Memo

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

Date: Friday, September 6, 2019
To: JPACT and Interested Parties
From: Ken Lobeck, Funding Programs Lead, 503-797-1785
Subject: September 2019 MTIP Formal Amendment & Approval Request of Resolution 19-5018

STAFF REPORT

FOR THE PURPOSE OF ADDING OR AMENDING EXISTING PROJECTS TO THE 2018-21 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM INVOLVING THIRTEEN PROJECTS IMPACTING METRO, ODOT, PORTLAND, SMART, TRIMET, AND WASHINGTON COUNTY (SP20-01-SEP)

BACKROUND

What This Is:
The September 2019 Formal Metropolitan Transportation Improvement Program (MTIP) Formal/Full Amendment bundle (for FFY 2019) contains required changes and updates impacting Metro, ODOT, Portland, SMART, TriMet, and Washington County. Thirteen projects comprise the amendment bundle.

What is the requested action?
TPAC recommends JPACT approval of the September 2019 formal amendment and resolution 19-5018, and then on to the Metro Council for approval enabling the projects to be amended correctly into the 2018 MTIP with final approval to occur from USDOT. Note: The September 2019 Formal MTIP Amendment represents the first formal amendment for federal fiscal year (FFY) 2020. The summary of the fourteen projects is shown in the below table:

September 2019 Formal Amendment Project Summary					
ODOT Key #	**MTIP ID #**	**Lead Agency**	**Project Name**	**Project Description**	**Description of Changes**
Child projects being added to the Metro MPO MTIP from the ODOT Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Statewide Grant include project entries #1 - #6. ATCMTD Project #0 represents the grant matching funds project in Key 21157 which also is being updated for a construction phase obligation correction					
ATCMTD Project #0 (or #7) Key 21157	71030	ODOT	I-205 Johnson Creek - Glen Jackson Phase II	Construct NB Aux lane segments from US26 (Powell Blvd) to EB I-84 and rehab improvements to impacted interchanges plus implement Advance Traffic Management System (ATMS).	**COST DECREASE:** Key 21157 acts as the approved match to the ODOT statewide Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant program. The construction phase obligation decrease is also being updated and reflects a 20.9% cost decrease to the project which requires a formal amendment

ATCMTD Project #1 Key 21504 NEW	TBD	ODOT	**I-205 Active Traffic Management**	Include ops & safety improvements that combine ATMS freeways, active traffic signal management, & performance monitoring on I-205 (ATCMTD Child)	**ADD NEW PROJECT:** K21504 provides the I-205 System test and Evaluation component to the ATMS improvements. This will include operational and safety improvements that combine Active Traffic Management (ATM) systems on freeways, active traffic signal management, and performance monitoring to reduce crashes, improve travel time reliability, safety and operations on I-205.
ATCMTD Project #2 Key 21495 NEW	TBD	ODOT	**OR212/224 Arterial Corridor Management**	The OR212/224 Arterial Corridor Management project will implement a variety of treatments to improve safety, mobility, and reliability along the congested, industrial OR212/224 corridor in Clackamas County. ATCMTD child project	**ADD NEW PROJECT:** Key 21495 is a child project to the larger statewide ODOT ATCMTD grant. This project primarily includes modifications and additions to existing signalized intersections with improvements that include: (1) Upgrades up to 18 traffic signal controllers to advanced traffic controllers (ATC) (2) Enhanced mainline radar detection (3) Advance radar detection for improved freight operation (4) Battery back-up systems at select intersections to keep signal operational during power outages (5) Improved communication to traffic signals within the project corridor
ATCMTD Project #3 Key 21496 NEW	TBD	Portland	**NE Airport Way Arterial Corridor Management**	ATCMTD child project to deploy ITS infrastructure along Airport Way from 82nd Ave to Riverside Parkway. Install message signs, update signal collectors, CCTV cameras, fiber communication, etc.	**ADD NEW PROJECT:** Key 21496 is a child project to the larger statewide ODOT ATCMTD grant. The city of Portland will install Intelligent Transportation Systems (ITS) infrastructure along Airport Way from 82nd Avenue to Riverside Parkway. Awarded ATCMTD grants funds to this project total $1,200,000. The match is covered in project 21157
ATCMTD Project #4 Key 21498 NEW	TBD	TriMet	**TriMet Next Generation Traffic Signal Priority**	Implement a Next Generation Transit Signal Priority System (TSP), that will allow for fast and reliable high occupancy vehicle travel in TriMet's service area (ATCMTD child)	**ADD NEW PROJECT:** Key 21498 is added to the MTIP as a child project from the larger ODOT statewide ATCMTD grant. TriMet will implement a software-based traffic signal preemption and priority control system. The Centralized TSP system will provide an integrated preemption and priority control solution, interfacing with the existing vehicle, network, and traffic infrastructure where supported. The system will include the following components: the core application, vehicle API and intersection API, and optional vehicle hardware.

ATCMTD Project #5 Key 21500 NEW	TBD	Washington County	**Cornelius Pass Road Arterial Corridor Management**	Implement a variety of Intelligent Transportation System (ITS) treatments to enhance safety and mobility in rural and suburban Washington County and Multnomah County (Cornelius Pass Road from US 30 to OR 8, TV Highway	**ADD NEW PROJECT:** Key 21500 is a ATCMTD child project that will construct just under a mile of fiber optic communication interconnect between US 26 and West Union Road, install two rural variable message signs at route decision points to warn of weather or blockage on Cornelius Pass Road, install two rural curve warning systems for locations with the most run off the road crashes, and two rural weather stations, with cameras, Bluetooth, and cellular connection to advise of weather conditions near the high elevation points on Cornelius Pass Road.
ATCMTD Project #6 21499 (*#9 on Grant budget table*) NEW	TBD	Metro	**Multimodal Integrated Corridor Management Architecture**	ATCMTD child project to develop standardized TSMO/ITS policies for data access and sharing plus required architecture platform supporting shared data	**ADD NEW PROJECT:** The formal amendment adds this new child project to the larger ODOT statewide Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant program from Federal Highways Administration (FHWA). The Metro project is one of nine total subprojects to be implemented as part of the total grant. The Metro Multimodal Integrated Corridor Management Architecture project will support the Metro ITS Architecture Plan to develop appropriate policies and strategies supporting data sharing elements and toe recommended ITS architecture resulting in a TSMO/ITS data sharing formal policy, management procedures, partnering, reporting and evaluation leading to data sharing implementation
End of the ATCMTD Grant Projects					

Additional Projects Submitted as Part of the September 2019 Formal Amendment Bundle - Combining Projects					
Project #8 Key 20473	71001	ODOT	OR210 Over OR217	Deck overlay; replace joints; patch column spalls.	**COMBINED PROJECT:** OR 210 over OR 217 was initially authorized to be increased by #1 million (to the construction phase). Subsequent discussions as the amendment was in initial development phase determined that Key 20437 would be combined into Key 18841 and progress together with that project. This amendment shows the initial funding increase to the project and then corresponding d-programming action as Key 20437 is combined into Key 18841.

