

Memo



Date: December 17, 2020
 To: Metro Council and Interested Parties
 From: Ken Lobeck, Funding Programs Lead
 Subject: December 2020 MTIP Formal Amendment & Resolution 20-5151 Approval Request

FORMAL AMENDMENT STAFF REPORT

FOR THE PURPOSE OF AMENDING FIVE EXISTING AND ADDING SIX NEW PROJECTS TO THE 2021-24 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) IMPACTING CLACKAMAS COUNTY, METRO ODOT, SMART, AND, TRIMET (DC21-05-DEC)

BACKGROUND

What This Is:

The December 2020 Formal Metropolitan Transportation Improvement Program (MTIP) Formal/Full Amendment which is contained in Resolution 20-5151 and being processed under MTIP Amendment DC21-05-DEC.

What is the requested action?

JPACT approved Resolution 20-5151 on December 17, 2020 and is requesting Metro Council approve Resolution 20-5151 consisting of eleven projects in the December 2020 Formal Amendment Bundle enabling the projects to be amended correctly into the 2021-24 MTIP with final approval to occur from USDOT.

Proposed December 2020 Formal Amendment Bundle					
Amendment Type: Formal/Full					
Amendment #: DC21-05- DEC					
Total Number of Projects: 11					
ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #1 Key TBD NEW PROJECT	TBD	Clackamas County	Clackamas Cnty Regional ATC Controller & Signal Optimization	Throughout Clackamas County, replace up to ninety-nine (99) older model 170/2070 traffic signal controllers and upgrade to the latest Advanced Traffic Controllers (ATC) national and state standards. Along with controller, local software, and central signal system upgrade, intersection signal timing will be optimized for all users.	<u>ADD NEW PROJECT:</u> The formal amendment adds the new Clackamas County Advance Traffic Controller (ATC) upgrade project to the 2021-24 MTIP. The ATC upgrade project is a Transportation Systems Management and Operations (TSMO)/Intelligent Transportation System (ITS) approved project which was awarded funding from Metro's 2019 TSMO project call.

ODOT Key #	MTIP ID #	Lead Agency	Project Name	Project Description	Description of Changes
Project #2 Key 19289	70671	Metro	Transportation System Management & Operations (TSMO) Program 2018	The Transportation System Management & Operations (TSMO) program coordinates both the planning and implementation of the regions system management and operations strategies to enhance multi-modal mobility for people and goods.	SPLIT FUNDS: Commit remaining \$200,000 of STP-U funds to the new Clackamas County ATC project (Project #1 this amendment). As a result, the programming buck of Key 19289 is now zero and canceled from the MTIP,
Project #3 Key 20884	70875	Metro	Transportation System Mgmt Operations/ITS (2019)	Provide strategic and collaborative program management including coordination of activities for TransPort TSMO committee.	SPLIT FUNDS: The formal amendment splits off and commits \$535,787 of STBG-U to the new Clackamas County Advance Traffic Controller (ATC) upgrade project to the 2021-24 MTIP.
Project #4 Key 20335	70950	ODOT	Central Systemic Signals and Illumination (ODOT)	Illumination; intersection work; bike and pedestrian improvements; ADA upgrades; signal work; signs; warnings; striping; medians; utility relocation; and other safety improvements at various locations. (PGB-ARTS)	SCOPE CHANGE The formal amendment updates the project based on the addition of the two new site locations (ID #44- US-30By (Lombard) at N Interstate Ave) & (ID#97 US-30By (Lombard) at OR99E(MLK) as part of the approved PGB
Project #5 Key 20414	70970	ODOT	Road Safety Audit Implementation	Address unanticipated safety improvements as identified. 2018 RTP approved HSIP Safety and Operations PGB	COST DECREASE: The formal amendment decreases the project grouping bucket by \$600,000 of HSIP federal funds. The funds were moved to support project Key 20479, ODOT's Region 1 Bike Ped Crossings project. The funds were shift as part of the 2021-24 MTIP and STIP update but not corrected here in Key 20414.
Project #6 Key 20866	70896	SMART	SMART Senior and Disabled Program 2019	Provide ADA paratransit services to improve mobility for seniors and individuals with disabilities such as Dial-A-Ride services, offering RideWise Travel Training operating shared-ride service for disabled people, and maintaining ADA buses and vans, plus implementing ADA improvements at stops and stations	ADD NEW PROJECT: The formal amendment adds SMART's 5310 funding to FY 2021 which is effectively a project slip from FY 2020.
Project #7 Key 20867	70897	SMART	SMART Senior and Disabled Program 2020	Provide ADA paratransit services to improve mobility for seniors and individuals with disabilities such as Dial-A-Ride services, offering RideWise Travel Training operating shared-ride service for disabled people, and maintaining ADA buses and vans, plus implementing ADA improvements at stops and stations	ADD NEW PROJECT: The formal amendment adds SMART's 5310 funding to FY 2021 which is effectively a project slip from FY 2020.

Project #8 Key 20869	70899	SMART	Smart Bus and Bus Facilities (Capital) 2019	SMART's 5339 program supports the replacement, rehabilitation and purchase of buses and related equipment and to construct bus-related facilities such as SMART's schedule scheduling software procurement, and upgrades to bus stop amenities such as bus shelters and signs and bus/support vehicle replacement needs.	ADD NEW PROJECT: The formal amendment adds SMART's 5339 funding to FY 2021 which is effectively a project slip from FY 2020.
Project #9 Key 20870	70900	SMART	SMART Bus and Bus Facilities (Capital) 2020	SMART's 5339 program supports the replacement, rehabilitation and purchase of buses and related equipment and to construct bus-related facilities such as SMART's schedule scheduling software procurement, and upgrades to bus stop amenities such as bus shelters and signs and bus/support vehicle replacement needs.	ADD NEW PROJECT: The formal amendment adds SMART's 5339 funding to FY 2021 which is effectively a project slip from FY 2020
Project #10 Key 20837	70924	TriMet	TriMet Elderly and Disabled Program (2020)	Services And Facility Improvements In Excess Of ADA Requirements	CANCEL PROJECT: The formal amendment cancels Key 20827 from the 221-24 MTIP. The project was projected to obligate its funds before the end of FY 2020 (September 30, 2020). This did occur, but verification did not occur until October. The project does not need to be included now in the 2021-24 MTIP.
Project #11 Key New TBD	New TBD	TriMet	TriMet Battery Electric Bus Purchases	Purchase five 40 ft. expanded-range battery electric replacement vehicles for fixed-route bus service, with transition to battery-electric buses (BEB) from diesel buses for fixed route bus service within the TriMet district. The transition to BEB from diesel will include a combination of new bus purchases and battery electric repowers of diesel buses.	ADD NEW PROJECT: The formal amendment adds the new TriMet bus purchase for FY 2022. The project results from a past fund exchange among Metro, Portland, and TriMet.

