jeanne Stewart, Clark County
 Kris Strickler, Washington Dept. of Transportation
 Jessica Vega Pederson, Multnomah County
 Rian Windsheimer, Oregon Dept. of Transportation

ACKNOWLEDGEMENTS**Project management team**

Elissa Gertler, planning and development director
 Margi Bradway, planning and development deputy director
 Kim Ellis, project manager
 Tyler Frisbee, policy and innovation manager
 Clifford Higgins, communications manager
 Tom Kloster, regional planning manager
 Ted Leybold, transportation planning manager
 Jessica Martin, administrative supervisor

Research center

Chris Johnson, modeling manager
 Cindy Pederson, modeling manager
 Karen Scott-Lowthian, client services manager
 Peter Bosa, principal researcher and modeler
 Aaron Breakstone, principal researcher and modeler
 Clint Chiavarini, senior GIS specialist
 Joe Gordon, senior GIS Specialist
 Al Mowbray, associate GIS specialist
 Thaya Patton, senior researcher and modeler
 Kevin Saavedra, assistant researcher and modeler

Parks and nature

Tommy Albo, natural areas GIS coordinator
 Lori Hennings, senior natural resource scientist
 Robert Spurlock, senior regional planner

Planning and development

Grace Cho, associate transportation planner
 Tim Collins, senior transportation planner
 Paulette Copperstone, program assistant
 Rebecca Hamilton, associate regional planner
 Matthew Hampton, senior GIS specialist and cartographer
 Lisa Hunrichs, director's assistant
 Dan Kaempff, principal transportation planner
 Ben Kahn, intern
 Frankie Lewington, communications specialist
 Ken Lobeck, senior transportation planner
 Andre' Lightsey-Walker, assistant regional planner
 Lake McTighe, senior regional planner
 John Mermin, senior regional planner
 Marie Miller, program assistant
 Peggy Morell, senior public affairs specialist
 Tim O'Brien, principal planner
 Jeff Raker, economic development planner
 Eliot Rose, senior technology and transportation planner
 Jamie Snook, principal transportation planner
 Julie Stringham, intern
 Caleb Winter, senior transportation planner

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we’ve already crossed paths.

So, hello. We’re Metro – nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

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Tom Hughes

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600 NE Grand Ave.
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Materials following this page were distributed at the meeting.

January 17, 2019

Metro
600 NE Grand Avenue
Portland, OR 97232

Dear Metro Council,

With the beginning of a new year, it is essential to emphasize the importance of having the supporting materials available for the agenda items in a timely way. We are requesting that materials for the JPACT and MPAC agendas be available 10 days prior to their respective meetings so that members have sufficient time to prepare for the meeting, as well as enough time for jurisdictions to coordinate with their local representatives on the various items.


As an example, as of noon on Monday, the supporting documents for the Emerging Technologies PILOT were not included in the packet. We would appreciate the opportunity to review agenda materials with staff and gather input from jurisdictions through our coordinating committee at a Wednesday morning meeting.


In the upcoming year, JPACT and MPAC will be discussing significant issues. It is important that all related materials for those discussions be provided early enough for each member to sufficiently prepare. This will benefit all members of JPACT and MPAC.

We look forward to working together in 2019.

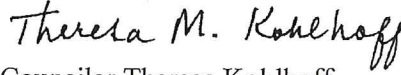
Sincerely,


CLACKAMAS JPACT AND MPAC Members:



Commissioner Paul Savas
Clackamas County (JPACT)


Commissioner Martha Schrader
Clackamas County (MPAC)


Mayor Tim Knapp
City of Wilsonville (JPACT – Cities)


Councilor Theresa Kohlhoff
City of Lake Oswego (MPAC – Largest City)


Mayor Dan Holladay
Oregon City (MPAC – 2nd Largest City)


Mayor Mark Gamba
City of Milwaukie (MPAC – Other Cities)