Project #9 Key 21179	71034	ODOT	OR217: OR210 SW Scholl's Ferry Rd - SW 72nd Ave	On OR217 from about 72nd Ave to SW Scholl's Ferry Road (OR210) construct New NB auxiliary lane segments (HB2017 awarded Project $54,000,000 original award)	**COMBINED PROJECT:** The formal amendment combines the ADVCON and local Other funds into Key 18841. Obligated and expended State funds in PE remain with Key 21179. All other funds are transferred through this amendment to Key 18841.
Project #10 Key 18841	70782	ODOT	OR217 Southbound: OR10 to OR99W	~~OR217 from OR10 to OR99W, construct lane segments between existing aux lanes to provide a 3rd SB through lane (HB2017 Awarded Project)~~ **On OR217: OR10 to OR99W, construct lane segments between existing aux lanes providing a NB & SB 3rd through lane, bridges refit, road rehab, and Hall Blvd widening (Combines Key 21179 and 20473 into Key 18841) (HB2017 $44 million award)**	**COMBINED PROJECT:** Keys 20473 and 21179 are combined into Key 18841 for streamlined delivery, costs, and improved delivery efficiencies. The three projects also were part of the STIP Re-balancing Amendment that occurred during July 2019. However, due to the complexities of combining the three projects with the current programming, unprogrammed approved committed funds, and the additional funds to cover the cost increase, Metro requested the projects proceed via a formal amend to allow additional details about the combining effort to be included.

Additional Project Submitted as Part of the September 2019 Formal Amendment Bundle - Transit Related					
Project #11 Key 21552	TBD	SMART	**Bus and Bus Facilities - Rural SMART 2017**	Vehicle/facilities replacement and expansion	**ADD NEW PROJECT:** SMART was awarded $555,200 in FTA Section 5339 funds from the ODOT Rural Area Discretionary Awards program. The match requirement is 16% or $106,800. Total project cost is $662,000. Funding will support SMART's vehicle/facilities replacement needs.
Project #12 Key 21517	TBD	TriMet	**TriMet Bus Replacement Award FFY2019**	Replacement of 13 buses. Funding shifted from ODOT Non-MPO project grouping bucket Key 21424	**ADD NEW PROJECT:** TriMet was awarded $1,014,845 in federal transit funds from ODOT's Public Transit Division's STP Vehicle Replacement Program for bus replacement needs
Project #13 Key TBD	TBD	TriMet	**TriMet Low-No Bus Program FFY 2019**	FFY 2019 FTA Low-No Bus Program (5339c) discretionary award to purchase zero-emission battery electric replacement buses	**ADD NEW PROJECT:** TriMet received a discretionary grant from FTA's Low or No-Emission Vehicle Program for the FYY 2019 Cycle. The grant will be used to purchase zero-emission electric replacement buses

A detailed summary of the amended projects is provided in the tables on the following pages.

Amendment Section
Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)

The FAST Act established the Advanced Transportation and Congestion Management Technologies Deployment Program to make competitive grants for the development of model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment.

ODOT submitted an application and was successful in obtaining an ATCMTD grant award. The total grant award is $12 million. The required minimum match is 50% or greater. Eligibility areas enable the grant award agencies the ability to deploy advanced transportation and congestion management technologies which include:

- Advanced traveler information systems
- Advanced transportation management technologies
- Infrastructure maintenance, monitoring, and condition assessment
- Advanced public transportation systems
- Transportation system performance data collection, analysis, and dissemination systems
- Advanced safety systems, including vehicle-to-vehicle and vehicle-to-infrastructure Communications
- Technologies associated with autonomous vehicles, and other collision avoidance technologies
- Includes systems using cellular technology
- Integration of intelligent transportation systems with the Smart Grid and other energy distribution and charging systems
- Electronic pricing and payment systems, or
- Advanced mobility and access technologies, such as dynamic ridesharing and information systems to support human services for elderly and disabled individuals. [23.U.S.C. 503(c)(4) (E)]

ODOT's grant submittal is called the Smart Mobility Network. The Smart Mobility Network uses smart technologies statewide in both urban and rural regions to ease the impacts of rapid growth, guide infrastructure investments, and promote optimal mobility for all modes. Overall, the project uses 30 smart technologies, including advanced traveler information systems and infrastructure maintenance, monitoring, and condition assessment to create an integrated and cohesive transportation planning and management program in Oregon serving all modes.

ODOT's Smart Mobility Network grant will be partitioned into nine separate sub-projects as shown in the below grant budget table. Including the matching project in Key 21157, six additional sub-projects will be programmed and implemented in the Metro MPO boundary area. Each ATCMTD sub-project that will be programmed in the MTIP is summarized after this section.

	PROJECT 1: ODOT I-205 Active Traffic Management		PROJECT 2: ODOT OR 212/224 Arterial Corridor Management		PROJECT 3: City of Portland NW Airport Way Arterial Corridor Management		PROJECT 4: TriMet Next Generation Traffic Signal Priority	
	Federal	Non-Federal	Federal	Non-Federal	Federal	Non-Federal	Federal	Non-Federal
Design			$300,000		$110,000			
Construction		$14,000,000	$2,425,000		$1,040,000			
Other*							$2,330,000	$4,000,000
Evaluation	$25,000		$75,000		$50,000		$50,000	
SHARE SUBTOTALS:	$25,000	$14,000,000	$2,800,000	$0	$1,200,000	$0	$2,380,000	$4,000,000
PROJECT TOTAL:	$14,025,000		$2,800,000		$1,200,000		$6,380,000	

Total Federal Contribution:	$12,000,000
Total Non-Federal Contribution:	$19,200,000
Total:	$31,200,000

BUDGET

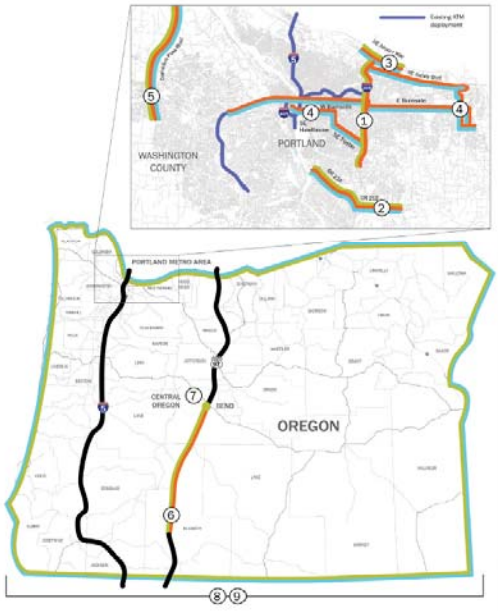
PROJECT 5: Washington County Cornelius Pass Road Arterial Corridor Management		PROJECT 6: ODOT US 97 Road Weather Management		PROJECT 7: ODOT City of Bend Colorado/Arizona Couplet ASTPM's		PROJECT 8: ODOT Oregon State Police UAS Crash Reconstruction		PROJECT 9: ODOT Multimodal Integrated Corridor Management Architecture	
Federal	Non-Federal	Federal	Non-Federal	Federal	Non-Federal	Federal	Non-Federal	Federal	Non-Federal
$440,000	$104,100	$245,000		$250,000					
$1,160,000	$295,200	$2,630,000		$480,000					
	$700,700					$51,000		$75,000	
	$100,000	$125,000		$100,000		$39,000			
$1,600,000	$1,200,000	$3,000,000	$0	$830,000	$0	$90,000	$0	$75,000	$0
$2,800,000		$3,000,000		$830,000		$90,000		$75,000	