A detailed summary of the new proposed amended project is provided below.

Project 1: Clackamas Cnty Regional ATC Controller & Signal Optimization	
Lead Agency:	Clackamas County
ODOT Key Number:	TBD MTIP ID Number: TBD
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> Proposed improvements: Throughout Clackamas County, replace up to ninety-nine (99) older model 170/2070 traffic signal controllers and upgrade to the latest Advanced Traffic Controllers (ATC) national and state standards. Along with controller, local software, and central signal system upgrade, intersection signal timing will be optimized for all users. Source: New project. Funding:

	<p>The awarded source of funding is from the Metro FY 2019 Transportation Systems Management and Operations (TSMO) project call. (The funding originates within the RFFA Step 1 allocation)</p> <ul style="list-style-type: none"> • Project Type: TSMO/ITS (Exempt) • Location: Regional – throughout Clackamas County • Cross Street Limits: N/A • Overall Mile Post Limits: N/A • Current Status Code: 1 = Pre-first phase obligation activities (IGA development, project scoping, scoping refinement, etc.). • STIP Amendment Number: TBD • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No • Metro approval date: January 2020
<p>What is changing?</p>	<p><u>AMENDMENT ACTION: ADD NEW PROJECT</u></p> <p>The formal amendment adds the new Clackamas Cnty Regional ATC Controller & Signal Optimization to the 2021-24 MTIP. The project is a Metro 2019 TSMO awarded project to upgrade and install Advance Traffic Controllers at up to 99 locations in Clackamas County.</p> <p>Clackamas County currently maintains approximately 170 traffic signals, of which 73 signals are owned by Clackamas County and the remaining 97 signals are owned by local jurisdictions. These local jurisdictions consist of City of Lake Oswego, City of Oregon City, City of Wilsonville, City of Milwaukie, City of Gladstone, and City of West Linn. Traffic signals within these local jurisdictions are maintained by Clackamas County through an existing intergovernmental traffic engineering and maintenance support agreements. Of the 170 existing traffic signals, 99 signal controllers are using out dated technology, with unsupported local software, and out dated signal timing.</p> <p>ATC Controllers are the latest national and state standards with more functionality and built-in performance software tools. Along with controller, local software, and central signal system upgrade, intersection signal timing will be optimized for all users</p>
<p>Additional Details:</p>	<p>The Metro TSMO funding allocation awards a total of \$735,878 of federal STBG funds to the project. ATC replacement and upgrades include the following general locations: Clackamas County = 29 ATCs, Gladstone = 3 ATCs, Lake Oswego = 24 ATCs, Milwaukie = 6 ATCs, Oregon City = 17 ATCs, West Linn = 1 ATC, Wilsonville = 19 ATCs. 99 total ATC replacement and upgrades planned.</p> <p>The ODOT Local Agency Liaison (LAL) review of the Technical scoping document has determined the project scope and budget are sufficiently developed to allow MTIP and STIP programming to now occur. Development of the Intergovernmental Agreement (IGA) will now follow with a target obligation and Notice to Proceed (NTP) early federal fiscal year 2022 (fall of 2022).</p>

Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, adding a new project to the MTIP requires a formal/full amendment to be completed.
Total Programmed Amount:	The project federal award of \$735,878 is being drawn from two existing Metro TSMO/ITS project grouping buckets (PGB). \$200,000 of STP-U is being pulled from Key 19289 with the remainder of \$535,787 shifted from Key 20884.
Added Notes:	Included attachments: <ul style="list-style-type: none"> (Attachment 1): Clackamas County Regional ATC Controller Upgrade Location Map (Attachment 2): Metro TSMO Award Memo

Project 2:	Transportation System Management & Operations (TSMO) Program 2018		
Lead Agency:	Metro		
ODOT Key Number:	19289	MTIP ID Number:	70671
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> Proposed improvements: The Transportation System Management & Operations (TSMO) program coordinates both the planning and implementation of the regions system management and operations strategies to enhance multi-modal mobility for people and goods. Source: Existing project. Funding: The project grouping bucket (PGB) is programmed with committed federal STP-U that will be awarded to selected Metro TSMO projects. Project Type: TSMO/ITS Location: Regional MPO allocation Cross Street Limits: N/A Overall Mile Post Limits: N/A Current Status Code: N/A – PBG are programed as a commitment to future TSMO projects STIP Amendment Number: TBD MTIP Amendment Number: DC21-05-DEC OTC approval was not required for this amendment. 		
What is changing?	<p><u>AMENDMENT ACTION: SPLIT FUNDS</u></p> <p>The formal amendment shifts the remaining \$200,000 of STP-U funds to the new Clackamas County ATC controller upgrade project (see project #1 this amendment bundle).</p> <p>As a result of the fund shift, Key 19289 is now empty and zero programmed. Key 19289 is canceled from the MTIP.</p>		
Additional Details:	Funding for the new Clackamas County ATC project is also supported by a fund shift from Key 20884. Se next project.		

Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, the fund shift draws down Key 19289 to a zero programmed level resulting its cancellation. The cancellation action requires a formal amendment to complete.
Total Programmed Amount:	The total programming amount decreases from \$222,891 to \$0
Added Notes:	

Project 3: Transportation System Mgmt Operations/ITS (2019)	
Lead Agency:	Metro
ODOT Key Number:	20884 MTIP ID Number: 70875
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Proposed improvements: Provide strategic and collaborative program management including coordination of activities for TransPort TSMO committee. • Source: Existing project • Funding: The PGB contains STBG funds committed for future Metro awarded TSMO projects • Project Type: TSMO/ITS • Location: N/A • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: TBD • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No
What is changing?	<p><u>AMENDMENT ACTION: SPLIT FUNDS</u></p> <p>The formal amendment shifts \$535,787 of STBG-U funds to Clackamas County's new ATC upgrade project. The funding along with \$200,000 of STP-U funds from Key 19289 is providing the funding source for the Clackamas County project.</p>
Additional Details:	
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, for projects that cost \$1 million or above, a formal/full amendment is required when the cost change impacting the project is above 20%. For this project the cost change from the split equals 31.6%
Total Programmed Amount:	The total programmed amount in Key 20884 (federal and match) decreases from \$1,887,411 to \$1,290,199
Added Notes:	

Project 4: Central Systemic Signals and Illumination (ODOT)	
Lead Agency:	ODOT
ODOT Key Number:	20335 MTIP ID Number: 70950
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Proposed improvements:

	<p>Illumination; intersection work; bike and pedestrian improvements; ADA upgrades; signal work; signs; warnings; striping; medians; utility relocation; and other safety improvements at various locations. (PGB-ARTS)</p> <ul style="list-style-type: none"> • Source: Existing project • Funding: The PGB contains committed federal Highway Safety Improvement Program (HSIP) funds • Project Type: Safety Project Grouping Bucket (PGB) • Location: N/A • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: 21-24-0109 • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No
What is changing?	<p><u>AMENDMENT ACTION: SCOPE CHANGE</u></p> <p>The formal amendment adds two site locations to the project grouping bucket. As a result PE design costs increase. Right-of-Way (ROW) phase costs have been update to reflect actual needs and costs. Unrequired ROW funding is shifted to PE to cover the increased PE phase costs.</p>
Additional Details:	
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, projects involving a significant scope change require a full/formal amendment
Total Programmed Amount:	The total programmed amount remains unchanged at \$4,370,300.
Added Notes:	

Project 5: Road Safety Audit Implementation	
Lead Agency:	ODOT
ODOT Key Number:	20414 MTIP ID Number: 7070
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Proposed improvements: Address unanticipated safety improvements as identified. 2018 RTP approved HSIP Safety and Operations Project Grouping Bucket (PGB) • Source: Existing project • Funding: The PGB contains committed federal Highway Safety Improvement Program (HSIP) funds • Project Type: Safety Project Grouping Bucket (PGB) • Location: N/A • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: 21-24-0119 • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No

What is changing?	<p><u>AMENDMENT ACTION: COST DECREASE</u></p> <p>The formal amendment decreases the project grouping bucket by \$600,000 of HSIP federal funds. The funds were moved to support project Key 20479, ODOT's Region 1 Bike Ped Crossings project. The funds were shift as part of the 2021-24 MTIP and STIP update but not corrected here in Key 20414.</p>
Additional Details:	<p>The \$600k was already removed from the project grouping bucket and committed to Key 20479 as part of the 2021-24 MTIP Update process. The double programming error was caught and is being corrected now.</p>
Why a Formal amendment is required?	<p>Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, projects with a total project cost of \$1 million or greater and involve a cost change greater than 20% require a formal amendment.</p>
Total Programmed Amount:	<p>The total programmed amount decreases from 1,539,244 to \$939,244 and represents a 38.9% cost change to the project.</p>
Added Notes:	

<p>Project 6: SMART Senior and Disabled Program 2019</p>	
Lead Agency:	<p>SMART</p>
ODOT Key Number:	<p>20866 MTIP ID Number: 70896</p>
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Proposed improvements: <ul style="list-style-type: none"> Provide ADA paratransit services to improve mobility for seniors and individuals with disabilities such as Dial-A-Ride services, offering RideWise Travel Training operating shared-ride service for disabled people, and maintaining ADA buses and vans, plus implementing ADA improvements at stops and stations Source: New project • Funding: The project contains FTA Section 5310 federal funds supporting paratransit and senior mobility needs • Project Type: Transit • Location: SMART service area • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: 21-24-0123 • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No
What is changing?	<p><u>AMENDMENT ACTION: ADD NEW PROJECT</u></p> <p>The formal amendment adds the new FTA Section 5310 project to the 2021-24 MTIP. Key 20866 was programmed in the 2018-21 MTIP and expected to obligate its funds by the end of FY 2020. As a result, the project was not carried-over into the new 2021-24 MTIP. Upon learning that the 5310 obligation did not occur as expected, Key 20866 is being added to the 2021-24 MTIP to ensure the fund obligation can occur during FY 2021.</p>

Additional Details:	The MTIP short and detailed descriptions are being updated as well.
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, adding a new project to the MTIP requires a full/formal amendment.
Total Programmed Amount:	The total programmed amount is \$51,250
Added Notes:	

Project 7: SMART Senior and Disabled Program (2020)	
Lead Agency:	SMART
ODOT Key Number:	20867 MTIP ID Number: 70897
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Proposed improvements: Provide ADA paratransit services to improve mobility for seniors and individuals with disabilities such as Dial-A-Ride services, offering RideWise Travel Training operating shared-ride service for disabled people, and maintaining ADA buses and vans, plus implementing ADA improvements at stops and stations Source: New project • Funding: The project contains FTA Section 5310 federal funds supporting paratransit and senior mobility needs • Project Type: Transit • Location: SMART service area • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: 21-24-0126 • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No
What is changing?	<p><u>AMENDMENT ACTION: ADD NEW PROJECT</u></p> <p>The formal amendment adds the new FTA Section 5310 project to the 2021-24 MTIP. Key 20867 was programmed in the 2018-21 MTIP and expected to obligate its funds by the end of FY 2020. As a result, the project was not carried-over into the new 2021-24 MTIP. Upon learning that the 5310 obligation did not occur as expected, Key 20867 is being added to the 2021-24 MTIP to ensure the fund obligation can occur during FY 2021.</p>
Additional Details:	The MTIP short and detailed descriptions are being updated as well.
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, adding a new project to the MTIP requires a full/formal amendment.
Total Programmed Amount:	The total programmed amount is \$51,250
Added Notes:	

Project 8: Smart Bus and Bus Facilities (Capital) 2019	
Lead Agency:	SMART
ODOT Key Number:	20869 MTIP ID Number: 70899
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> Proposed improvements: SMART's 5339 program supports the replacement, rehabilitation and purchase of buses and related equipment and to construct bus-related facilities such as SMART's schedule scheduling software procurement, and upgrades to bus stop amenities such as bus shelters and signs and bus/support vehicle replacement needs. Source: New project Funding: The project contains FTA Section 5339 federal funds supporting various transit improvement needs Project Type: Transit Location: SMART service area Mile Post Limits: N/A Current Status Code: N/A STIP Amendment Number: 21-24-0163 MTIP Amendment Number: DC21-05-DEC OTC approval required: No
What is changing?	<p><u>AMENDMENT ACTION: ADD NEW PROJECT</u></p> <p>The formal amendment adds the new FTA Section 5339 project to the 2021-24 MTIP. Key 20869 was programmed in the 2018-21 MTIP and expected to obligate its funds by the end of FY 2020. As a result, the project was not carried-over into the new 2021-24 MTIP. Upon learning that the 5339 obligation did not occur as expected, Key 20869 is being added to the 2021-24 MTIP to ensure the fund obligation can occur during FY 2021.</p>
Additional Details:	The MTIP short and detailed descriptions are being updated as well.
Why a Formal amendment is required?	Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, adding a new project to the MTIP requires a full/formal amendment.
Total Programmed Amount:	The total programmed amount is \$87,500
Added Notes:	

Project 9: SMART Bus and Bus Facilities (Capital) 2020 (Add New Project)	
Lead Agency:	SMART
ODOT Key Number:	20870 MTIP ID Number: 70970
Projects Description:	<p>Project Snapshot:</p> <ul style="list-style-type: none"> Proposed improvements:

	<p>SMART’s 5339 program supports the replacement, rehabilitation and purchase of buses and related equipment and to construct bus-related facilities such as SMART’s schedule scheduling software procurement, and upgrades to bus stop amenities such as bus shelters and signs and bus/support vehicle replacement needs.</p> <p>Source: New project</p> <ul style="list-style-type: none"> • Funding: The project contains FTA Section 5339 federal funds supporting various transit improvement needs • Project Type: Transit • Location: SMART service area • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: 21-24-0164 • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No
<p>What is changing?</p>	<p><u>AMENDMENT ACTION: ADD NEW PROJECT</u></p> <p>The formal amendment adds the new FTA Section 5339 project to the 2021-24 MTIP. Key 20870 was programmed in the 2018-21 MTIP and expected to obligate its funds by the end of FY 2020. As a result, the project was not carried-over into the new 2021-24 MTIP. Upon learning that the 5339 obligation did not occur as expected, Key 20870 is being added to the 2021-24 MTIP to ensure the fund obligation can occur during FY 2021.</p>
<p>Additional Details:</p>	<p>The MTIP short and detailed descriptions are being updated as well.</p>
<p>Why a Formal amendment is required?</p>	<p>Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, adding a new project to the MTIP requires a full/formal amendment.</p>
<p>Total Programmed Amount:</p>	<p>The total programmed amount is \$96,000</p>
<p>Added Notes:</p>	

<p>Project 10:</p>	<p>TriMet Elderly and Disabled Program (2020) (Cancel Project)</p>		
<p>Lead Agency:</p>	<p>TriMet</p>		
<p>ODOT Key Number:</p>	<p>20837</p>	<p>MTIP ID Number:</p>	<p>70924</p>
<p>Projects Description:</p>	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Proposed improvements: Providing para-transit ADA services within the TriMet service area to improve mobility for seniors and individuals with disabilities such as operating LIFT, TriMet’s shared-ride service for people who are unable to use regular buses and trains due to a disability or disabling health condition, procuring, and maintaining ADA buses and vans, plus implementing ADA improvements at stops and stations. <p>Source: Existing project</p>		

	<ul style="list-style-type: none"> • Funding: The project contains FTA Section 5310 federal funds supporting senior mobility and para-transit ADA support to people with disabilities • Project Type: Transit • Location: TriMet service area • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: 21-24-0075 • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No 																																																																																																																								
<p>What is changing?</p>	<p><u>AMENDMENT ACTION: CANCEL PROJECT</u></p> <p>The formal amendment cancels Key 20837 from the 221-24 MTIP. Key 20837 is programmed with FTA Section 5310 funds supporting transit needs for senior and the disabled. The project was projected to obligate its funds before the end of FY 2020 (September 30, 2020). This did occur, but verification did not occur until October. Since obligation verification was not available at the time of the final transition carry-over decisions, Key 20837 was carried over into the 2021-24 MTIP under the assumption it did not obligate its 5310 funds. Now that obligation verification has occurred, Key 20837 is being canceled from the 2021-24 MTIP. The 20218-21 MTIP retains Key 20837 and no action is required to re-open the 2018-21 MTIP.</p>																																																																																																																								
<p>Additional Details:</p>	<p>Fund obligation during September 2020 and verified by TrAMS status and approval grant report from TriMet</p> <p><i>Sep-2020</i></p> <table border="1"> <tr> <td>OR-2020-043</td> <td>NA</td> <td>FY2019 5312 STEPS to MOD & MPI Demonstration</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Travel & Incidentals (00)</td> <td>5312</td> <td>\$35,000</td> <td>\$0</td> <td>\$35,000</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Personnel - Task 4 Project Management (00)</td> <td>5312</td> <td>\$415,872</td> <td>\$47,128</td> <td>\$463,000</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Contractual - Task 3 Mobility Data (00)</td> <td>5312</td> <td>\$334,100</td> <td>\$150,000</td> <td>\$484,100</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Contractual - Task 2 Customer Experience (00)</td> <td>5312</td> <td>\$258,476</td> <td>\$380,077</td> <td>\$618,553</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Contractual - Task 1 Innovative Payment (00)</td> <td>5312</td> <td>\$546,304</td> <td>\$236,808</td> <td>\$783,212</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Contractual - Task 1 Innovative Payment (00)</td> <td>5312</td> <td>\$222,530</td> <td>\$90,502</td> <td>\$319,032</td> <td></td> </tr> <tr> <td colspan="3"><i>Subtotal OR-2020-043</i></td> <td></td> <td>\$1,812,282</td> <td>\$890,615</td> <td>\$2,702,897</td> <td></td> </tr> <tr> <td>OR-2020-060-00</td> <td>20837</td> <td>FY20 5310 Mobility Management, Purchase of Service, Preventive Maintenance & Operating</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Preventive Maintenance FY20 (00)</td> <td>5310</td> <td>\$25,475</td> <td>\$6,368</td> <td>\$31,844</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Operating FY20 (00)</td> <td>5310</td> <td>\$466,042</td> <td>\$466,042</td> <td>\$932,084</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active Mobility Management FY20 (00)</td> <td>5310</td> <td>\$165,712</td> <td>\$41,428</td> <td>\$207,140</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active 3rd Party Contracted Services (5310 Only) FY20 (00)</td> <td>5310</td> <td>\$51,475</td> <td>\$12,869</td> <td>\$64,344</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Active 3rd Party Contracted Services FY20 (00)</td> <td>5310</td> <td>\$615,671</td> <td>\$153,918</td> <td>\$769,589</td> <td></td> </tr> <tr> <td colspan="3"><i>Subtotal OR-2020-060-00</i></td> <td></td> <td>\$1,324,375</td> <td>\$680,626</td> <td>\$2,005,001</td> <td></td> </tr> </table>	OR-2020-043	NA	FY2019 5312 STEPS to MOD & MPI Demonstration								Active Travel & Incidentals (00)	5312	\$35,000	\$0	\$35,000				Active Personnel - Task 4 Project Management (00)	5312	\$415,872	\$47,128	\$463,000				Active Contractual - Task 3 Mobility Data (00)	5312	\$334,100	\$150,000	\$484,100				Active Contractual - Task 2 Customer Experience (00)	5312	\$258,476	\$380,077	\$618,553				Active Contractual - Task 1 Innovative Payment (00)	5312	\$546,304	\$236,808	\$783,212				Active Contractual - Task 1 Innovative Payment (00)	5312	\$222,530	\$90,502	\$319,032		<i>Subtotal OR-2020-043</i>				\$1,812,282	\$890,615	\$2,702,897		OR-2020-060-00	20837	FY20 5310 Mobility Management, Purchase of Service, Preventive Maintenance & Operating								Active Preventive Maintenance FY20 (00)	5310	\$25,475	\$6,368	\$31,844				Active Operating FY20 (00)	5310	\$466,042	\$466,042	\$932,084				Active Mobility Management FY20 (00)	5310	\$165,712	\$41,428	\$207,140				Active 3rd Party Contracted Services (5310 Only) FY20 (00)	5310	\$51,475	\$12,869	\$64,344				Active 3rd Party Contracted Services FY20 (00)	5310	\$615,671	\$153,918	\$769,589		<i>Subtotal OR-2020-060-00</i>				\$1,324,375	\$680,626	\$2,005,001	
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<p>Total Programmed Amount:</p>	<p>The total programmed amount decreases to \$0</p>																																																																																																																								
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<p>Project 11:</p>	<p>TriMet Battery Electric Bus Purchases</p>		
<p>Lead Agency:</p>	<p>TriMet</p>		
<p>ODOT Key Number:</p>	<p>TBD - New</p>	<p>MTIP ID Number:</p>	<p>TBD - New</p>

