

Transportation Performance Management
State Biennial Performance Report
for Performance Period 2018-2021

2018

Baseline Performance Period Report

Oregon

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Summary of Performance Measures and Targets

Performance Measures	Baseline	2-Year Target	4-Year Target
Percentage of Pavements of the Interstate System in Good Condition			35.0%
Percentage of Pavements of the Interstate System in Poor Condition			0.5%
Percentage of Pavements of the Non-Interstate NHS in Good Condition	63.9%	50.0%	50.0%
Percentage of Pavements of the Non-Interstate NHS in Poor Condition	6.6%	10.0%	10.0%
Percentage of NHS Bridges Classified as in Good Condition	12.4%	11.4%	10.0%
Percentage of NHS Bridges Classified as in Poor Condition	1.9%	2.4%	3.0%
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	80.9%	78.0%	78.0%
Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable			78.0%
Truck Travel Time Reliability (TTTR) Index	1.39	1.45	1.45
Annual Hours of Peak Hour Excessive Delay Per Capita: Urbanized Area 1			24.0
Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Urbanized Area 1	30.7%	33.1%	33.5%
Total Emission Reductions: PM2.5	0.450	0.120	0.230
Total Emission Reductions: NOx			
Total Emission Reductions: VOC			
Total Emission Reductions: PM10	520.470	363.000	726.400
Total Emission Reductions: CO	3618.440	584.000	1168.000

Overview

OVERVIEW SECTION 1		
O1	Please provide a description of how the State DOT is coordinating with relevant MPOs in target selection. [23 CFR 490.105(e)(2)] (Optional)	Oregon DOT has established a Federal Performance Measure Coordination Protocol document that outlines the roles and responsibilities, along with the coordination processes for how Oregon DOT will establish the statewide targets in coordination with the MPOs. This document also discusses how ODOT will coordinate with the MPOs in setting MPO specific targets – if they choose to do so.
O2	Please discuss how the established targets provided in this performance report supports expectations documented in longer range plans, such as the State asset management plan required by 23 U.S.C. 119(e) and the long-range statewide transportation plan. [23 CFR 490.107(b)(1)(ii)(C)]	The Oregon Transportation Plan (OTP) is the state’s long range transportation plan. The OTP established clear funding priorities related to available funding. Oregon has been in a reduced funding scenario for many years and has focused the vast majority of federal and state funding to preserving and maintaining the existing transportation system. However, even with this focus on maintaining system assets, Oregon has been projecting a steady decline in asset conditions. This is also reflected in our Federal Transportation Asset Management Plan. The Oregon Legislature passed a significant state transportation funding increase in 2017. This increase in funding is focused primarily on improving safety and preserving the transportation system assets. With the focus of funding centered on preserving system assets, there is very little funding targeted to improving system performance and reliability for freight and non-freight users. As such, Oregon has used a methodology of declining system performance for the PM 3 measures.
O3	Please use this space to provide any general comments that may assist FHWA in its review of your submission. You can use this space to provide greater context for your targets and baseline condition/performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	N/C
OVERVIEW SECTION 2		
O4	Who should FHWA contact with questions?	Philip Kase
O5	What is the phone number for this contact?	5039863248
	Please provide 10-digit number (area code and phone number) without formatting. (e.g., 1234567890)	

O6	What is the email address for this contact?	philip.j.kase@odot.state.or.us
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Pavement

Pavement Performance Overview		
P1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and baseline condition, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	<p>As stated in the Transportation Asset Management Plan, the Oregon Department of Transportation has used performance measures for more than 25 years to track the agency's performance at meeting a series of transportation-related benchmarks, including public safety, asset condition, livability, and economic prosperity. The National Goals and Performance Measures established under MAP-21 are in many ways thoroughly consistent with Oregon's transportation performance measures, particularly in the areas of pavement and bridge infrastructure condition. Although discrepancies exist between these state and national performance measures in terms of the scope of assets considered and condition metrics, they are largely congruent with each other. Smart investments that rely upon asset management strategies to improve the condition of Oregon's pavement and bridges according to state performance measures will also have the direct impact of improving conditions according to national performance measures.</p> <p>To address the challenge of overlapping state and federal performance measures and targets and how they impact agency decision-making, ODOT's policy is to continue to emphasize the central role of state performance measures in shaping bridge and pavement investment decisions and project selection. ODOT's process for selecting investments is aimed at achieving a more complex set of performance measures that are intended to result in a balanced program across many competing needs rather than solely meeting the limited scope of the national performance measures pertaining to asset condition. This continued focus on, and prioritization of, state performance measures is anticipated to have the practical effect of meeting the more narrow scope of the national performance</p>

		<p>measures and targets for NHS bridges and pavements.</p> <p>The Oregon Department of Transportation has been collecting pavement distress and roughness data on Interstate and State jurisdiction NHS highways for over 20 years. This rich dataset provides a strong foundation for establishing pavement performance targets. However, there are considerable differences between ODOT's Overall Condition Index methodology and the National Pavement Measure established under MAP-21. This is because ODOT's methodology incorporates cracking severity as opposed to just cracking quantity in the National measure. In addition, ODOT's rating methodology includes other critical distresses such as potholes, patching, weathering and raveling while the National measure doesn't. Differing threshold values for determining good-fair-poor categories and differing data aggregation methodologies are also a factor. The end result is that there is no direct conversion between ODOT's Pavement Condition Measure and the new National Pavement Performance measures. Each system is unique and although each system captures similar relative trend versus time, the actual magnitude of the numbers between the two methodologies are not directly comparable.</p>
<p>Statewide Performance Target for the Percentage of Pavements of the Interstate System in Good Condition</p>		
<p>P2</p>	<p>Please provide the 4-year target for the statewide percentage of pavements of the Interstate System in Good condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p> <p>Notes: For the first performance period only, baseline condition and 2-year targets are not required for the Pavements on the Interstate System measures. [23 CFR 490.105(e)(7)]</p>	<p>35.0</p>
<p>P3</p>	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 4-year target established for the 2018-2021 Performance Period for the statewide percentages of pavements of the Interstate System in Good condition. [23 CFR 490.107(b)(1)(ii)(A)]</p>	<p>In order to understand historic data trends and provide context for setting performance targets, Interstate pavement condition data from 2008 through 2016 were re-processed using the National</p>