Metro

CLIMATE SMART STRATEGY IMPLEMENTATION AND THE 2018 REGIONAL TRANSPORTATION PLAN

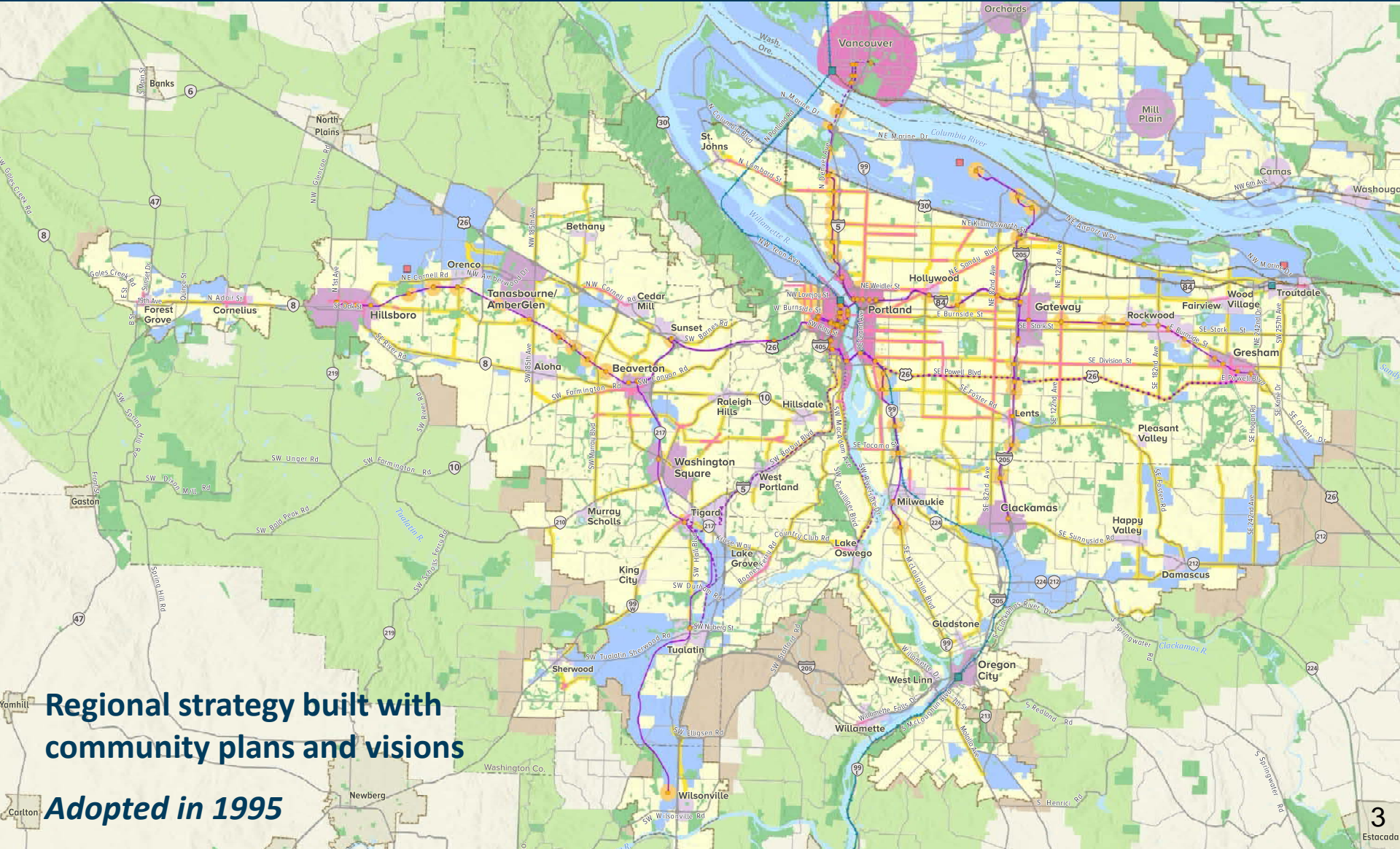
January 17, 2019 | JPACT Briefing

State directs Metro to reduce greenhouse gas emissions

- 2007** **Legislature adopts House Bill 3543**
(Global Warming Actions)
- 2009** **Legislature adopts House Bill 2001**
(Jobs and Transportation Act)
- 2011** **LCDC adopts greenhouse gas reduction targets for our region**
(OAR 660-044)
- 2012** **LCDC adopts Dec. 31, 2014 deadline for adopting Climate Smart Strategy**
(OAR 660-044)
- 2017** **LCDC adopts updated greenhouse gas reduction targets for our region**
(OAR 660-044)