<p>Projects Description:</p>	<p>Project Snapshot:</p> <ul style="list-style-type: none"> • Proposed improvements: Purchase five 40 ft. expanded-range battery electric replacement vehicles for fixed-route bus service, with transition to battery-electric buses (BEB) from diesel buses for fixed route bus service within the TriMet district. The transition to BEB from diesel will include a combination of new bus purchases and battery electric repowers of diesel buses. • Source: New project • Funding: The project contains Metro allocated Congestion Mitigation Air Quality (CMAQ) improvement funds • Project Type: Transit • Location: TriMet service area • Mile Post Limits: N/A • Current Status Code: N/A • STIP Amendment Number: TBD • MTIP Amendment Number: DC21-05-DEC • OTC approval required: No
<p>What is changing?</p>	<p><u>AMENDMENT ACTION: ADD NEW PROJECT</u></p> <p>The formal amendment adds the new TriMet bus procurement project into the 2021-24 MTIP. The use of CMAQ for this project originates from a fund exchange among Metro, Portland, and TriMet. The use of CMAQ was determined to be a better fit for the CMAQ funds which require a clear and demonstrable air quality improvements as part of their core eligibility for use. Initially programmed to a Portland project, the fund exchange offered Portland the opportunity to deliver their faster and potentially with fewer delivery obstacles. TriMet receives CMAQ on an annual basis from Metro and the opportunity to apply the CMAQ to the electric bus purchase offered a stronger value for the CMAQ funds.</p>
<p>Additional Details:</p>	<p>Determining the eligibility for use of CMAQ funds also requires approvals from the ODOT State CMAQ Manager and FHWA to ensure the funds are being used for eligible air quality benefits. Approval for the use the CMAQA has now occurred allowing MTIP and STIP programming to move forward.</p>
<p>Why a Formal amendment is required?</p>	<p>Per the FHWA/FTA/ODOT/MPO approved Amendment Matrix, adding a new project in the MTIP requires a full/formal amendment.</p>
<p>Total Programmed Amount:</p>	<p>The total programmed amount is \$5,867,360</p>
<p>Added Notes:</p>	<p>See Attachments 3 and 4 for additional details</p> <ul style="list-style-type: none"> • Attachment 3 CMAQ Eligibility Submission for Approval – TriMet Electric Bus Purchases • Attachment 4: CMAQ Fund Use Application for TriMet Electric Bus Purchase

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

METRO REQUIRED PROJECT AMENDMENT REVIEWS

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

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

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.

- Determined the project is eligible to be added to the MTIP, or can be legally amended as required without violating provisions of 23 CFR450.300-338 either as a formal Amendment or administrative modification:
 - Does not violate supplemental directive guidance from FHWA/FTA’s approved Amendment Matrix.
 - Adheres to conditions and limitation for completing technical corrections, administrative modifications, or formal amendments in the MTIP.
 - Is eligible for special programming exceptions periodically negotiated with USDOT.
 - Programming determined to be reasonable of phase obligation timing and is consistent with project delivery schedule timing.
- Reviewed and initially assessed for Performance Measurement impacts 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 December 2020 Formal MTIP amendment (DC21-05-DEC) will include the following:

<u>Action</u>	<u>Target Date</u>
• Initiate the required 30-day public notification process.....	December 1, 2020
• TPAC notification and approval recommendation.....	December 4, 2020
• JPACT approval and recommendation to Council.....	December 17, 2020
• Completion of public notification process.....	December 31, 2020
• Metro Council approval.....	January 7, 2021

Notes:

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

USDOT Approval Steps:

<u>Action</u>	<u>Target Date</u>
• Amendment bundle submission to ODOT for review.....	January 12, 2021
• Submission of the final amendment package to USDOT	Janaury13, 2021
• ODOT clarification and approval.....	Early February, 2021
• USDOT clarification and final amendment approval.....	Mid February, 2021

ANALYSIS/INFORMATION

1. **Known Opposition:** None known at this time.
2. **Legal Antecedents:**
 - a. Amends the 2021-24 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 20-5110 on July 23, 2020 (FOR THE PURPOSE OF ADOPTING THE 2021-2024 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM FOR THE PORTLAND METROPOLITAN AREA).
 - b. Oregon Governor approval of the 2021-24 MTIP: July 23, 2020
 - c. 2021-2024 Statewide Transportation Improvement Program (STIP) Approval and 2021 Federal Planning Finding: September 30, 2020
3. **Anticipated Effects:** Enables the projects to obligate and expend awarded federal funds, or obtain the next required federal approval step as part of the federal transportation delivery process.
4. **Metro Budget Impacts:** None to Metro

RECOMMENDED ACTION:

JPACT approved Resolution 20-5151 on December 17, 2020 and is requesting Metro Council approve Resolution 20-5151 consisting of eleven projects in the December 2020 Formal Amendment Bundle enabling the projects to be amended correctly into the 2021-24 MTIP with final approval to occur from USDOT.