OREGON SMART MOBILITY NETWORK

Advanced Transportation and Congestion Management Technologies Deployment Initiative

Notice of Funding Opportunity 693JJ318NF00010

Exhibit 1: Program Geographic Area



NO.	PROJECT DESCRIPTION	RESPONSIBLE AGENCY	PREPARE	MANAGE	RECOVER	SOLUTIONS
1	I-205 Active Traffic Management	ODOT	X			Automatic Traffic Recorders
				X		Adaptive Ramp Metering
				X		Dynamic Speed Limits
				X		Queue Warning System
2	OR 212/224 Arterial Corridor Management	ODOT	X			ATSPMs
			X			Bluetooth Travel Time System
			X			CCTV Monitoring Cameras
				X		Freight Signal Priority
				X	X	Next-Gen TSP
3	NE Airport Way Arterial Corridor Management	Portland	X			ATSPMs
			X			Bluetooth Travel Time System
			X			CCTV Monitoring Cameras
				X		Freight Signal Priority
				X	X	Dynamic Routing
				X	X	Next-Gen TSP
4	Next-Generation Transit Signal Priority	TriMet		X	X	Next-Gen TSP
5	Cornelius Pass Road Arterial Corridor Management	Washington County	X			ATSPMs
			X			Bicycle and Pedestrian Counters
			X			Bluetooth Travel Time System
			X			Road Weather Decision Support
				X		Adaptive Pedestrian Safety System
				X		Freight Signal Priority
				X		Next-Gen TSP
				X		Road Weather Information Dissemination
				X		SPaT
				X	X	Dynamic Routing
					X	Battery Back-Up Systems
					X	Red-Light-Running Crash Mitigation System
			X			Road Weather Decision Support
6	US 97 Road Weather Management	ODOT		X		Dynamic Speed Limits
				X		Road Weather Information Dissemination
7	City of Bend Colorado/Arizona Couplet ATSPMs	ODOT	X			ATSPMs
8	UAS Crash Reconstruction	ODOT			X	UAS Crash Reconstruction System
9	Multimodal Integrated Corridor Management Architecture	ODOT	X			Multimodal ICM Architecture

Project 0: *(also #7 in bundle)*	**I-205 Johnson Creek - Glen Jackson Phase II (ATCMTD match project)**		
Lead Agency:	**ODOT**		
ODOT Key Number:	**21157**	MTIP ID Number:	71030
Projects Description:	Project Snapshot: • Proposed improvements: o Construct NB Aux lane segments from US26 (Powell Blvd) to EB I-84 o Rehab improvements to impacted interchanges o Implement Advance Traffic Management System (ATMS). • Source: Existing MTIP project • Funding: FHWA National Highway Performance Program (NHPP) and federal advance construction funds appropriated to ODOT from the FAST Act • Type: Operations/Preservation – O&M, + ATMS • Location: On I-205 from US26 (Powell Blvd in the south then north to beyond EB I-84 to about Airport Way • Cross Streets: US26 north to EB I-84 • Mile Post Limits: 16.20 to 26.60 = 9.40 miles • Current Status Code: 8 = Post construction activities occurring (e.g. final rehab work, ITS system test and evaluation actions, etc.) • STIP Amendment Number: TBD • MTIP Amendment Number: SP20-01-SEP		
What is changing?	**AMENDMENT ACTION: COST DECREASE** Key 21157 acts as the matching project to the $12 million ATCMTD grant. A significant part of the project scope involved Active Transportation Management System (ATMS) improvements. FHWA determined these improvements which total over $14 million could count towards them ATCMTD match requirement. For this formal amendment, the construction phase funding amount is being updated to reflect the actual phase obligation amount. The correction is large enough (net change of 20.9%) to require a formal amendment.		
Additional Details:	The use of planned improvements from one project as the match for the grant funds is a creative approach to meeting the match requirements. ODOT staff is involved in the grant development is to be commended for obtaining approval from FHWA with this approach for the ATCMTD grant.		
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, projects that exceed $1 million in total costs and experience a cost change above 20% require a formal MTIP Amendment to be completed		
Total Programmed Amount:	The total project programming amount decreases from $37,453,015 to $31,785,415		
Added Notes:	Child project to the parent statewide ODOT ATCMTD grant		

Project 1:	**I-205 Active Traffic Management (New Project)**		
Lead Agency:	**ODOT**		
ODOT Key Number:	**21504**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: • Source: New MTIP project. • Funding: ATCMTD grant awarded sub-project • Type: TSMO/ITS • Location: On I-205 from US26 (Powell Blvd in the south then north to beyond EB I-84 about at Airport Way. • Cross Streets: US26 north to EB I-84		

	• Overall Mile Post Limits: 16.20 to 26.60 = 9.40 miles • Current Status Code: 8 = Post construction activities occurring (e.g. final rehab work, ITS system test and evaluation actions, etc.) • STIP Amendment Number: TBD • MTIP Amendment Number: SP20-01-SEP
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** This project includes operational and safety improvements that combine Active Traffic Management (ATM) systems on freeways, active traffic signal management, and performance monitoring to reduce crashes, improve travel time reliability, safety and operations on I-205 between the Glenn Jackson Bridge and the Johnson Creek Blvd structure. $25,000 of ATCMTD grant funds and $25,000 of ODOT ITS finds are committed to this project. Key 21157 acts as the match. The overall improvements run parallel to the ATMS improvements in Key 21157. Together, the following ATMS improvements which total over $14 million are planned to be implemented along the I-205 corridor within the project limits: <u>Project Construction Scope:</u> • Active Traffic Management (ATM) system; variable message signs and their structures and foundations, electrical services, mainline detection. • Traffic control • Ramp meters, traffic signals, signal poles and foundations, and traffic detection • Illumination • Automatic traffic recorders • ITS telecommunications • Signs and sign supports • Striping • Staging and containment system for work over waters of the US and State • Interstate paving and subgrade construction • Interstate widening, interstate milling, SE Stark St. / SE Washington St. reconfiguration to a two lane exit • Adjust and replace all inlets and drainage as needed • New barrier • Affected impact attenuators will be replaced • Guardrail and/or barrier removal and replacement as needed • Tall barrier or other engineered structure as needed • Replace AC wearing surface on end panels, bridge joint and wheel-rut repair work at I-205 & SE Powell Blvd., Structure No. 13531 and at I-205 & SE Division St., Structure No. 13528 • Water quality treatment • Erosion control • Utility coordination and relocation
Additional Details:	The $50,00 of additional funds for ATMS improvements are being added as a separate project for tracking and accounting purposes
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding a new project to the MTIP requires a formal amendment