2040 Growth Concept is the carbon reduction platform



**Regional strategy built with
community plans and visions**

Adopted in 1995

Six desired outcomes are the framework



Equity



Vibrant communities



Economic prosperity



**Safe and reliable
travel options**



Clean air and water



Climate Smart Strategy
for the Portland metropolitan region

oregonmetro.gov/climatestrategy

2014

Climate leadership

Adopted in 2008

Climate Smart Strategy

Regional strategy for reducing emissions



Climate Smart Strategy

Toolbox of possible local, regional and state actions

1. Legislative and policy changes
2. Partnerships and coalitions
3. Technical assistance and grant funding
4. Education and awareness
5. Planning and design
6. Investments
7. Research

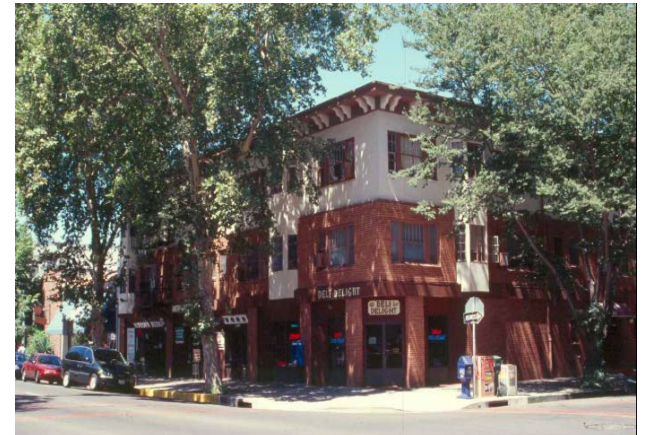


oregonmetro.gov/climatestrategy

Climate Smart Land Use

Emphasize low carbon development patterns

- More infill and redevelopment in centers and corridors
- More mixed use and transit oriented development
- Higher densities for new development
- Compact urban growth boundary



Climate Smart Transportation

Increase low carbon travel options and travel efficiency

- Low carbon and zero emissions vehicles
- Expand transit service (coverage and frequency)
- Complete biking and walking networks
- Provide incentives for walking, biking, transit and shared travel
- Use “smart” transportation technology



Largest potential carbon reduction in Metro region

Climate Smart Strategy | Largest potential carbon reduction impact*



Vehicles and Fuels (Investment)

- Newer, more fuel efficient vehicles
- Low- and zero-emission vehicles
- Reduced carbon intensity of fuels



Pricing (Policy)

- Carbon pricing
- Gas taxes
- Per-mile road usage charges (e.g., OReGO)
- Parking management and pricing
- Pay-as-you-drive private vehicle insurance



Community Design (Policy with Investment)

- Walkable communities and job centers facilitated by compact land use in combination with walking, biking and transit connections



Transit (Investment)

- Expanded transit coverage
- Expanded frequency of service
- Improvements in right-of-way to increase speed and reliability of buses and MAX

Moderate potential carbon reduction in Metro region

Climate Smart Strategy | Moderate potential carbon reduction impact*



Active Transportation (Investment)

- New biking and walking connections to schools, jobs, downtowns and other community places



Travel Information and Incentives (Investment)

- Commuter travel options programs
- Household individualized marketing programs
- Car-sharing and eco-driving techniques



System Management and Operations (Investment)

- Variable message signs and speed limits
- Signal timing and ramp metering
- Transit signal priority, bus-only lanes, bus pull-outs
- Incident response detection and clearance

Source: *Understanding Our Land Use and Transportation Choices Phase 1 Findings* (January 2012), Metro.