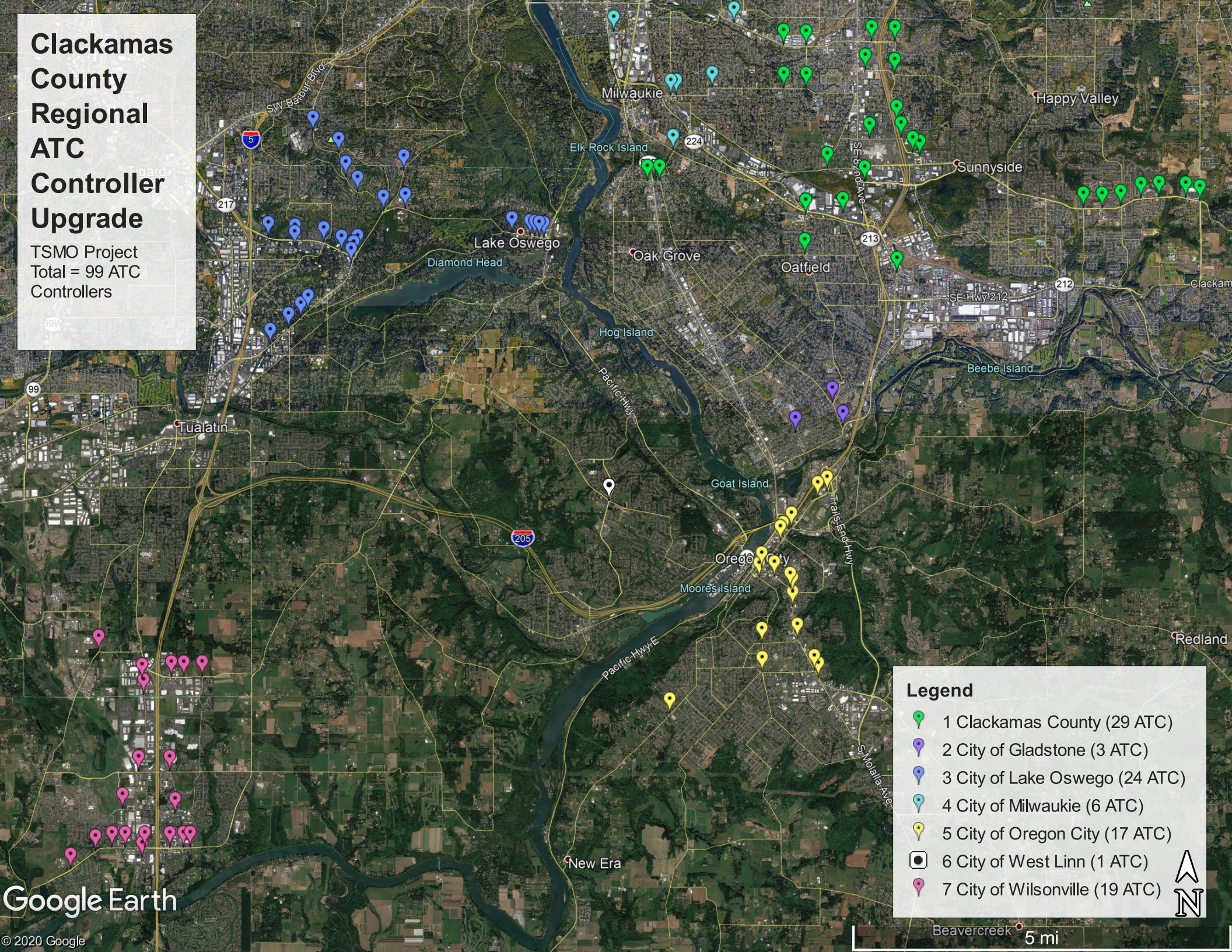
- TPAC notification and approval recommendation: December 4, 2020
- JPACT approval: December 17, 2020

Attachments:

1. Clackamas County Regional ATC Controller Upgrade Location Map
2. Metro TSMO Award Memo
3. Attachment 3 CMAQ Eligibility Submission for Approval – TriMet Electric Bus Purchases
4. Attachment 4: CMAQ Fund Use Application for TriMet Electric Bus Purchase

Clackamas County Regional ATC Controller Upgrade

TSMO Project
Total = 99 ATC
Controllers



Legend

- 1 Clackamas County (29 ATC)
- 2 City of Gladstone (3 ATC)
- 3 City of Lake Oswego (24 ATC)
- 4 City of Milwaukie (6 ATC)
- 5 City of Oregon City (17 ATC)
- 6 City of West Linn (1 ATC)
- 7 City of Wilsonville (19 ATC)





Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Memo

Date: Jan. 2, 2020
To: TPAC and Interested Parties
From: Caleb Winter, TSMO Program Manager, Senior Transportation Planner
Subject: TSMO Sub-allocation for FFY19-21

Memo Purpose

Share TransPort's Transportation System Management and Operations (TSMO) project recommendations from the 2019 TSMO Project Solicitation (2019-2021 MTIP).

Overview

TransPort is the Subcommittee of TPAC that plays a key role in advancing TSMO projects. TransPort updates the criteria based on the current TSMO strategy and regional policy priorities. Metro leads the TSMO solicitation and review process. TransPort recommends projects for funding.

The 2019 TSMO Project Solicitation process included these steps:

- March-July 2019 – TransPort discussed important 2018 RTP policies to develop the criteria that went into the 2019 TSMO Project Solicitation
- August-September 2019 - Solicitation and submissions
- October 2019 – Metro led the review process including screening for meeting minimum requirements, project readiness/risk review and ratings from a group of regional-level reviewers
- November 2019 - TransPort discussion, including GIS exercises to tie intersection investments to TSMO criteria
- November 2019 – Applicants provided revised requests (optional)
- December 11, 2019 – TransPort took action to unanimously recommend the projects below.

For more background, please see the application and guidance still posted at <https://www.oregonmetro.gov/tsmo>.

The 2019 TSMO Solicitation was based on affording projects with an estimated \$4.6M in federal funds. After budget review and accounting for the TSMO program management costs for three years, Metro determined that \$4.7M in federal funds is available for the 2019 TSMO Project Solicitation. Nearly \$7M in requests were received (\$2.3M above available funds).

During the November 13, 2019 TransPort meeting, consensus was to give each applicant the option of tightening budgets and/or scaling down the project. Most of the applicants submitted revised requests. Revised requests, plus those that were not revised, totaled \$6,341,459 in requested TSMO federal funds (\$1.6M above available funds).

Metro Staff created an option for TransPort to discuss at their Dec. 11 using reviewer ratings, GIS analysis of project locations and other input to help scale projects to the \$4.7M of available TSMO federal funds.

Recommended Projects

TransPort recommends projects in two categories. The first involves upgrading the hardware equipment at many signalized intersections across the region with Advanced Traffic Controllers

(ATCs). The second category primarily serves region-wide needs. The following describes these categories with select project details. All projects are listed at the end of this memo.

Advanced Traffic Controller Projects

These projects are located at intersections around the region and applicants provided Metro with locations. Metro compared intersections to 2019 TSMO Solicitation criteria as the basis for investment:

- Equity – fund all in 2018 RTP equity focus areas
- Safety – fund all that are at high-injury crash intersections identified by Metro or by local agency’s safety plan, plus signals nearby or serving fire stations
- Reliability for people – fund all related to transit reliability as well as some additional transit-serving intersections, intersections near schools and intersections that provide a foundation for Integrated Corridor Management
- Reliability for goods movement – fund all related to Metro analysis of reliability on freight routes plus some intersections with identified freight demand
- Reliability – fund some intersections that provide a foundation for Integrated Corridor Management
- Partnerships – fund a portion of intersections in cities that are providing local matching funds

The list of lead agencies deploying ATCs is included at the end of this memo.

All Other Project Applications

PSU – PORTAL keeps the funding level close to historic levels for the next three years of enhancing and continuing the regional transportation data archive.

Metro - TSMO Program Plus provides additional support to bring onboard additional professional services to boost both the technical side and communications for the program.