		<p>methodology, analyzed, and results compared with the ODOT pavement condition methodology.</p> <p>The results show that the Percent Good measure for Interstate pavement ranged from a low of 25% in 2008 to a high of 46% in 2016. This trend was similar to that seen using ODOT's pavement condition methodology although the magnitude of the values was different. Both systems showed that condition levels were relatively flat between 2008 and 2010, jumped up then flattened for 2012 and 2014, and then jumped again in 2016. Current pavement conditions, as reflected by the 2016 data, are thought to be at or near their peak and a decline in pavement conditions towards historical values is expected over the next few years due to deteriorating conditions and reduced pavement funding levels. The 4-year target value of 35.0% is a conservative estimate that is slightly below the 38%-40% range seen in 2012 and 2014.</p>
Statewide Performance Target for the Percentage of Pavements of the Interstate System in Poor Condition		
P4	<p>Please provide the 4-year target for the statewide percentage of pavements of the Interstate System in Poor condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p> <p>Notes: For the first performance period only, baseline condition and 2-year targets are not required for the Pavements on the Interstate System measures. [23 CFR 490.105(e)(7)]</p>	0.5
P5	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 4-year target established for the 2018-2021 Performance Period for the statewide percentages of pavements of the Interstate System in Poor condition. [23 CFR 490.107(b)(1)(ii)(A)]</p>	<p>Analysis of condition data from 2008 through 2016 showed that the Percent Poor measure for Interstate pavement ranged from 0.1% to 0.4%. Again, the magnitude of these numbers is substantially different than ODOT's pavement condition methodology and the year to year trends are somewhat different as well. As noted in the discussion for Percent Good on Interstates, pavement conditions are expected to decline towards historical values and a 4-year target value of 0.5% is a conservative estimate that reflects the actual historic numbers over the analysis period. ODOT places</p>

		a high value on keeping the Interstate pavement network in a state of good repair and this target is well below the maximum allowable level of 5% poor established under MAP-21.
Statewide Performance Target for the Percentage of Pavements of the Non-Interstate NHS in Good Condition.		
Note: For the first performance period only, the overall condition for all Non-Interstate NHS pavement types will use IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]		
P6	<p>Baseline statewide percentage of pavements of the Non-Interstate NHS in Good condition. [23 CFR 490.107(b)(1)(ii)(B)] For the first performance period, FHWA has calculated this value using IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]</p> <p>The data submitted must cover the condition derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)]</p> <p>The data must be reported to the nearest tenth of a percent.</p>	63.9
P7	<p>Please provide the 2-year target for the statewide percentage of pavements of the Non-Interstate NHS in Good condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2019.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p>	50.0
P8	<p>Please provide the 4-year target for the statewide percentage of pavements of the Non-Interstate NHS in Good condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p>	50.0
P9	<p>Please provide a discussion, to the maximum extent practicable, on the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the statewide percentages of pavements of the Non-Interstate NHS in Good condition. [23 CFR 490.107(b)(1)(ii)(A)]</p>	<p>For the Non-Interstate NHS Pavement Condition Measures, 23 CFR 490.313(e) provides a “transition” provision for the first performance period and the overall condition (i.e., Good, Fair or Poor) of pavement sections will be rated based only on the IRI values (or Present Serviceability Rating (PSR) values, where applicable). This transition provision applies only to the 2018-2021 performance period and for the second performance period onwards, overall condition for Non-Interstate Pavements will be based on full distress and IRI.</p> <p>Analysis of historical data showed that using IRI only yields substantially different results than the full set of metrics. For example, using IRI data only the Percent Good ranges from 50 to 65%</p>

		<p>whereas under the full distress and IRI the Percent Good ranges from only 25 to 40%. Therefore, the baseline values and targets for the second performance period will have to be changed accordingly to reflect the change in methodology.</p> <p>As mentioned previously under the Interstate target discussion, current pavement conditions, as reflected by the 2016 data, are thought to be at or near their peak and a decline in pavement conditions towards historical values is expected over the next few years due to deteriorating conditions and reduced pavement funding levels. 2-Year and 4-year target values of 50.0% were selected as conservative estimates that are slightly below the actual historic range since 2008. Because these targets are temporary for the first performance period only and will have to be changed substantially for future performance periods when the full pavement distress and IRI data becomes implemented, refinements or adjustments to the targets at the mid-reporting period are not planned.</p>
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Statewide Performance Target for the Percentage of Pavements of the Non-Interstate NHS in Poor Condition.