Low potential carbon reduction in Metro Region

Climate Smart Strategy | Low potential carbon reduction impact*



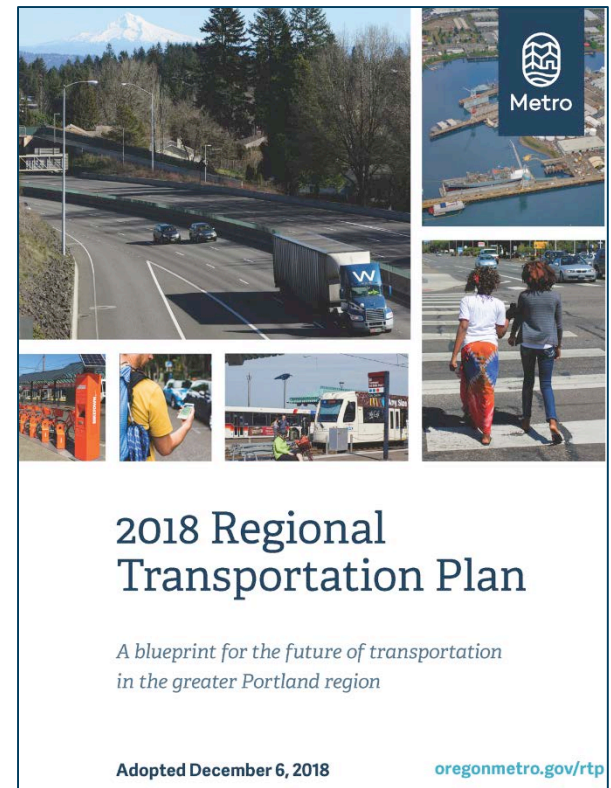
Street and Highway Capacity (Investment)

- New lane miles (e.g, general purpose lanes, auxiliary lanes)
-

Source: *Understanding Our Land Use and Transportation Choices Phase 1 Findings* (January 2012), Metro.

Metro implementation since 2014

1. Revised Metro grant criteria to award points for reducing carbon emissions
2. Successfully advocated for increased transportation funding for region (esp. transit)
3. Advocated for cleaner, low carbon fuels and more fuel-efficient vehicles
4. Integrated Climate Smart Strategy investments and policies in 2018 Regional Transportation Plan
5. Initiated state-required monitoring and reporting (RTP Appendix J)



oregonmetro.gov/rtp

What we learned from the 2018 Regional Transportation Plan...

We are making satisfactory progress if we implement the RTP, but more work (and funding) is needed

We exceed Climate Smart targets for:

- land use and growth in 2040 centers
- transit service hours, but not necessarily meeting goal of delivering faster, more reliable service
- households served by frequent transit service
- biking trips

We fall short of RTP targets for:

- sidewalk and biking system completion
- tripling walking, biking and transit mode share
- reduced per capita vehicle miles traveled



...What we learned from the 2018 Regional Transportation Plan

We can expect to meet our climate goals if:

- we fund and implement our plan
- funding of projects and programs in the plan are prioritized based on their potential carbon reduction

We should continue to improve our tools to measure and track carbon emissions



- 46 percent

expected reduction in per capita
greenhouse gas emissions from
passenger vehicles by 2040
(compared to 2015 levels)

Source: Metro regional travel
demand model and Metro regional
emissions model (MOVES)



Climate Smart implementation through the 2018 RTP

With 2040 land use as a foundation: Estimated carbon reduction and annual investment needed through 2040

ESTIMATED CARBON REDUCTION*	INVESTMENT AREA	ESTIMATED ANNUAL COST**
	Transit capital and operations	\$230 M/\$620 M
	Biking and walking connections	\$84 M
	Travel information and incentives	\$6 M
	“Smart” transportation technology	\$9 M
	Streets and bridges connectivity and capacity	\$150 M

* This information was derived from Metropolitan GreenSTEP during development of the Climate Smart Strategy to demonstrate the relative effectiveness of each policy area. It assumes planned land uses to implement the 2040 Growth Concept and does not capture variations that may occur from synergies between multiple policies and investments.

** Climate Smart investments have been incorporated in the 2018 RTP. Estimated annual costs are for the RTP Constrained Priorities for the period from 2019 to 2040. Costs do not include throughway capacity (approximately \$210 million per year) and keeping our streets, bridges and throughways in good repair (approximately \$590 million per year). Costs are rounded.