Total Programmed Amount:	**The total project programming amount is $50,000**
Added Notes:	Child to the parent statewide ODOT ATCMTD grant

Project 2:	**OR212/224 Arterial Corridor Management (New Project)**		
Lead Agency:	**ODOT**		
ODOT Key Number:	**21495**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: On OR 212/224, the project components primarily include modifications and additions to existing signalized intersections which include: o Upgrading up to 18 traffic signal controllers to advanced traffic controllers (ATC) o Enhanced mainline radar detection, o Advance radar detection for improved freight operation o Battery back-up systems at select intersections to keep signal operational during power outages o Improved communication to traffic signals within the project corridor • Source: New MTIP project. • Funding: ATCMTD grant awarded project • Type: TSMO/ITS • Location: On OR224 and OR 212 • Cross Streets: Corridor wide I-205 south east to OR 212 (at SE 122nd Ave) and then east to SB OR224 in the Milwaukie and Happy Valley areas • Overall Mile Post Limits - Site locations identified at: o OR212: at 3.82 o OR224: At 8.16 • Current Status Code: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.). • STIP Amendment Number: 18-21-2523 • MTIP Amendment Number: SP20-01-SEP		
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** The formal amendment adds this child project from the larger ATCMTD grant. The OR212/224 Arterial Corridor Management project will implement a variety of treatments to improve safety, mobility, and reliability along the congested, industrial OR212/224 corridor in Clackamas County. Project components primarily include modifications and additions to existing signalized intersections: • Upgrading up to 18 traffic signal controllers to advanced traffic controllers (ATC) • Enhanced mainline radar detection • Advance radar detection for improved freight operation • Battery back-up systems at select intersections to keep signal operational during power outages • Improved communication to traffic signals within the project corridor The project elements allow for increased signal performance measurement capabilities and enhanced detection, which will provide signal operators better insight into arterial conditions and allow for more proactive corridor management.		

	Advance detection for freight priority will improve freight mobility and reliability within the corridor.
Additional Details:	The objectives of the project are to develop, design, implement, and operate the OR212/224 Arterial Corridor Management treatments within budget, on-schedule, and accomplishing the expected safety and mobility benefits along this corridor. The modifications proposed provide opportunities to collect data related to corridor performance, improve vehicle and freight detection at signalized intersections, improve network communication, The treatments should enhance corridor reliability and safety by: • Increasing signal capabilities at individual locations (ATC controllers) • Updating corridor signal timing • Improving signal detection, including freight detection at priority locations • Improving signal communications and accessibility for signal operators to identify and address signal timing concerns remotely
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding a new project to the MTIP requires a formal amendment
Total Programmed Amount:	**The total project programming amount is $2,800,000 which is 100% ATCMTD grant funds. The match is sourced from Key 21157**
Added Notes:	Child to the parent statewide ODOT ATCMTD grant

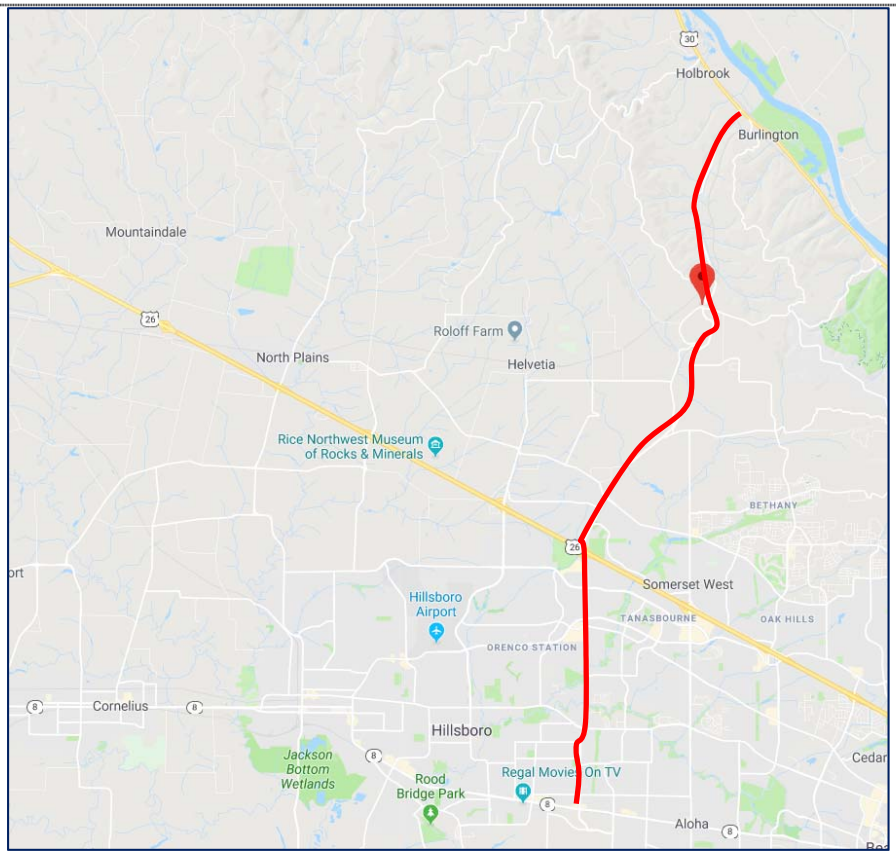
Project 3:	**NE Airport Way Arterial Corridor Management (New Project)**		
Lead Agency:	**Portland**		
ODOT Key Number:	**21496**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: ATCMTD child project that will o Install electronic message signs o Update traffic signal controllers o Install CCTV cameras o Install truck priority, traffic monitoring stations o Install fiber communication o Integrate these devices with the City's, ODOT's, and TriMet's Transportation Operation Centers. o This project is part of the larger City and Regional Advanced Traffic Management System (ATMS) objectives • Source: New MTIP project • Funding: ATCMTD grant awarded project • Type: TSMO/ITS • Location: On NE Airport Way • Cross Street Limits: From west of 82nd Ave at PDX east to and past Riverside Pkwy to the NE Sandy Blvd intersection • Overall Mile Post Limits: N/A (arterial) • Current Status Code: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.). • STIP Amendment Number: 18-21-2524 • MTIP Amendment Number: SP20-01-SEP		