Note: For the first performance period only, the overall condition for all Non-Interstate NHS pavement types will use IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]

P10	<p>Baseline statewide percentage of pavements of the Non-Interstate NHS in Poor condition. [23 CFR 490.107(b)(1)(ii)(B)] For the first performance period, FHWA has calculated this value using IRI, only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]</p> <p>The data submitted must cover the condition derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)]</p> <p>The data must be reported to the nearest tenth of a percent.</p>	6.6
P11	<p>Please provide the 2-year target for the statewide percentage of pavements of the Non-Interstate NHS in Poor condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2019.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p>	10.0
P12	<p>Please provide the 4-year target for the statewide percentage of pavements of the Non-Interstate NHS in Poor condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021.</p>	10.0

	Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.	
P13	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the statewide percentages of pavements of the Non-Interstate NHS in Poor condition. [23 CFR 490.107(b)(1)(ii)(A)]	<p>As discussed under the Non-Interstate NHS Percent Good section, the Percent Poor targets are subject to the “transition” provision under 23 CFR 490.313(e) and are based on IRI values only. For the 2018-2021 performance period. Analysis of historical data showed that Percent Good using IRI only ranged from approximately 6.5% to 8.5% whereas under the full distress and IRI the Percent Good ranged from only 0.5% to 2.5%. As with the Percent Good measure, the baseline values and targets for the second performance period will have to be changed accordingly to reflect the change in methodology.</p> <p>As noted in other discussion sections, pavement conditions are expected to decline towards historical values and 2-Year and 4-year target values of 10.0% were selected as conservative estimates that are slightly below the actual historic range since 2008. Because these targets are temporary for the first performance period only and will have to be changed substantially for future performance periods when the full pavement distress and IRI data becomes implemented, refinements or adjustments to the targets at the mid-reporting period are not planned.</p>
The line above marks the end of the required reporting. Everything below this line is related to optional targets.		
Optional Additional Pavement Performance Target #1 [23 CFR 490.105(e)(3)]		
P14	Which measure are you establishing an optional additional target? Percentage of Pavements on the:	
P15	Please indicate what area(s) the State DOT is establishing this additional target for (UZA stands for Urbanized Area). For each measure, a State DOT can only establish one additional target for the non-UZA area within their State. They can establish additional targets for any number and combination of UZAs.	
P16	If this target is for a single UZA or group of UZAs, please indicate which UZA(s) are included in this target. This field is not applicable if the target is for the statewide urbanized area (all UZAs) or the non-UZA area (Statewide Rural and Small Urban Areas). Please enter the UZA with its official name, state abbreviation, and then the 5-digit UZA code in parentheses. For example: BIRMINGHAM, AL (07786).	

	<p>For a group of UZAs, please separate them with a semi-colon. For Example: BIRMINGHAM, AL (07786); AUBURN, AL (04033).</p>	
P17	<p>Please provide the current baseline condition for the selected measure in this target area. [23 CFR 490.107(b)(1)(ii)(B)]</p> <p>The data submitted must cover the condition derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)]</p> <p>The data must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p> <p>Notes: For the first performance period only, baseline condition and 2-year targets are not required for the Pavements on the Interstate System measures. [23 CFR 490.105(e)(7)]</p> <p>For the first performance period only, baseline condition for the all pavements on the non-Interstate NHS should be based on an overall condition using IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]</p>	
P18	<p>Please provide the 2-year target for the selected measure in this target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2019.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p> <p>Notes: For the first performance period only, baseline condition and 2-year targets are not required for the Pavements on the Interstate System measures. [23 CFR 490.105(e)(7)]</p>	
P19	<p>Please provide the 4-year target for the selected measure in the target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.313(f)] Enter 86.5% as 86.5.</p>	
P20	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the selected measure in the target area. [23 CFR 490.107(b)(1)(ii)(A)] Include the source of the urbanized dataset used to establish the targets. [23 CFR 490.107(b)(1)(ii)(D)]</p>	

Bridge

Bridge Performance Overview		
B1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and baseline condition, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	N/C
Statewide Performance Target for Bridges on the NHS Classified as in Good Condition		
B2	<p>Baseline statewide percentage of deck area of bridges on the NHS classified as in Good condition. [23 CFR 490.107(b)(1)(ii)(B)]</p> <p>The data submitted must cover the condition derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)]</p> <p>The data must be reported to the nearest tenth of a percent.</p>	12.4
B3	<p>Please provide the 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2019.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.409(c)] Enter 86.5% as 86.5.</p>	11.4
B4	<p>Please provide the 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.409(c)] Enter 86.5% as 86.5.</p>	10.0
B5	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the statewide percentage of deck area of bridges on the NHS classified as in Good condition. [23 CFR 490.107(b)(1)(ii)(A)]	<p>The majority of NHS bridges in good condition have NBI values of 7 (11.2%). Bridges with deck NBIs of 7 are most at risk of moving to fair condition. Recently constructed bridges (within the last 30 years) that currently have deck NBI values of 7 were analyzed and found to move from good to fair in about 24 years. Typically bridges less than 30 years old are not prioritized for rehab, so there is little chance these bridges will get work. We also considered trends for bridges that are older than 30 years that are in fair condition and expected to remain fair or degrade to poor based on current program funding. The analysis considered which bridges would move from poor or fair to good, based on projected rehab or replacement. Bridges can only move from poor to good condition if it is replaced.</p>

		The deck area of possible replacement in the next 10 years was calculated. Based on projections of our Program Funding and using the above assumptions, the deck area of the resulting good bridges was calculated for less than 30 year old bridges and greater than 30 year old bridges and added together to set the target.
Statewide Performance Target for Bridges on the NHS Classified as in Poor Condition		
B6	<p>Baseline statewide percentage of deck area of bridges on the NHS classified as in Poor condition. [23 CFR 490.107(b)(1)(ii)(B)]</p> <p>The data submitted must cover the condition derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)]</p> <p>The data must be reported to the nearest tenth of a percent.</p>	1.9
B7	<p>Please provide the 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2019.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.409(c)] Enter 86.5% as 86.5.</p>	2.4
B8	<p>Please provide the 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.409(c)] Enter 86.5% as 86.5.</p>	3.0
B9	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition. [23 CFR 490.107(b)(1)(ii)(A)]</p>	<p>The majority of NHS bridges in poor condition have an NBI value of 4 (1.4%). Within the last 14 years, ODOT has targeted the reduction in poor bridges through the OTIA III Program using bonded funding for strengthening and limited replacements, and using Major Bridge Maintenance for strengthening and repair. The percent poor has been reduced from 7.7% in 2009 to the current 1.9%. A bridge can only move from poor to good condition if it is replaced. The majority of bridges that were poor are now fair and could move back to poor in the next few years. Based on projections of the number of bridges moving to poor condition needing replacement, rather than continually repairing, the deck area of the resulting poor is projected to</p>