Metro implementation activities



2040 planning and development grants



Community Placemaking grants



Regional flexible funding for transportation projects



Travel options grants



Transit-Oriented Development Program

Grants and resources

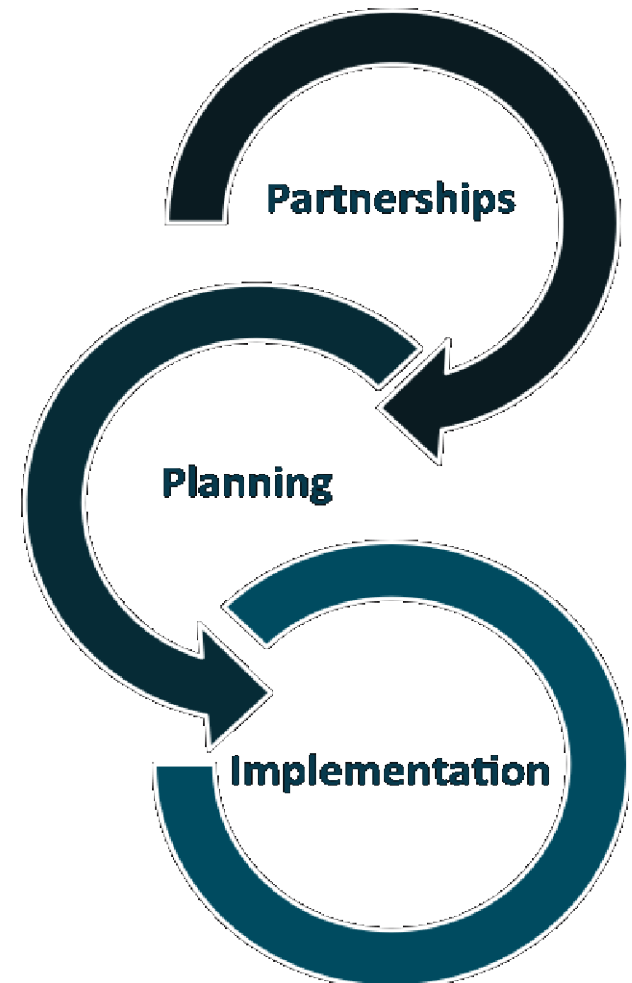
- ✓ 2040 planning and development grants
- ✓ PILOT emerging technology grants
- ✓ Community placemaking grants
- ✓ Equitable housing initiative grants
- ✓ Regional Flexible Funds Allocation
- ✓ Travel options program and grants
- ✓ System management program and grants
- ✓ Investment areas program
- ✓ Transit-oriented development program

Technical assistance

Planning support and data

What's Next: Moving forward

- Pursue investment dollars
- Advocate for cleaner, low carbon fuels and more efficient vehicles
- Engage diverse communities and perspectives in implementation
- Address resilience and preparation
 - Identify vulnerabilities and actions to reduce risks and impacts
 - Build capacity to prepare for and respond to impacts
- Track and report progress every 5 years





2018 Regional Transportation Plan

oregonmetro.gov/rtp





Metro

PILOT: Letter of interest review

JPACT

January 17, 2019



Our purpose today:

Update JPACT on the **Partnerships and Innovative Learning Opportunities in Transportation (PILOT)** program and describe what it tells us about local, community, and regional needs and ideas related to emerging technology.

Emerging technologies



Automated vehicles (AVs)



Connected vehicles (CVs) and CV infrastructure



Electric vehicles (EVs)