What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** The City is proposing to install Intelligent Transportation Systems (ITS) infrastructure along Airport Way from 82nd Avenue to Riverside Parkway. The project will install electronic message signs, update traffic signal controllers, CCTV cameras, truck priority, traffic monitoring stations, fiber communication, and integrate these devices the City's, ODOTS, and TriMet's Transportation Operation Centers. This project is part of the larger City and Regional Advanced Traffic Management System (ATMS) and provides the minimum project elements that will yield significant benefits to the corridor. It will also allow us to provide more efficient and safe operation of our traffic signal system. 
Additional Details:	Specific proposed improvements include: • <u>CCTV installations along Airport Way:</u> Riverside, 158th, 148th, 138th, 122nd, Win Sivers/Glenn Widing, and at Holman • <u>Traffic Controller Updates:</u> I-205 SB ramp, I-205 SB ramp, Hollman, Glen Widing, 122nd, 138th, 148th, 158th, and Riverside • <u>Fiber installation:</u> 288 Fiber run from 82nd Avenue to Riverside • <u>Variable Message Signs:</u> There will be three locations along Airport Way where Variable Message Signs (VMS) will be installed. • <u>Truck Priority and Count Stations:</u> Truck freight priority will be installed along NE Airport Way between Riverside and NE 82nd Avenue as part of the new detection installation. • <u>Detection and Count Stations:</u> New radar detection will be installed along NE Airport Way at every signalized intersection. The detection will allow for improvements to freight mobility via truck priority. Furthermore, the new detection allows us to gather data on the signal operation and efficiency by using Automated Traffic Signal Performance Measure (ATSPM) data. • <u>Travel Time devices:</u> There will be permanent Bluetooth data readers installed along NE Airport Way in order to measure travel time data along the corridor. It will help inform our signal timing and operations plan
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding a new project to the MTIP requires a formal amendment
Total Programmed Amount:	**The total project programming amount is $1,200,000 and reflects all ATCMTD funds. The match is sourced from Key 21157.**
Added Notes:	Child project to the ATCMTD grant

Project 4:	**TriMet Next Generation Traffic Signal Priority (New Project)**		
Lead Agency:	**TriMet**		
ODOT Key Number:	**21498**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements. The TriMet ATCMTD child project will: o Implement a software-based traffic signal preemption and priority control system. o The Centralized TSP system will provide an integrated preemption and priority control solution, interfacing with the existing vehicle, network, and traffic infrastructure where supported. o The system will include the following components: the core application, vehicle API and intersection API, and optional vehicle hardware. • Source: New MTIP project • Funding: ATCMTD grant awarded project • Type: TSMO/ITS • Location: Cornelius Pass Rd • Cross Street Limits: US 30 south to OR 8 • Overall Mile Post Limits: N/A (arterial) • Current Status Code: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.). • STIP Amendment Number: 18-21-2526 • MTIP Amendment Number: SP20-01-SEP		
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** The formal amendment adds the ATCMTD child project to the 2018 MTIP. TriMet in close cooperation with regional traffic partners at Oregon Department of Transportation, the City of Portland, Metro and others suburban cities is seeking to implement a Next Generation Transit Signal Priority System (TSP), that will allow for fast and reliable high occupancy vehicle travel in TriMet's service area. TriMet must have the Next Generation Transit Signal Priority in place and operating as designed by June 1st, 2022 in preparation for the launch of the Division Transit Project. The Next Generation TSP system will be a central software-based traffic signal preemption and priority control system. The Centralized TSP system will provide an integrated preemption and priority control solution, interfacing with the existing vehicle, network, and traffic infrastructure where supported. The system will include the following components: the core application, vehicle API and intersection API, and optional vehicle hardware		
Additional Details:	The Intelligent Preemption and Priority Control Application shall be configured with the necessary vehicle provisions, relative priority settings, conditional preemption/priority parameters, and intersection location information. As supported vehicles travel throughout the supported region, vehicle data shall be sent to the Intelligent Preemption and Priority Control Application. The Intelligent Preemption and Priority Control Application shall process the vehicle data, applying any necessary relative priority and conditional factors to determine the appropriate time to send the preemption or priority request along with identifying the appropriate intersection to send the preemption or priority request to. Once determined, the Intelligent Preemption and Priority Control Application shall package the preemption or priority request data into the defined message structure and issue to the preconfigured traffic-side system. The traffic-side		

	system shall then process and act upon the preemption or priority request based on its pre-configured settings.
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding or removing a project from the MTIP requires a full/Formal Amendment
Total Programmed Amount:	**The total MTIP project programming amount is $6,380,000. The ATCMTD grant portion is $2,380,000.** TriMet is providing additional local matching funds totaling $4,000,000 to the project resulting in the $6,380,000 project total.
Added Notes:	Child project to the ATCMTD grant

Project 5:	**Cornelius Pass Road Arterial Corridor Management (New Project)**		
Lead Agency:	**Washington County**		
ODOT Key Number:	**21500**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: ATCMTD child project: o Implement just under a mile of fiber optic communication interconnect between US 26 and West Union Road o Install two rural variable message signs at route decision points to warn of weather or blockage on Cornelius Pass Road o Install two rural curve warning systems for locations with the most run off the road crashes o Add two rural weather stations, with cameras, Bluetooth, and cellular connection to advise of weather conditions near the high elevation points on Cornelius Pass Road. • Source: New MTIP project • Funding: ATCMTD grant awarded project • Type: TSMO/ITS • Location: Various locations • Cross Street Limits: In Various arterials • Overall Mile Post Limits: N/A (arterial) • Current Status Code: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.). • STIP Amendment Number: 18-21-2528 • MTIP Amendment Number: AP19-09-MAY		
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** The formal amendment adds this ATCMTD child project to the MTIP. The Cornelius Pass Road Arterial Corridor Management project will implement a variety of Intelligent Transportation System (ITS) treatments to enhance safety and mobility in rural and suburban Washington County and Multnomah County (Cornelius Pass Road from US 30 to OR 8, TV Highway). All project work is expected within existing right-of-way.		



Additional Details:

In addition to the improvement stated in the project snapshot the remaining ITS components will be additions to existing traffic signals to enhance their ability to sense and adapt for safety enhancement and multi-modal performance measures and including the following components:

- Seven battery back-up systems to keep major traffic signals operational in power outages,
- Pedestrian-bicycle counting and bike detection confirmation systems to aid multi-modal performance,
- An adaptive pedestrian safety system that will deploy high-resolution, all-weather sensors to conditionally extend the pedestrian service interval to reduce crash exposure for vulnerable pedestrian users, or cancel the pedestrian service if the pedestrian is no longer waiting to cross the road, thereby avoiding unnecessary vehicular stops, delays and emissions,
- Red light crash mitigation system which will leverage high-resolution radar and next generation traffic signal controllers to predict red light runners on approach and conditionally extend the red clearance interval (Manual on Uniform Traffic Control Devices, Section 4D.26.11) to reduce crash exposure and probability at six higher risk signalized intersections along Cornelius Pass Road, and
- Upgrade the 21 traffic signal controllers along Cornelius Pass Road to high-resolution, advanced traffic controllers (ATC), along with a connection to central management to stream Signal Phasing and Timing (SPaT) data to 3rd party subscribers to publish signal state data to Connected Vehicles. Examples are Traffic Technology Services, TTS, which will stream this data to Audi, BMW, and other auto original equipment manufacturers (OEMs).

Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding or removing a project from the MTIP and STIP requires a formal amendment
Total Programmed Amount:	**The total project programming amount is $2,800,000. The ATCMTD grant funds total $1,600,000**. The local match and overmatch funds committed to the project are $1,200,000
Added Notes:	Child project to the ATCMTD grant

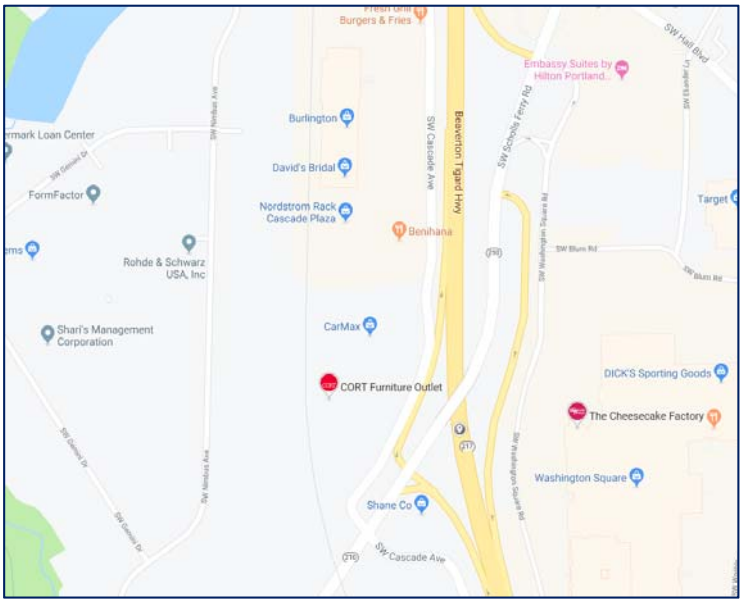
Project 6:	**Multimodal Integrated Corridor Management Architecture (New Project)**		
Lead Agency:	**Metro**		
ODOT Key Number:	**21499**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: ATCMTD child project: o Support of the Metro ITS Architecture Plan to develop appropriate policies and strategies o Supporting data sharing elements and toe recommended ITS architecture resulting in a TSMO/ITS data sharing formal policy, management procedures, partnering, reporting and evaluation leading to data sharing implementation. • Source: New MTIP project • Funding: ATCMTD grant awarded project • Type: TSMO/ITS • Location: Various locations • Cross Street Limits: In Various arterials • Overall Mile Post Limits: N/A (arterial) • Current Status Code: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.). • STIP Amendment Number: 18-21-2527 • MTIP Amendment Number: SP20-01-SEP		
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** The formal amendment adds this ATCMTD child planning project to the MTIP. The primary objective is to draft a policy that is agreeable and useful to sharing data across multiple agencies, operators and potential third parties, making any needed updates to the existing Intelligent Transportation Systems (ITS) Architecture and specifying a shared data platform and/or method, in order to serve travelers and freight in a corridor. The problem the study will address: Data to support future active demand management and traffic incident management on multimodal integrated corridors is in different formats. The solution the study will attempt to formulate: Data system architecture will be designed to seamlessly interface with multiple data formats, allowing support for such things as dynamic transit capacity assignment, predictive traveler information, and traffic incident decision support. This work reflects the region's and state's desire to move up in "capability maturity" from work performed in an ad-hoc fashion to work that is integrated between agencies.		

Additional Details:	The following tasks are sourced from the I-84 Multimodal ICM study from 2018 and will be incorporated into the study. Six Operations Alternatives relate to the strategies needed to develop capabilities for Multimodal ICM, one of which is to create a data-sharing policy. The tasks below borrow from the recommendations included in that study. The following is one way to broadly describe how the study flows into task work: • What does the data need to look like? • What do agencies want to do? • What data do agencies need to do it? • Which needed data sets fill gaps? • Build a system around a shared understanding. • Identify future improvements. Generally, partners of this project will work on: • Understanding current data while developing use cases. • Considering data specifications (e.g., fields, variables, frequency of updates, etc.). • Identifying what platform supports the data in its intended use and for its intended users. • Agreeing on the processes and policies that partners will follow.
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding or removing a project from the MTIP and STIP requires a formal amendment
Total Programmed Amount:	The total project programming amount for the study is $75,000.
Added Notes:	Child project to the ATCMTD grant

This ends the child projects which are part of the ODOT ATCMTD grant

Added note: Key 21157 is labeled as "project #0". It was positioned first to help explain the project's role as the match to the ATCMTD grant. It also acts as project #7 in the amendment bundle. This is why the next project listed in the amendment bundle is #8.

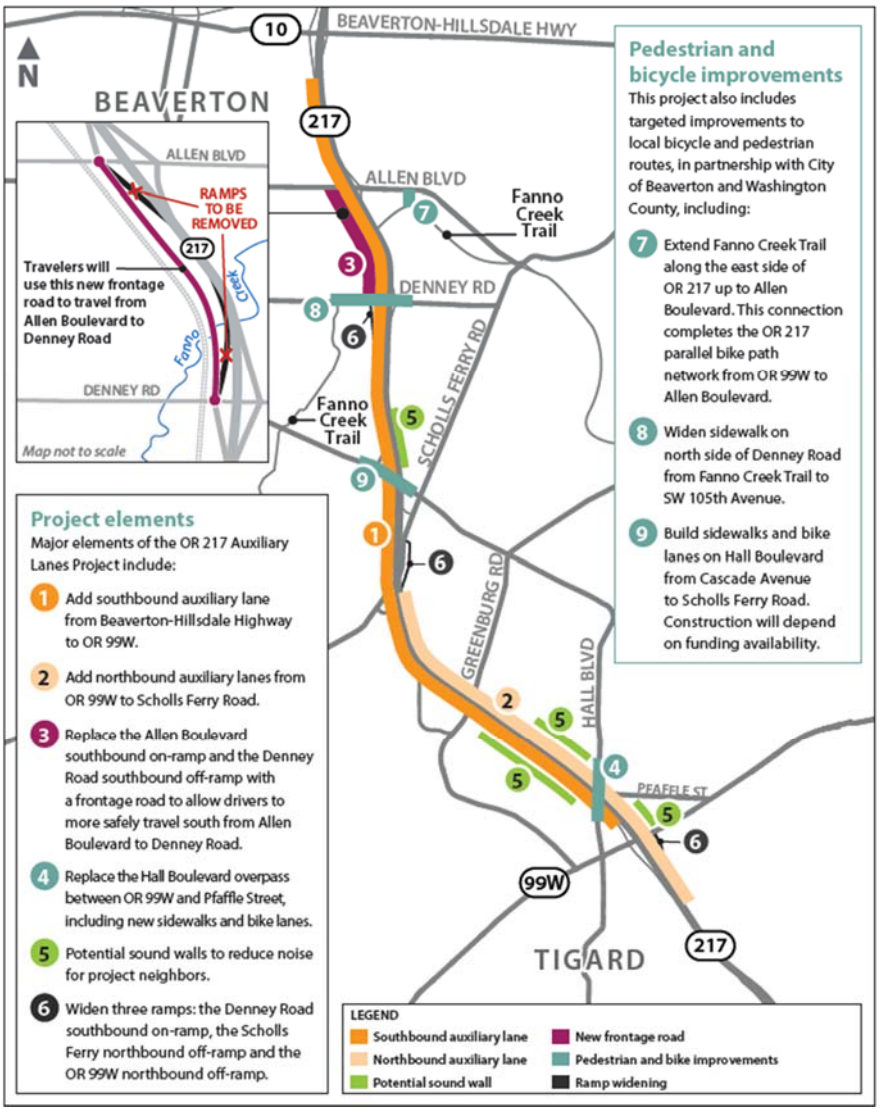
Project 8:	**OR210 Over OR217**		
Lead Agency:	**ODOT**		
ODOT Key Number:	**20473**	MTIP ID Number:	71001
Projects Description:	Project Snapshot: • Proposed improvements: Operations and maintenance - deck overlay; replace joints; patch column spalls. • Source: Existing MTIP project • Funding: Federal National Highway Performance Program (NHPP) • Type: Operations & Maintenance/Bridge • Location: At the OR210 flyover at OR217 in south Beaverton • Cross Street Limits: OR210 at OR 217 • Overall Mile Post Limits: 9.16 to 9.24 = 0.08 total miles • Current Status Code: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.). • STIP Amendment Number: 18-21-2597 • MTIP Amendment Number: SP20-01-SEP		