		increase slightly rather than decrease.
The line above marks the end of the required reporting. Everything below this line is related to optional targets.		
Optional Additional Bridge Performance Target #1 [23 CFR 490.105(e)(3)]		
B10	Which measure are you establishing an optional additional target? Percentage of deck area of Bridges on the NHS classified as in:	
B11	Please indicate what area(s) the State DOT is establishing this additional target for (UZA stands for Urbanized Area). For each measure, a State DOT can only establish one additional target for the non-UZA area within their State. They can establish additional targets for any number and combination of UZAs.	
B12	If this target is for a single UZA or group of UZAs, please indicate which UZA(s) are included in this target. This field is not applicable if the target is for the statewide urbanized area (all UZAs) or the non-UZA area (Statewide Rural and Small Urban Areas). Please enter the UZA with its official name, state abbreviation, and then the 5-digit UZA code in parentheses. For example: BIRMINGHAM, AL (07786). For a group of UZAs, please separate them with a semi-colon. For Example: BIRMINGHAM, AL (07786); AUBURN, AL (04033).	
B13	Please provide the baseline condition for the selected measure in this target area. [23 CFR 490.107(b)(1)(ii)(B)] The data submitted must cover the condition derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)] The data must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.409(c)] Enter 86.5% as 86.5.	
B14	Please provide the 2-year target for the selected measure in this target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2019. Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.409(c)] Enter 86.5% as 86.5.	
B15	Please provide the 4-year target for the selected measure in the target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected condition by the end of 2021. Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.409(c)] Enter 86.5% as 86.5.	
B16	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the selected measure in the target area. [23 CFR 490.107(b)(1)(ii)(A)] Include the source of the urbanized dataset used to establish the targets. [23 CFR 490.107(b)(1)(ii)(D)]	

Reliability

Travel Time Reliability Performance Overview		
R1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and baseline performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	N/C
Statewide Performance Target for the Percent of the Person-Miles Traveled on the Interstate That Are Reliable		
R2	<p>Baseline percent of person-miles traveled on the Interstate that are reliable. [23 CFR 490.107(b)(1)(ii)(B)]</p> <p>The data submitted must cover the performance derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)]</p> <p>The data must be reported to the nearest tenth of a percent.</p>	80.9
R3	<p>Please provide the 2-year target for the percent of the person-miles traveled on the Interstate that are reliable that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2019.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.513(b)] Enter 86.5% as 86.5.</p>	78.0
R4	<p>Please provide the 4-year target for the percent of the person-miles traveled on the Interstate that are reliable that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.513(b)] Enter 86.5% as 86.5.</p>	78.0
R5	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the percent of the person-miles traveled on the Interstate that are reliable. [23 CFR 490.107(b)(1)(ii)(A)]	<p>ODOT calculated LOTTR (level of travel time reliability) for each TMC (traffic message channel) within the NHS network; each of the TMCs were tagged based on the individual LOTTR calculations Good (1.4 or less), Barely Good (between 1.4 and 1.5), Barely Bad (between 1.5 and 1.6), and Bad (1.6 and above). With the reliability cutoff point of 1.5, the segments valued as barely good and barely bad were thought of as the "shoulder categories"; these are the segments that would most likely influence future LOTTR ratings by either improvements or deterioration. Approximately 1.5% of the Interstate System was considered Barely Good, with about 1% categorized as Barely Bad (almost all miles within Metro).</p>

		The future is extremely hard to predict, so a decision was made to consider a worst case scenario of limited or reduced modernization funding, we made the assessment that the Barely Good sections could very possibly shift into the Barely Bad category. This assessment predominately entered into consideration when setting our future targets.
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Statewide Performance Target for the Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable

R6	<p>Please provide the 4-year target for the percent of the person-miles traveled on the non-Interstate NHS that are reliable that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.513(c)] Enter 86.5% as 86.5.</p> <p>Note: For the first performance period only, baseline performance and 2-year targets are not required for the Non-Interstate NHS reliability measure. [23 CFR 490.105(e)(7)]</p>	78.0
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R7	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 4-year target established for the 2018-2021 Performance Period for the percent of the person-miles traveled on the non-Interstate NHS that are reliable. [23 CFR 490.107(b)(1)(ii)(A)]</p>	<p>ODOT calculated LOTTR (level of travel time reliability) for each TMC (traffic message channel) within the NHS network; each of the TMCs were tagged based on the individual LOTTR calculations Good (1.4 or less), Barely Good (between 1.4 and 1.5), Barely Bad (between 1.5 and 1.6), and Bad (1.6 and above). With the reliability cutoff point of 1.5, the segments valued as barely good and barely bad were thought of as the "shoulder categories"; these are the segments that would most likely influence future LOTTR ratings by either improvements or deterioration. For the Non-Interstate NHS System, about 5.5% and 3% were deemed Barely Good and Barely Bad, respectively (with over half of the miles being located in Metro). The future is extremely hard to predict, so a decision was made to consider a worst case scenario of limited or reduced modernization funding, we made the assessment that the Barely Good sections could very possibly shift into the Barely Bad category. This assessment predominately entered into consideration when setting our future targets.</p>
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The line above marks the end of the required reporting. Everything below this line is related to optional targets.