Ride-hailing



AV/EV transit vehicles



Microtransit



Car share



Bike / scooter share



Travel information and payment



New data sources

Partnerships & Innovative Learning Opportunities in Transportation

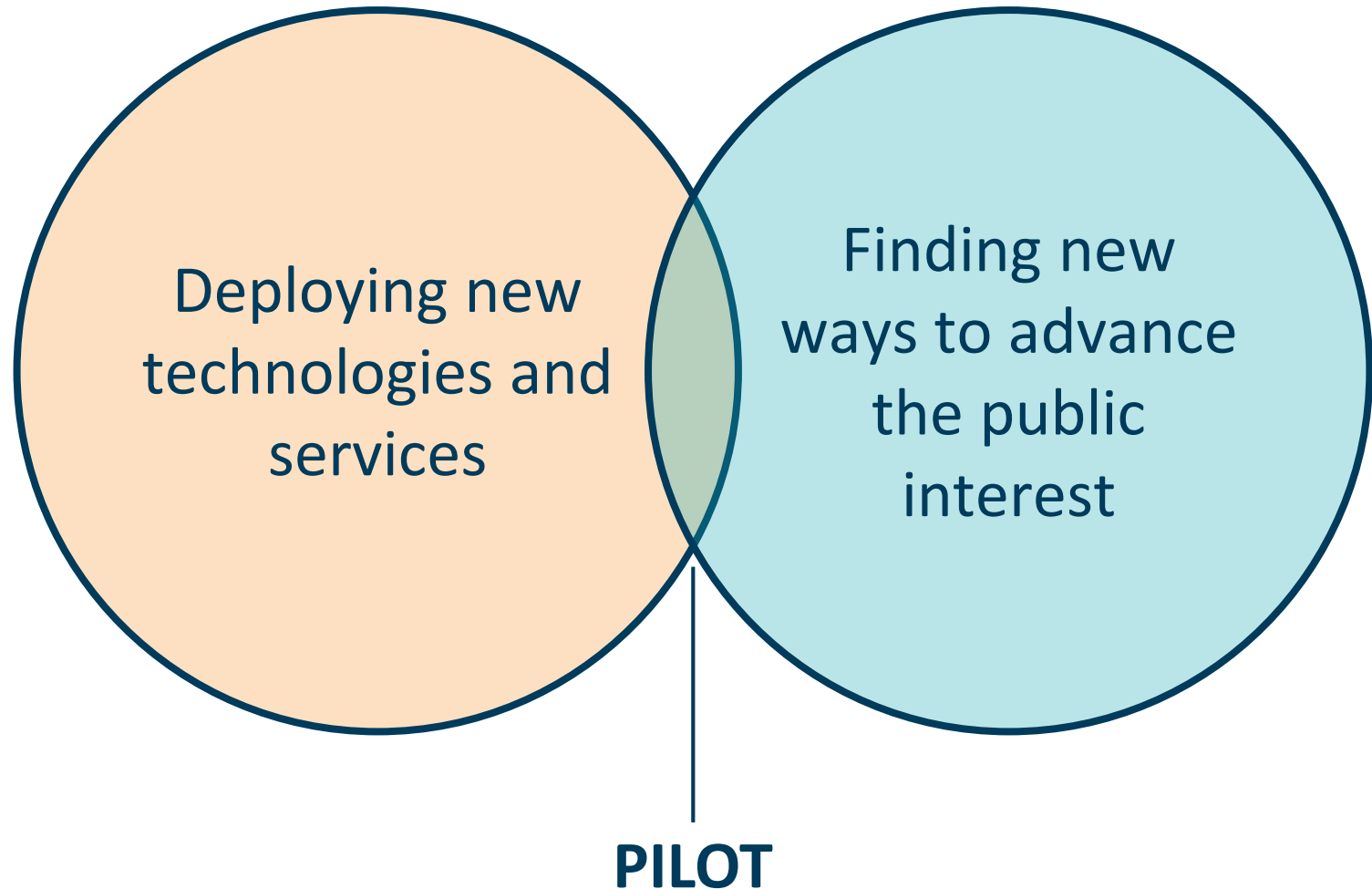


PILOT basics

- Total funding available: \$150,000 (1-6 projects)
- Amount applicants are allowed to request: \$25,000-\$150,000
- Eligible applicants: Teams consisting of public agencies, non-profits, and/or private companies.
- Grant period: Two years, from July 2019 through June 2021
- Funding source: Metro General Fund



What do we mean by “innovation?”



100 people at the launch event
32 letters of interest





We encouraged interested applicants to submit **letters of interest**.