What is changing?	**AMENDMENT ACTION: COMBINED PROJECT** The formal amendment began by first adding $1 million in approved ODOT funding to the project's construction phase. Subsequent to the developing the amendment, ODOT decided to combine the scope and increased funding into Key 18841. The notification table shows the initial funding increase and then the final decision to combine the scope and funding into Key 18841. As a result, Key 20473 is now zeroed programmed and cancelled. The purpose of the combining will allow a streamline delivery of the planned improvements to OR217.
Additional Details:	 NB view of OR210 over OR217 
Why a Formal amendment is required?	Due to the complex combining nature of the 217 projects of Keys 20473 and 21179 into Key 18841 along with the STIP funds re-balancing effort, Metro requested the three projects proceed under formal amendment rules to provide added clarification for the required changes
Total Programmed Amount:	The total project programming amount decreases from $1,863,363 to $0
Added Notes:	See revised project scope for NB and SB OR 217 improvements in Key 18841 as a result of the project combining.

Project 9:	**OR217: OR210 SW Scholl's Ferry Rd - SW 72nd Ave**		
Lead Agency:	**ODOT**		
ODOT Key Number:	**21179**	MTIP ID Number:	71034
Projects Description:	Project Snapshot: • Proposed improvements: Construct New NB auxiliary lane segments • Source: Existing MTIP project • Funding: Federal Advance Construction funds • Type: Highway/Capacity Enhancing • Location: On OR 217 • Cross Street Limits: From about 72nd Ave to SW Scholl's Ferry Rd • Overall Mile Post Limits: 1.77 to 6.32 = 4.55 miles total • Current Status Code: 4 = (PS&E) Planning Specifications, & Estimates (final design 30%, 60%, 90% design activities initiated). • STIP Amendment Number: 18-21-2597 • MTIP Amendment Number: SP20-01-SEP		
What is changing?	**AMENDMENT ACTION: COMBINED PROJECT** The formal amendment combines the scope and funding of Key 21179 into Key 18841 with the exception of the expended state funds in the preliminary engineering phase. The funds will remain with the project in Key 21179. The purpose of combining effort to enable the planned improvements on OR217 to be delivered in more efficient and streamlined fashion.		
Additional Details:	See Key 18841 in this amendment package for the combined scope of work elements and project locations for the planned improvements.		
Why a Formal amendment is required?	Due to the complex combining nature of the 217 projects of Keys 20473 and 21179 into Key 18841 along with the STIP funds re-balancing effort, Metro requested the three projects proceed under formal amendment rules to provide added clarification for the required changes.		
Total Programmed Amount:	The total project programming amount decreases from $11,400,000 to $798,970		
Added Notes:	See revised project scope for NB and SB OR 217 improvements in Key 18841 as a result of the project combining.		

Project 10:	**OR217 ~~Southbound:~~ OR10 to OR99W** **OR217: OR10 to OR99W**		
Lead Agency:	**ODOT**		
ODOT Key Number:	**18841**	MTIP ID Number:	70782
Projects Description:	Project Snapshot: • Proposed improvements: o ~~OR217 from OR10 to OR99W, construct lane segments between existing aux lanes to provide a 3rd SB through lane (HB2017 Awarded Project)~~ o **On OR217: OR10 to OR99W, construct lane segments between existing aux lanes providing a NB & SB 3rd through lane, bridges refit, road rehab, and Hall Blvd widening (Combines Key 21179 and 20473 into Key 18841) (HB2017 $44 million award)** • Source: Combined existing MTIP project • Funding: Federal Highway Safety Improvement Program (HSIP), Advance Construction funds, and state HB2017 funds • Type: Highway/Capacity Enhancing • Location: On OR 217		

	• Cross Street Limits: From OR10 to OR99W • Overall Mile Post Limits: 1.77 to 6.32 = 4.55 miles total • Current Status Code: 4 = (PS&E) Planning Specifications, & Estimates (final design 30%, 60%, 90% design activities initiated). • STIP Amendment Number: 18-21-2597 • MTIP Amendment Number: SP20-01-SEP
What is changing?	**AMENDMENT ACTION: COMBINED PROJECT** The formal amendment combines the scope and funding of Keys 20473 and 21179 into Key 18841 enabling the planned improvements on OR217 to be delivered in more efficient and streamlined fashion. This adds $12,464,393 from Keys 20473 and 21179 to Key 18841. Key 21179 had only PE and a small amount of ROW programmed which totaled $11,400,000. However, this HB217 project was awarded $54,000,000 in HB 2017 funds. The funds remain committed to the project and are now combined into Key 18841. The original programming for Key 18841 total $47,302,832. Combining the three projects together with all approved committed funds ($1,863,363 from Key 20473 + $54,000,000 from Key 21179 +$47,302,832 from Key 18841 now totals $103,166,215. During the STIP Re-balancing Amendment, the updated total project cost for the three combined projects (Keys 20473, 21179 and 18841 now combined into 18841) was increased to $134,200,840. This requires a cost increase of $31,034,625 or 30.1% to the combined project. The additional funds have been secured through other projects pushed out into the next STIP Cycle through the STIP Re-balancing Amendment. Full programming and combining the three project is occurring to streamline project delivery costs and improve delivery efficiencies. The need for additional funds to complete all three projects was approved by the OTC during their June 2019 meeting. Because of the complexity of the cost increase and combining effort, Metro requested the three projects proceed under MTIP formal amendment rules to help explain the combining effort and how the total project cost break-out among the three combined projects. **Project need** OR 217 between Beaverton and Tigard has 10 interchanges in just over seven miles and some of the shortest merging spacing in the region. The interchange spacing, combined with 120,000 vehicles a day, leads to high crash rates and travel delays. The interchanges at Allen Boulevard and Denney Road are some of the worst bottleneck locations. 