- \$90,000 for planning supportive of extending the 2020 TSMO Strategy update to city, county and related state planning efforts
- \$30,000 for operator policy development, supportive of operator agreements, sharing agreements and similar efforts called for by the 2020 TSMO Strategy
- \$100,000 for research of a range of needs to be identified in the 2020 TSMO Strategy that may include applying a racial equity lens by understanding TSMO related context around changing travelers access and needs; ranging to, Dynamic Traffic Assignment modeling, to understand performance of different operations scenarios.
- \$40,000 for training, supportive of the skills desired by TSMO partners
- \$48,600 for Communications supportive of TSMO partners to do their work communicating the TSMO strategies, solutions and outcomes

City of Portland - Regional Traffic Signal System Performance Measures for active transportation.

City of Portland - Traffic Signal Communications (fiber optics) for connecting signals on NE Holgate east of 82nd Ave.

Two projects received lower ratings and were ultimately lower priorities for TransPort and will not receive funding from the 2019 TSMO recommendation:

- Metro Regional Operations Asset Data ConOps: a planning project to create a virtual layer of signal and signage infrastructure.
- PBOT Rail Safety Crossing Project: batteries to help in the event of power failure.

Next Steps

The steps ahead for concluding the project recommendation process and beginning projects include:

- Metro newsfeed item announcing recommended projects
- TSMO Program staff finalize recommendation letters with conditions of approval
- Winter/Spring - Lead agencies will refine project scopes, draft IGAs, work with Metro and ODOT on MTIP/STIP programming in preparation for FHWA Obligation

Please contact me with any questions at 503-797-1758 or Caleb.Winter@oregonmetro.gov.

Lead agency	Project name	Project type	TSMO Federal Portion
City of Portland	Traffic Signal Communications	Data communications through fiber optics	\$227,196
City of Portland	Local Traffic Signal Controller Replacement	ATCs	\$840,435
City of Portland	Regional Traffic Signal System Performance Measures	Traffic Signal Performance Measures for Active Transportation	\$619,137
Clackamas County	Clackamas County Regional ATC controller & Signal Optimization Project	ATCs in Clackamas County, Gladstone, Lake Oswego, Milwaukie, Oregon City, West Linn, Wilsonville	\$735,878
Metro	Regional TSMO Program Plus	Advancements in planning, training, research and communications	\$285,880
Oregon Department of Transportation	Advanced Traffic Controller (ATC) Deployment Project 99E and Tualatin Valley Highway	ATCs	\$239,507

Lead agency	Project name	Project type	TSMO Federal Portion
Portland State University	Multimodal Transportation Data Archive	Data archiving and enhancements of PORTAL	\$600,000
Washington County	Advanced Traffic Controller (ATC) Optimization Project	ATCs in Washington County, Beaverton, Hillsboro and Tigard	\$1,151,936

Total = \$4,700,000

Memo

Attachment 3 CMAQ Eligibility Submission of Approval
– TriMet Electric Purchase



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Date: October 15, 2020
To: Hope Derrickson, CMAQ Program Manager – ODOT
From: Grace Cho, Senior Transportation Planner - Metro
Ted Leybold, Resource Development Manager - Metro
Subject: CMAQ Eligibility Submission for Approval – TriMet Electric Bus Purchases

Introduction

The following memorandum outlines the details requested in ODOT’s CMAQ application form for those eligible transportation projects seeking the use of CMAQ funds. Included are the cost-benefit analysis, project timeline, overview of MPO process and criteria, project sketch as required by the ODOT CMAQ funding eligibility application. Additional materials are attached, as indicated.

Background

The TriMet electric bus purchases is a new project anticipated to be amended in the 2021-2024 MTIP. Previously awarded CMAQ funding is being reprogrammed to the purchase of electric buses. This is to address timing and obligation issues related to two previously awarded projects from the 2016-2018 Regional Flexible Fund and 2014-2015 Regional Flexible Fund allocation cycles. The previous projects are the Central City Multimodal Safety Project – Phase II (City of Portland) and Vehicle Electrification (Metro). Based on project scopes, both projects were deemed eligible and Metro conducted the necessary emissions analyses of the project and submitted it for CMAQ eligibility approval. Approvals was received in 2015 and 2012.

Since the original CMAQ eligibility approval, the two projects have ran into various scoping and timeline issues where all parties agreed locally funding the projects would expedite delivery rather than entering into new IGAs and beginning the federal aid process. Through a fund exchange agreement with TriMet, the Central City Multimodal Safety Project and Vehicle Electrification are both being locally funded in exchange for TriMet to apply the CMAQ funds to an eligible use, which has been identified as the purchase of electric buses. Metro serves as the local fund administrator. Metro is resubmitting an emissions analysis to reprogram the CMAQ funding to another CMAQ eligible use, electric bus purchases.

Overview of Supplemental Materials – As Required by the CMAQ Application

- Map showing project location – See Attached – TriMet District Map
- Indicate what level of Operating Assistance will be required – N/A
- Detailed Project Cost Estimate/Budget and Schedule – See CMAQ Application
- Detailed Timeline for Project – See Section 1.
- Documentation if Project is a TCM in an approved SIP – N/A
- Buy America information or waiver request – See Attached – Buy America Information from Electric Bus Vendors/Manufactures
- Cost Effectiveness Assessment – See Section 2.
- Overview of MPO public process and criteria in project selection – See Section 3.
- Additional quantitative or qualitative emissions analysis information – See Attached – AFLEET calculation
- Project Sketch/drawings or plans – See Attached – TriMet Electric Bus Press Release
- Any other supporting documentation that may support successful award – N/A
 - A copy of the fund exchange IGA can be provided upon request.

1. TriMet Electric Bus Purchase Project Timeline

- July- December 2021 - Procurement of electric buses (If needed; in some cases a multi-year RFP-contract is already in place.)
- January – February 2022 – Details about the order are sorted/ new specs, adjustments to the build etc.
- February 2022 – Orders for buses are placed
- March - August 2022 – Buses are in production by vendor/manufacturer
- September 2022 – Buses delivered; TriMet conducts deployment validation, invoice received. Once validation is complete, the invoice is paid and TriMet submits a report/reimbursement request for CMAQ funds to FTA.

2. CMAQ Cost Effectiveness Analysis for TriMet Electric Bus Purchases

Total – 5 electric buses purchased.

Carbon Monoxide (CO)	Volatile Organic Compounds (VOC)	Nitrogen Oxide (NOx)
\$4,946,372	\$4,946,372	\$4,946,372
/94.248	/16.037	/220.420
\$52,482.39	\$208,422.34	\$22,440.62

3. MPO Process for Prioritization and Criteria in Project Selection

Electrification of the transit fleet is a transportation investment priority which has been identified in the 2018 Regional Transportation Plan (RTP) and the Climate Smart Strategy for the Portland metropolitan region (adopted in 2014). In the development of the 2018 RTP, addressing climate change (and the co-benefit of reducing air pollution from vehicles) emerged as one of four main priority areas for the region to focus its efforts. The 2018 RTP identifies goals and objectives related to the reduction of greenhouse gases from the transportation system and serving as a leader on addressing climate change. Addressing climate change is also supported by the region’s adopted Climate Smart Strategy (2014), which is a state-mandated transportation and land use strategy to reduce greenhouse gas emissions from light duty vehicles with established targets.