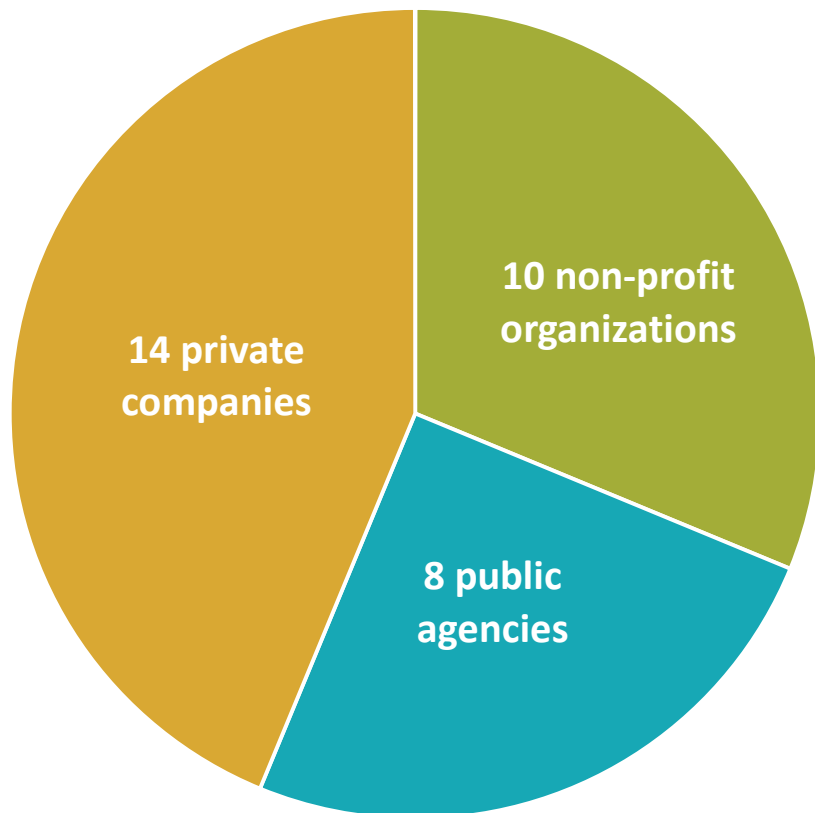
In return, we offered feedback, matchmaking, and technical assistance with applying.

(We also wanted to learn more about what type of projects people were thinking about.)

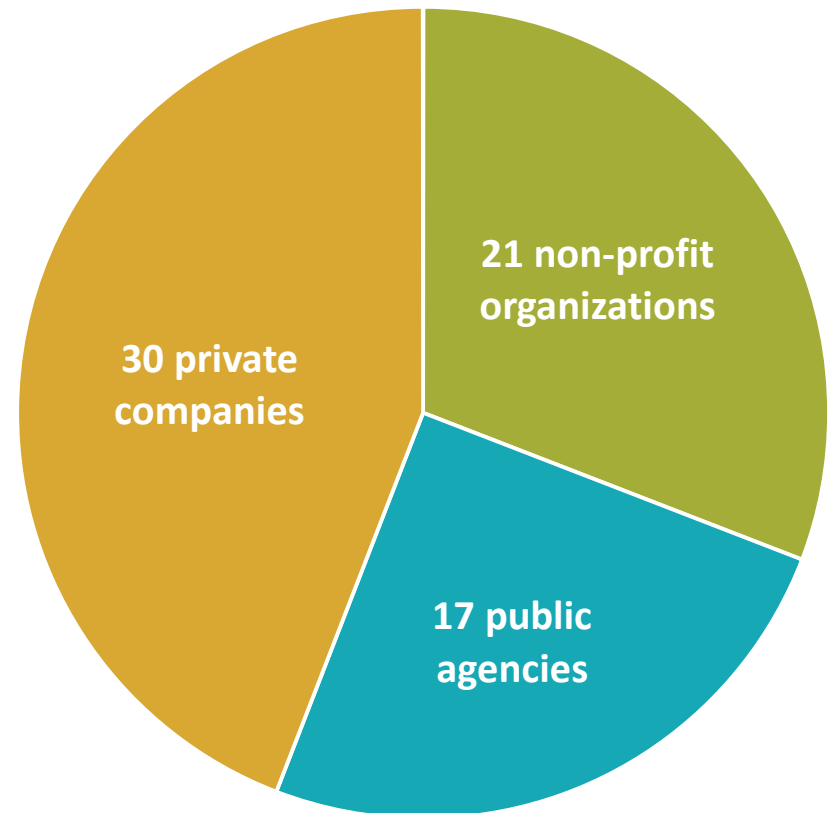


Who submitted letters of interest?