Additional Details:	
Why a Formal amendment is required?	Due to the complex combining nature of the 217 projects of Keys 20473 and 21179 into Key 18841 along with the STIP funds re-balancing effort, Metro requested the three projects proceed under formal amendment rules to provide added clarification for the required changes.
Total Programmed Amount:	The total project programming amount decreases from $47,302,832 to 134,200,840
Added Notes:	Project includes the transfer of funds through the STIP re-balancing amendment

Project 11:	**Bus and Bus Facilities – Rural SMART 2017 (New Project)**		
Lead Agency:	**SMART**		
ODOT Key Number:	**21522**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: Vehicle/facilities replacement and CNG station expansion to include: o Purchase one 30-35 ft./25-35 seat/2 ADA securement stations/CNG powered transit bus		

	○ Purchase two 25-30 ft./16-30 seat/2 ADA securement stations/CNG powered transit buses ○ Purchase one 20 ft./3-6 seat/1 ADA securement station/gas powered van ○ Construct one compressed natural gas refueling station to support the transportation needs of the general public • Source: New MTIP project • Funding: FTA Section 5339 funding form the ODOT 2017 Rural Discretionary Program • Type: Transit • Location: City of Wilsonville area within the SMART transit network • Cross Street Limits: N/A • Overall Mile Post Limits: N/A (Transit) • Current Status Code: T22 = Programming actions in progress or programmed in current MTIP • STIP Amendment Number: 18-21-2602 • MTIP Amendment Number: SP20-01-SEP
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** Through this amendment, SMART's rural 2017 discretionary grant award project is being added to the MTIP SMART applied for and was awarded a discretionary transit grant from ODOT's 5339 Bus and Bus Facilities Discretionary Application to purchase replacement transit vehicles (buses and vans) and support expansion of SMART's CNG refueling station. The expansion of the CNG facility will reduce re-fueling bottlenecks, ensuring buses stay on schedule.
Additional Details:	The grant award will support the purchase of replacement buses and vans as follows: • Purchase One 30-35 ft., 25-35 seats with 2 estimated ADA securement stations, CNG powered bus • Purchase two 25-30 ft., 16-30 seats with 2 estimated ADA securement stations, CNG powered buses • Purchase one less than 20 feet , 3-6 seats with 1 estimated ADA securement station transit van  The grant also provides funding to support expansion of SMART's existing CNG refueling station to add a refueling station
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding or removing a project from the MTIP and STIP requires a formal amendment
Total Programmed Amount:	**The total project programming amount totals $662,000. The FTA Section 5339 federal grant portion totals $555,200.**
Added Notes:	

Project 12:	**TriMet Bus Replacement Award FFY 2019 (New Project)**		
Lead Agency:	**TriMet**		
ODOT Key Number:	**21517**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: Bus replacements • Source: New MTIP project • Funding: FTA Section 5310 funding from 2019-2021 Enhanced Mobility of Seniors and Individuals with Disabilities (5310) program • Type: Transit • Location: TriMet area transit network • Cross Street Limits: N/A • Overall Mile Post Limits: N/A (Transit) • Current Status Code: T22 = Programming actions in progress or programmed in current MTIP • STIP Amendment Number: 18-21-2592 • MTIP Amendment Number: SP20-01-SEP		
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT** Federal FTA section 5310 funding award to TriMet for replacement bus purchases		
Additional Details:			
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding or removing a project from the MTIP and STIP requires a formal amendment		
Total Programmed Amount:	**The total project programming amount totals $1,130,999. The FTA Section 5310 federal grant portion totals 1,014,845.**		
Added Notes:			

Project 13:	**TriMet Bus Replacement Award FFY 2019 (New Project)**		
Lead Agency:	**TriMet**		
ODOT Key Number:	**TBD**	MTIP ID Number:	TBD
Projects Description:	Project Snapshot: • Proposed improvements: Bus replacements • Source: New MTIP project • Funding: FTA Section 5339c funding from FTA FY 2019 Low or No-Emission Bus Program (5339c) Discretionary Program • Type: Transit • Location: TriMet area transit network • Cross Street Limits: N/A • Overall Mile Post Limits: N/A (Transit) • Current Status Code: T22 = Programming actions in progress or programmed in current MTIP • STIP Amendment Number: TBD • MTIP Amendment Number: SP20-01-SEP		
What is changing?	**AMENDMENT ACTION: ADD NEW PROJECT**		

	ODOT discretionary FTA section 5339c funding award to TriMet for replacement bus purchases The Low or No Emission Competitive program provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities
Additional Details:	Eligible projects include: • Purchasing or leasing low- or no-emission buses • Acquiring low- or no-emission buses with a leased power source • Constructing or leasing facilities and related equipment (including intelligent technology and software) for low- or no-emission buses • Constructing new public transportation facilities to accommodate low- or no-emission buses • Rehabilitating or improving existing public transportation facilities to accommodate low- or no-emission buses
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO Amendment Matrix, adding or removing a project from the MTIP and STIP requires a formal amendment
Total Programmed Amount:	**The total project programming amount totals $4,248,000. The FTA Section 5339c federal grant portion totals 2,088,579.** TriMet's required minimum match is $368,573. TriMet also is providing $1,790,848 in local overmatching funds for a total local match of $2,159,421.
Added Notes:	TriMet has been successful over the last several years in obtaining discretionary 5339c grant awards from FTA.

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: • Change in project termini - greater than .25 mile in any direction • Changes to the approved environmental footprint • Impacts to AQ conformity • Adding capacity per FHWA Standards • Adding or deleting worktype

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

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

- Reviewed and initially assessed for Performance Measurement impacts to include:
    - Safety
    - Asset Management - Pavement
    - Asset Management – Bridge
    - National Highway System Performance Targets
    - Freight Movement: On Interstate System
    - Congestion Mitigation Air Quality (CMAQ) impacts
    - Transit Asset Management impacts
    - RTP Priority Investment Areas support
    - Climate Change/Greenhouse Gas reduction impacts
    - Congestion Mitigation Reduction impacts
- MPO responsibilities completion:
    - Completion of the required 30 day Public Notification period:
    - Project monitoring, fund obligations, and expenditure of allocated funds in a timely fashion.
    - Acting on behalf of USDOT to provide the required forum and complete necessary discussions of proposed transportation improvements/strategies throughout the MPO.

APPROVAL STEPS AND TIMING

Metro's approval process for formal amendment includes multiple steps. The required approvals for the September 2019 Formal MTIP amendment will include the following:

Action	Target Date
• Initiate the required 30-day public notification process……	August 30, 2019
• TPAC notification and approval recommendation……	September 6 , 2019
• **JPACT approval and recommendation to Council…….**	**September 19, 2019***
• Completion of public notification process……	September, 3, 2019
• Metro Council approval……	October 3, 2019**

Notes:

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

** Confirmation for the Metro Council meeting on Thursday, October 3, 2019 is not firm. The specific Metro Council date for final approval of formal amendment SP20-01-SEP may be delayed one week to Thursday, October 10, 2019 depending upon the decision for the October 3rd meeting date.

USDOT Approval Steps:

Action	Target Date
• Metro development of amendment narrative package ……	October 8, 2019
• Amendment bundle submission to ODOT for review……..	October 9, 2019
• Submission of the final amendment package to USDOT……..	October 9, 2019
• ODOT clarification and approval……	Late October, 2019
• USDOT clarification and final amendment approval……..	Late October to early November, 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 19-5018.

- TPAC approval: September 6, 2019

Attachments:

1. Project Location Maps
2. Additional Project Support Materials