Optional Additional Reliability Performance Target #1 - Reliable Travel Times [23 CFR 490.105(e)(3)]	
R8	Which measure are you establishing optional additional targets? Percentage of person miles on the:
R9	Please indicate what area(s) the State DOT is establishing this additional target for (UZA stands for Urbanized Area). For each measure, a State DOT can only establish one additional target for the non-UZA area within their State. They can establish additional targets for any number and combination of UZAs.
R10	If this target is for a single UZA or group of UZAs, please indicate which UZA(s) are included in this target. This field is not applicable if the target is for the statewide urbanized area (all UZAs) or the non-UZA area (Statewide Rural and Small Urban Areas). Please enter the UZA with its official name, state abbreviation, and then the 5-digit UZA code in parentheses. For example: BIRMINGHAM, AL (07786). For a group of UZAs, please separate them with a semi-colon. For Example: BIRMINGHAM, AL (07786); AUBURN, AL (04033).
R11	Please provide the current baseline performance for the selected measure in this target area. [23 CFR 490.107(b)(1)(ii)(B)] The data submitted must cover the performance derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)] The data must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.513] Enter 86.5% as 86.5. Note: For the first performance period only, baseline performance and 2-year targets are not required for the Non-Interstate NHS reliability measure. [23 CFR 490.105(e)(7)]
R12	Please provide the 2-year target for the selected measure in this target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2019. Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.513(c)] Enter 86.5% as 86.5. Note: For the first performance period only, baseline performance and 2-year targets are not required for the Non-Interstate NHS reliability measure. [23 CFR 490.105(e)(7)]
R13	Please provide the 4-year target for the selected measure in the target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2021. Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.513(b)] Enter 86.5% as 86.5.
R14	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the selected measure in the target area. [23 CFR 490.107(b)(1)(ii)(A)] Include the source of the urbanized dataset used to establish the targets. [23 CFR 490.107(b)(1)(ii)(D)]

Freight

Freight Reliability (Movement) Performance Overview		
F1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and baseline performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	N/C
F2	Please attach a PDF document listing locations of truck freight bottlenecks within the State, including those identified in the National Freight Strategic Plan. If the State DOT has prepared a State Freight Plan under 49 U.S.C. 70202, within the last 2 years, then the State Freight Plan may serve as the basis for identifying truck freight bottlenecks. 23 CFR 490.107(b)(1)(ii)(E)	Yes, document was uploaded in the Attachment tab.
F3	If the required document was not included in this biennial reporting, please explain. (Optional).	N/C
Statewide Performance Target for the Truck Travel Time Reliability (TTTR) Index		
F4	Baseline statewide Truck Travel Time Reliability Index. [23 CFR 490.107(b)(1)(ii)(B)] The data submitted must cover the performance derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)] The data must be reported to the nearest hundredth.	1.39
F5	Please provide the 2-year target for the statewide Truck Travel Time Reliability Index established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2019. Target must be reported to the nearest hundredth. [23 CFR 490.101 (Target definition) & 23 CFR 490.613(b)] For example, enter 2.54.	1.45
F6	Please provide the 4-year target for the statewide Truck Travel Time Reliability Index established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2021. Target must be reported to the nearest hundredth. [23 CFR 490.101 (Target definition) & 23 CFR 490.613(b)] For example, enter 2.54.	1.45
F7	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the statewide Truck Travel Time Reliability Index. [23 CFR 490.107(b)(1)(ii)(A)]	ODOT calculated TTTR (truck travel time reliability) for each TMC within the Interstate network, in similar manner as described throughout various MAP-21 webinars; but because the TTTR is a summarized value across the entire Interstate system, it was not useful to tag and categorize the TMCs. With no available historical data to analyze, we know that about 8% of the LOTTR Interstate is categorized Barely Good/Bad (mostly within Metro) and we know that the state's TTTR is about half that of the Metro's TTTR. So, based on the worst case scenario of limited or reduced modernization funding, we made the assessment

		that the total system was more likely to decline than improve, so we added a little cushion to our calculated value as a proposed target. Without any historical reference, the target was simply an educated guesstimation.
The line above marks the end of the required reporting. Everything below this line is related to optional targets.		
Optional Additional Freight Reliability Performance Target (TTTR) #1 [23 CFR 490.105(e)(3)]		
F8	<p>Please indicate what area(s) the State DOT is establishing this additional target for (UZA stands for Urbanized Area).</p> <p>For each measure, a State DOT can only establish one additional target for the non-UZA area within their State. They can establish additional targets for any number and combination of UZAs.</p>	
F9	<p>If this target is for a single UZA or group of UZAs, please indicate which UZA(s) are included in this target. This field is not applicable if the target is for the statewide urbanized area (all UZAs) or the non-UZA area (Statewide Rural and Small Urban Areas).</p> <p>Please enter the UZA with its official name, state abbreviation, and then the 5-digit UZA code in parentheses. For example: BIRMINGHAM, AL (07786).</p> <p>For a group of UZAs, please separate them with a semi-colon. For Example: BIRMINGHAM, AL (07786); AUBURN, AL (04033).</p>	
F10	<p>Please provide the baseline performance for this measure in this target area. [23 CFR 490.107(b)(1)(ii)(B)]</p> <p>The data submitted must cover the performance derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)]</p> <p>The data must be reported to the nearest hundredth. [23 CFR 490.101 (Target definition) & 23 CFR 490.613(b)] For example, enter 2.54.</p>	
F11	<p>Please provide the 2-year target for the measure in this target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] The target should reflect expected performance by the end of 2019.</p> <p>Target must be reported to the nearest hundredth. [23 CFR 490.101 (Target definition) & 23 CFR 490.613(b)] For example, enter 2.54.</p>	
F12	<p>Please provide the 4-year target for the measure in the target area that the State DOT has established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] The target should reflect expected performance by the end of 2021.</p> <p>Target must be reported to the nearest hundredth. [23 CFR 490.101 (Target definition) & 23 CFR 490.613(b)] For example, enter 2.54.</p>	
F13	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the selected measure in the target area. [23 CFR 490.107(b)(1)(ii)(A)] Include the source of the urbanized dataset used to establish the targets. [23 CFR 490.107(b)(1)(ii)(D)]</p>	