32 lead organizations

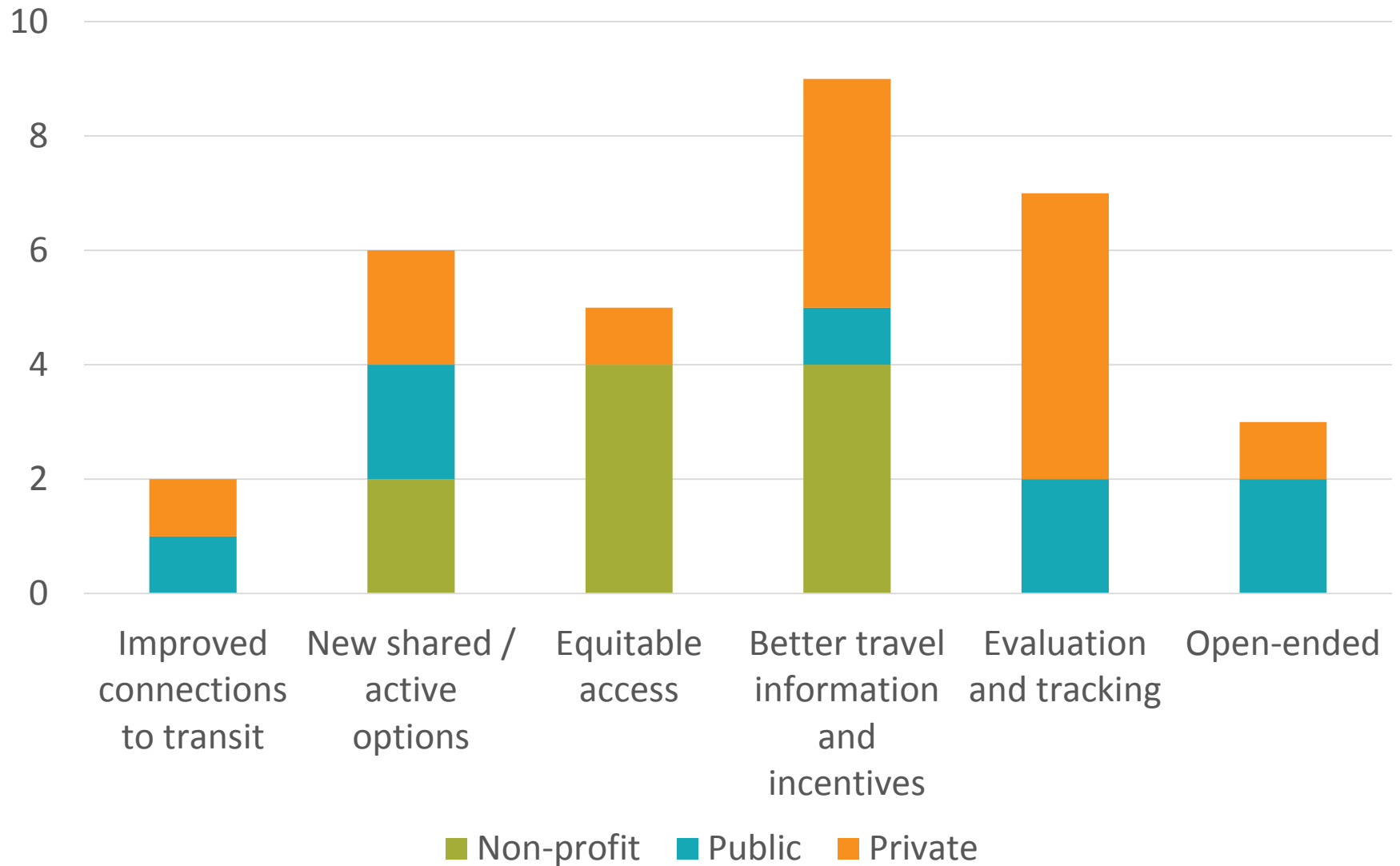


68 leads / partners





What outcomes are projects aiming for?





Some take-aways

- There's a lot of interest in this work - across the public, private, and non-profit sectors.
- We received the most interest in data and information-related projects.
- There's an opportunity to coordinate among different data and information projects.
- There's significant interest in testing new options (especially dockless) and providing equitable access.
- Improving connections to transit may require a more comprehensive approach.
- Some smaller jurisdictions are interested but need further capacity and expertise to engage in this work.

Program timeline



- Conduct education and outreach
- Form project and technical review panel
- Hold kickoff event (10/5/18)
- LOIs due (10/26/18)
- Offer feedback, suggest partnerships, announce technical assistance recipients (11/19/18)
- Open applications (12/2/18)
- **Applications due (2/1/19)**
- Announce awards (March 2019)
- Kick off projects (July 2019)

oregonmetro.gov/pilotgrants

oregonmetro.gov