The goals and objectives of these two planning documents and the further prioritization of addressing climate change in the 2018 RTP process serves as the primary process for prioritizing the electrification of transit fleet. Electric buses are included in the 2018 RTP financially constrained project list.

With each of these planning and prioritization efforts, wide outreach and engagement were undertaken throughout the entire development process. In the cases of the 2018 RTP and the Climate Smart Strategy, each effort undertook various forms of engagement – from online surveys, focus groups, leadership forums, etc. – over the three-year period of development. Electrification of the transit fleet as well as personal vehicles emerged as a central strategy to support the region address its goals centered around addressing climate change.

In addition, the recent Get Moving 2020 transportation funding measure led by the Metro Council also prioritized transit fleet electrification and the public comments received for the 2021-2024 Metropolitan Transportation Improvement Program (MTIP) also illustrated public support for the accelerated deployment of electrification of transit fleet to meet greenhouse gas reduction goals as well as address the public health impacts of diesel pollution from vehicles.

Information about the planning processes can be found on Metro's website at the following:

<https://www.oregonmetro.gov/regional-transportation-plan>

<https://www.oregonmetro.gov/climate-smart-strategy>

INSTRUCTIONS			
Review ODOT's CMAQ Guidelines for allowable project types and eligibility (ODOT allows fewer project types than FHWA)			
ODOT CMAQ Guidelines			
PROJECT INFORMATION			
Project Title	TriMet Battery Electric Bus Purchases		
MPO (if Applicable)	Metro	STIP #	
Agency (applicant)	Tri-county Metropolitan Transportation District of Oregon (TriMet)		
Address	1800 SW 1 st Avenue, Suite 300, Portland, OR 97201		
Primary Contact	Tyler Bennett		
Telephone	503-962-4896	Public-Private Partnership? Y/N	N
Email	BennettT@trimet.org		
Responsible Agency	TriMet		
Project Location (City)	Within TriMet District		
Project Delivery	Certified Agency <input checked="" type="checkbox"/> SFLP (non MPO) <input type="checkbox"/> ODOT Delivered: <input type="checkbox"/>		
PROJECT CATEGORY (Applicant Certifies by checking box that Project meets requirements as outlined in ODOT CMAQ Guidelines)			
<input checked="" type="checkbox"/>	Public Transportation Improvements		Traffic Flow Improvements for Congestion Reduction
<input type="checkbox"/>	Transp. Options Strategies	<input checked="" type="checkbox"/>	Vehicle and Fuel Efficiency Efforts
<input type="checkbox"/>	Pedestrian/Bicycle Infrastructure		Road Dust Mitigation (PM10 areas only)
<input type="checkbox"/>	ITS for Congestion Reduction		Project is a TCM
Infrastructure project is on a: <input type="checkbox"/> Roadway, <input type="checkbox"/> Bikeway or Sidewalk, <input checked="" type="checkbox"/> Transit, <input type="checkbox"/> Other			
Non-Infrastructure Project includes: <input type="checkbox"/> Operating Assistance, <input type="checkbox"/> Outreach/Education			
PROJECT LOCATION			
Street(s) Name (or Nearest Street): Bus routes Within the Tri-County Metropolitan Transportation District of Oregon		Functional Class: n/a	
Cross Streets, Termini: n/a		Total Linear Feet: n/a	

DETAILED COST ESTIMATE / SCHEDULE						
[Provide cost, including match, for eligible components. Use additional sheets for detailed estimate]						
Phase	Program FYs (beginning and completion)	Other Federal _____	CMAQ	Local	non Fed _____	Total
Project Development						
Design/ Engineering						
Right of Way						
Construction						
Operating Assistance (if applicable)						
Other – Battery Electric Bus Purchases	FFY2022		\$4,946,372	\$920,988		\$5,867,360
Totals			\$4,946,372	\$920,988		\$5,867,360
Duration of Project Funding (Years): 1 year, earliest first year of billing FFY2022						
Detail any CMAQ ineligible components and how they are funded. Provide source of all local/non-federal funds						
<p>Purchases of electric buses are eligible use of CMAQ funds. No ineligible components. Local match is derived from Statewide Transportation Improvement Fund and future bond revenue.</p>						
PROJECT NARRATIVE						
<p>Purchase replacement vehicles for fixed-route bus service, with transition to battery-electric buses (BEB) from diesel buses. (RTP ID 12081 and 10928) This project will provide five, 40 ft expanded-range battery electric buses for fixed route bus service within the TriMet district. The transition to BEB from diesel will include a combination of new bus purchases and battery electric repowers of diesel buses.</p>						

EMISSIONS REDUCTIONS

Emission reductions are calculated using the Argonne National Library AFLEET simple payback calculator.

Use the following boxes to show estimated reduction amount (kg/day).

VOC	.047	CO	.281
NOx	.657	PM10	N/A
PM2.5	N/A	CO2	N/A
Duration of PM10 & CO Benefit	Permanent/ 1 Years		

SUPPORTING INFORMATION

SUPPORTING INFORMATION: List all applicable and attach documents to submittal email

- Map showing project location (required)
- Indicate what level of Operating Assistance will be required (if applicable)
- Detailed Project Cost Estimate/Budget and Schedule (required)
- Detailed Timeline for Project (required)
- Documentation if Project is a TCM in an approved SIP
- Buy America information or waiver request (if applicable)
- Cost Effectiveness Assessment (required for MPOs)
- Overview of MPO public process and criteria in project selection (required for MPOs)
- Additional quantitative or qualitative emissions analysis information
- Project Sketch/drawings or plans (required)
- Any other supporting documentation that may support successful award

SUBMISSION

Submitted By:	Grace Cho, Metro, Senior Transportation Planner	Date:	November 3, 2020
	Name and Title		

Submit Completed Application to:

[E-mail: CMAQ@odot.state.or.us](mailto:CMAQ@odot.state.or.us) | [Subject Line: CMAQ \[Agency Name\] Application \[Year\]](#)

REVIEW AND APPROVAL (ODOT USE ONLY)			
ODOT Emissions Review:			
	Air Quality Program Coordinator		Date
Accept/Reject (ODOT CMAQ Program Manager):		Date:	
Reason for ODOT Rejection, if applicable.			
FHWA Concurrence/Rejection			
	FHWA CMAQ Coordinator		Date
Reason for FHWA Rejection, if applicable.			