Peak Hour Excess Delay (PHED)

Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita Performance Overview		
D1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and baseline performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	ODOT deferred to Portland Metro in the development of a state target for the Federal CMAQ performance measure of Peak Hour Excessive Delay (PHED), since the measure applies to Metro only. ODOT concurs with Metro's target and will defer to Metro's performance measure for congestion as it relates to project work in the Portland Metropolitan area while the federal measures remain in effect.
D2	The total number of applicable urbanized area(s) required to establish targets and report progress for the Traffic Congestion Measures in your State are:	1
Urbanized Area Target #1 - Annual Hours of Peak Hour Excessive Delay Per Capita		
D3	Urbanized Area:	Portland, OR--WA
D4	<p>Please report the agencies that established the unified PHED target for this urbanized area. Use a semicolon to separate multiple agencies. (Optional)</p> <p>All State DOTs and MPOs that contain, within their respective boundaries, any portion of the NHS network in this urbanized area shall agree on and report the same unified target for this measure. [23 CFR 490.105(e)(8)(iii)(B)] and & 23 CFR [490.105(f)(5)(iii)(B)]</p>	Portland Metro coordinated with Oregon DOT; Washington DOT; Southwest Washington DOT
D5	<p>Please provide the 4-year target for the annual hours of peak hour excessive delay per capita in this UZA that was established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] and & 23 CFR [490.107(c)(3)(ii)(A)] The target should reflect expected performance by the end of 2021.</p> <p>The target must be reported to the nearest tenth. [23 CFR 490.101 (Target definition) & 23 CFR 490.713(b)] For example, enter 7.1.</p> <p>Note: For the first performance period only, baseline performance and 2-year targets are not required for the PHED measure. [23 CFR 490.105(e)(8)(vi)]</p>	24.0
D6	Please provide a discussion, to the maximum extent practicable, of the basis for the 4-year target established for the 2018-2021 Performance Period for the annual hours of peak hour excessive delay per capita in this UZA. [23 CFR 490.107(b)(1)(ii)(A)]. Include the source of the urbanized dataset used to establish the target. [23 CFR 490.107(b)(1)(ii)(D)]	Metro and ODOT agreed to utilize the National Performance Management Research Dataset (NPMRDS) to inform the baseline conditions of peak hour excessive delay. Based on the data and looking at congestion trends in the region as well as nationally, Metro proposed taking an approach to manage congestion and slightly increase the annual per capita peak hour excessive delay. This approach was informed by the recent analysis of the long-range transportation plan showing worsening congestion on the regional transportation system. The source of the urbanized area boundaries is 2017 National Performance Management

		Research Dataset (NPMRDS). Population data comes from the most recent U.S. Census.
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Percent of Non-SOV Travel

Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel Performance Overview		
T1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and baseline performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	ODOT deferred to Portland Metro in the development of a state target for the Federal CMAQ performance measure Non-Single Occupancy Vehicle Travel, since the measure applies to Metro only. ODOT concurs with Metro's baseline and targets and will defer to Metro's performance measure for Non-SOV travel as it relates to project work in the Portland Metropolitan area while the federal measures remain in effect.
T2	The total number of applicable urbanized area(s) required to establish targets and report progress for the Traffic Congestion Measures in your State are:	1
Urbanized Area Target #1 - Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel		
T3	Urbanized Area:	Portland, OR--WA
T4	Please report the agencies that established the unified Non-SOV target for this urbanized area. Use a semicolon to separate multiple agencies. (Optional) All State DOTs and MPOs that contain, within their respective boundaries, any portion of the NHS network in this urbanized area shall agree on and report the same unified target for this measure. [23 CFR 490.105(e)(8)(iii)(B)] and & 23 CFR [490.105(f)(5)(iii)(B)]	Portland Metro coordinated with Oregon DOT; Washington DOT; Southwest Washington DOT
T5	Please provide the data collection method for the Percent of Non-SOV Travel measure. [23 CFR 490.107(b)(1)(ii)(I)]	Method A - American Community Survey
T5a	Please provide a brief description of the method for the Percent of Non-SOV Travel measure if either Method B or Method C were used. [23 CFR 490.709 (f)(2)]	
T6	Baseline percent of Non-SOV travel. [23 CFR 490.107(b)(1)(ii)(B) & 23 CFR 490.107(c)(3)(ii)(C)] The data submitted must cover the performance derived from the latest data collected through the beginning date of the performance period specified in 23 CFR 490.105(e)(4)(i). [23 CFR 490.107(b)(1)(ii)] The data must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.713(d)] Enter 86.5% as 86.5. If you select Method A in T5, the baseline data will be prepopulated based on American Community Survey (ACS) data. If you select Method B or Method C in T5, please provide the baseline performance calculated by the State DOT here.	30.7
T7	Please provide the 2-year target for the percent of Non-SOV travel established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2019. Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.713(d)] Enter 86.5% as 86.5.	33.1
T8	Please provide the 4-year target for the percent of Non-SOV travel established for the 2018-2021 Performance Period. [23 CFR	33.5

	<p>490.107(b)(1)(ii)(A)] Target should reflect expected performance by the end of 2021.</p> <p>Target must be reported to the nearest tenth of a percent. [23 CFR 490.101 (Target definition) & 23 CFR 490.713(d)] Enter 86.5% as 86.5.</p>	
<p>T9</p>	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for the percent of Non-SOV travel. [23 CFR 490.107(b)(1)(ii)(A)]. Include the source of the urbanized dataset used to establish the targets. [23 CFR 490.107(b)(1)(ii)(D)]</p>	<p>Utilizing the U.S. Census Bureau’s American Community Survey Journey to Work dataset to determine baseline non single occupancy travel for the region, Metro was able to look back at datasets from the early part of the decade (2010) to uncover trends in commuting. The trend data combined with looking forward towards the multimodal profile of transportation investments set forth in the long-range transportation plan as well as the state transportation package providing significant new funding towards transit service informed an increasing non single occupancy vehicle mode split in the upcoming performance period.</p> <p>Metro staff recommended a growth rate of .2% in non single occupancy vehicle mode split per year for the region and as part of the statewide performance target.</p> <p>The source of urbanized area boundaries and population data is 2012-2016 5-Year Estimates U.S. Census (American Community Survey)</p>

Emissions

Emissions Reduction Performance Overview		
E1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and baseline performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	N/C
E2	Does the State include any areas designated as nonattainment or maintenance for PM2.5? Note: Based on the response to E2, the State is not required to establish a statewide target for annual emissions reductions for PM2.5.	No
E3	If the State includes any areas designated as nonattainment or maintenance for PM2.5, are NOx and/or VOC a significant contributor to PM2.5 emissions anywhere in the State?	No significant contributors
E4	Does the State include any areas designated as nonattainment or maintenance for PM10? Note: Based on the response to E4, the State is required to provide a statewide target for annual emissions reductions for PM10.	Yes
E5	If the State includes any areas designated as nonattainment or maintenance for PM10, are NOx and/or VOC a significant contributor to PM10 emissions anywhere in the State?	No significant contributors
E6	Does the State include any areas designated as nonattainment or maintenance for CO? Note: Based on the response to E6, the State is required to provide a statewide target for annual emissions reductions for CO.	Yes
E7	Does the State include any areas designated as nonattainment or maintenance for ozone?	No
E8	The number of MPOs within your State that are required to submit a CMAQ Performance Plan to the State DOT are: [23 CFR 490.107(b)(1)(ii)(G)]	1
E9.1	MPO required to submit a CMAQ Performance Plan to the State DOT:	Portland Area Comprehensive Transportation System (OR)
E10.1	Did you upload the plan to the PMF on the "attachment" tab?	Yes
E10.1a	Please explain why the plan was not uploaded to the PMF.	
Statewide Total Emission Reductions PM2.5 Target #1		
E11	Please provide the baseline estimated emissions reductions (daily kilograms) of PM2.5. [23 CFR 490.107(b)(1)(ii)(B) & 23 CFR 490.107(c)(3)(ii)(D)] The baseline data for the performance period must include the cumulative statewide estimated emissions reductions (daily kilograms) for the previous 4 federal fiscal years before the start of the performance period. The data must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	0.450
E12	Please provide the 2-year target for cumulative emissions reduction (daily kilograms) of PM2.5 for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2019.	0.120

	The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	
E13	Please provide the 4-year target for cumulative emissions reduction (daily kilograms) of PM2.5 established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] and [23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2021. The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	0.230
E14	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for 2018-2021 Performance Period for cumulative emissions reduction (daily kilograms) of PM2.5. [23 CFR 490.107(b)(1)(ii)(A)]	Total emissions reduction baseline is calculated as the sum of emissions reductions from all projects funded with CMAQ dollars over the period of 2014 through 2017. 4-year target values reflect estimated emissions benefits for projects that are currently programmed in the STIP for 2018-2021. 2-year target values are set as one-half of the 4-year target.
Statewide Total Emission Reductions NOx Target #2		
E15	Please provide the baseline estimated emissions reductions (daily kilograms) of NOx. [23 CFR 490.107(b)(1)(ii)(B) & 23 CFR 490.107(c)(3)(ii)(D)] The baseline data for the performance period must include the cumulative statewide estimated emissions reductions (daily kilograms) for the previous 4 federal fiscal years before the start of the performance period. The data must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	
E16	Please provide the 2-year target for cumulative emissions reduction (daily kilograms) of NOx established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2019. The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	
E17	Please provide the 4-year target for cumulative emissions reduction (daily kilograms) of NOx established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2021. The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	
E18	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for cumulative emissions reduction (daily kilograms) of NOx. [23 CFR 490.107(b)(1)(ii)(A)]	
Statewide Total Emission Reductions VOC Target #3		
E19	Please provide the baseline estimated emissions reductions (daily kilograms) of VOC. [23 CFR 490.107(b)(1)(ii)(B) & 23 CFR	

	<p>490.107(c)(3)(ii)(D)]</p> <p>The baseline data for the performance period must include the cumulative statewide estimated emissions reductions (daily kilograms) for the previous 4 federal fiscal years before the start of the performance period.</p> <p>The data must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	
E20	<p>Please provide the 2-year target for cumulative emissions reduction (daily kilograms) of VOC established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] and [23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2019.</p> <p>The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	
E21	<p>Please provide the 4-year target for cumulative emissions reduction (daily kilograms) of VOC established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A)] and [23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2021.</p> <p>The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	
E22	<p>Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for cumulative emissions reduction (daily kilograms) of VOC. [23 CFR 490.107(b)(1)(ii)(A)]</p>	
Statewide Total Emission Reductions PM10 Target #4		
E23	<p>Please provide the baseline estimated emissions reductions (daily kilograms) of PM10. [23 CFR 490.107(b)(1)(ii)(B) & 23 CFR 490.107(c)(3)(ii)(D)]</p> <p>The baseline data for the performance period must include the cumulative statewide estimated emissions reductions (daily kilograms) for the previous 4 federal fiscal years before the start of the performance period.</p> <p>The data must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	520.470
E24	<p>Please provide the 2-year target for cumulative emissions reduction (daily kilograms) of PM10 established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2019.</p> <p>The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	363.000
E25	<p>Please provide the 4-year target for cumulative emissions reduction (daily kilograms) of PM10 established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2021.</p> <p>The target must be reported to the nearest one thousandths. [23</p>	726.400

	CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	
E26	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for cumulative emissions reduction (daily kilograms) the PM10. [23 CFR 490.107(b)(1)(ii)(A)]	Total emissions reduction baseline is calculated as the sum of emissions reductions from all projects funded with CMAQ dollars over the period of 2014 through 2017. 4-year target values reflect estimated emissions benefits for projects that are currently programmed in the STIP for 2018-2021. 2-year target values are set as one-half of the 4-year target.
Statewide Total Emission Reductions CO Target #5		
E27	Please provide the baseline estimated emissions reductions (daily kilograms) of CO. [23 CFR 490.107(b)(1)(ii)(B) & 23 CFR 490.107(c)(3)(ii)(D)] The baseline data for the performance period must include the cumulative statewide estimated emissions reductions (daily kilograms) for the previous 4 federal fiscal years before the start of the performance period. The data must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	3618.440
E28	Please provide the 2-year target for cumulative emissions reduction (daily kilograms) of CO established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2019. The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	584.000
E29	Please provide the 4-year target for cumulative emissions reduction (daily kilograms) of CO established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2021. The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.	1168.000
E30	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for cumulative emissions reduction (daily kilograms) of CO. [23 CFR 490.107(b)(1)(ii)(A)]	Total emissions reduction baseline is calculated as the sum of emissions reductions from all projects funded with CMAQ dollars over the period of 2014 through 2017. 4-year target values reflect estimated emissions benefits for projects that are currently programmed in the STIP for 2018-2021. 2-year target values are set as one-half of the 4-year target.
The line above marks the end of the required reporting. Everything below this line is related to optional targets.		
Optional Additional Emission Reductions Target #1 [23 CFR 490.105(e)(9)(iv)]		
E31	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. (Optional)	The baseline calculations do not include projects with qualitative

	<p>This item may be used to provide additional background detail or clarification on items included in this submission, note any complications, direct attention to areas of concern, ask questions, or for other similar purposes. (No text limit)</p>	<p>methodology, that continued from prior years, or that had CMAQ funds de-obligated, per federal CMAQ database parameters. Additionally, in 2016-17 ODOT changed how CMAQ funds and project selection is managed in Oregon, shifting much of the selection process to MPOs. Some of the changes that may impact target setting include</p> <ol style="list-style-type: none"> 1. Salem and Eugene MPOs are now eligible for CMAQ funds and will be included in CMAQ performance going forward, but were not included in prior years baseline data 2. ODOT and FHWA are becoming more prescriptive on using quantitative over qualitative methods. This move will likely show a greater quantitative air quality benefit without necessarily adding more or changing projects. 3. While ODOT provides a narrow list of eligible project types, MPOs and local agencies are ultimately responsible for identifying CMAQ projects for funding, rather than ODOT. Forecasting accurately what projects MPOs and local agencies might bring to ODOT for approval in addition to those already programmed is uncertain at best. <p>Other limitations for estimating air quality targets include the following</p> <ol style="list-style-type: none"> 4. Certain projects provide high air quality benefits but are highly infrequent, such as street sweepers. The infrequent nature of these projects makes it difficult to accurately forecast future targets. 5. Emission rates for pollutants used for baseline emissions are higher—particularly for CO—than for projects programmed for future year because of EPA regulations for vehicle engines and fuels have significantly reduced vehicle emissions. Estimated emissions benefits therefore are declining from one STIP cycle to the next for the some project types. <p>Impacts to Target Setting</p> <p>The addition of two MPO recipients for CMAQ funds, a shift to more quantitative methods, and the</p>
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		variety of projects recipients could identify will impact ODOT's CMAQ data over the 2018-2021 period, although the extent is not clear. ODOT is therefore estimating the 4- and 2-year targets using the projects already identified by CMAQ recipients, as available. This should allow ODOT to gather clearer data from 2018-20 and revise the 4-Year target as needed in 2020.
E32	What pollutant does this optional additional target apply?	
E33	Please indicate what non-attainment and maintenance area or combination of areas that the State DOT is establishing this additional target. Please list the area name(s) as it appears in the EPA Green Book. [23 CFR 490.105(e)(9)(iv)] Separate multiple names using semicolons.	
E34	<p>Please provide the baseline estimated emissions reductions (daily kilograms) of the pollutant for the selected non-attainment and maintenance area or combination of areas. [23 CFR 490.107(b)(1)(ii)(B)] and [23 CFR 490.107(c)(3)(ii)(D)]</p> <p>The baseline data for the performance period must include the cumulative statewide estimated emissions reductions (daily kilograms) for the previous 4 federal fiscal years before the start of the performance period.</p> <p>The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	
E35	<p>Please provide the 2-year target for cumulative emissions reduction (daily kilograms) of the applicable pollutant for the 2018-2021 Performance Period for the selected non-attainment and maintenance area or combination of areas. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2019.</p> <p>The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	
E36	<p>Please provide the 4-year target for cumulative emissions reduction (daily kilograms) of the applicable pollutant for the 2018-2021 Performance Period for the selected non-attainment and maintenance area or combination of areas. [23 CFR 490.107(b)(1)(ii)(A) & 23 CFR 490.107(c)(3)(ii)(B)] Target should reflect expected performance by the end of Federal fiscal year 2021.</p> <p>The target must be reported to the nearest one thousandths. [23 CFR 490.101 (Target definition) & 23 CFR 490.811(b)] For example, enter 86.512.</p>	
E37	Please provide a discussion, to the maximum extent practicable, of the basis for the 2-year and 4-year targets established for the 2018-2021 Performance Period for cumulative emissions reduction (daily kilograms) of the pollutant for the selected non-attainment and maintenance area or combination of areas. [23 CFR 490.107(b)(1)(ii)(A)]	

Attachments

S.No	Section	Attachment Name
1	Freight	2018_OR_Freight_Oregon Freight Bottlenecks Report.pdf
2	Other	2018_OR_Other_Portland (OR) Metro_CMAQ_PerformancePlan_2018.pdf