

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 17-4816, FOR THE PURPOSE OF APPROVING THE AIR QUALITY CONFORMITY DETERMINATION FOR THE 2018-2021 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM

Date: June 30, 2017

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Background

To comply with federal mandates, Metro is required to conduct an air quality analysis with the update of each Regional Transportation Plan (RTP) and development of a new Metropolitan Transportation Improvement Program (MTIP). The air quality conformity determination must demonstrate compliance with all federal and state regulated air pollutants for the area to allow the region to be eligible to receive federal funds for transportation projects. Compliance with all applicable air quality standards for the 2018-2021 MTIP is addressed in the Air Quality Conformity Determination proposed for adoption by the Metro Council.

Metro's region air quality is currently in "attainment with a maintenance plan" status for carbon monoxide. This means, while the region has greatly reduced carbon monoxide levels and has not exceeded maximum levels since 1989, it must continue to monitor on-road carbon monoxide emissions levels and complete air quality conformity determinations until October 2017.

For the region to demonstrate compliance with air quality regulations, the region must:

- Demonstrate the projected carbon monoxide emissions from transportation sources are equal to or less than the motor vehicle emissions budget(s) established for each analysis year (OAR 340-252-0190(b)(A)); and
- Demonstrate the region is meeting performance standards for any adopted transportation control measures (TCMs).

To demonstrate compliance, an air quality analysis is conducted using Metro's travel forecasting model and the U.S. Environmental Protection Agency's (EPA) approved emissions model. The travel model, using the assumptions from region's projected population and employment growth to the transportation plan horizon year (2040), produces a set of results for different years of interest. The travel model results are then fed into the emissions model to determine air pollutant emissions from on-road sources. The emissions are assessed against Oregon Department of Environmental Quality (DEQ) established emissions "budgets," or maximum permitted carbon monoxide levels from on-road transportation sources. The projected carbon monoxide emissions must be equal to or less than the region's "budgets" in order for the region to demonstrate compliance.

Additionally, the region must demonstrate it has met performance standards for all adopted TCMs. Demonstrating compliance with the TCMs involves off-model assessments. The region has three TCMs: 1) increasing transit service; 2) building bicycle infrastructure; and 3) building pedestrian infrastructure. Progress is tracked with each Regional Flexible Fund Allocation cycle.

Once the region has demonstrated air quality conformity compliance, the air quality conformity determination is adopted by Metro Council and approved by the Federal Highways Administration (FHWA) and Federal Transit Administration (FTA) (after conferring with the U.S. EPA).

Air Quality Conformity Determination - Process

Prior to conducting the analysis, the region must conduct technical consultation with local, regional, state, and federal partners to address and agree to the air quality conformity analysis approach, methodology, inputs, and assumptions. In May and June 2016, representatives of FHWA, FTA EPA, DEQ, and Oregon Department of Transportation (ODOT) and Metro were contacted via email concerning the upcoming 2018-2021 MTIP conformity analysis. A Pre-Conformity Plan (Appendix C of Exhibit A) outlining the approach and methodology to conducting the air quality analysis, was provided for review. A key element to the approach (outlined in the Pre-Conformity Plan) for conducting the air quality analysis is to utilize a provision with the federal transportation conformity rules which allows the 2018-2021 MTIP to rely on the results from the previous emissions analysis undertaken for the 2014 RTP (Resolution 14-4534) as long as certain conditions were met. The approach was proposed in the Pre-Conformity Plan and discussed at interagency consultation. State and federal partners indicated support for the Pre-Conformity Plan and gave approval to move forward with the air quality analysis on June 1, 2016. Additionally, the Transportation Policy Alternatives Committee (TPAC), as the official local consultation body for the Metro region on air quality issues related to transportation, were provided the Pre-Conformity Plan and consultation was held at the September 30, 2016 meeting. Members of TPAC approved the technical approach to the conformity determination.

Air Quality Conformity Determination Results

Exhibit A to Resolution No. 17- 4816, “For the Purpose of Approving the Air Quality Conformity Determination for the 2018-2021 Metropolitan Transportation Improvement Program,” is the air quality analysis that demonstrates the projected carbon monoxide emissions from on-road transportation sources are equal or less than state approved budgets. The emissions results compared to approved budgets are listed below in the Table 2.

Table 2. Carbon Monoxide Motor Vehicle Emissions Compared to SIP Approved Budgets

Year	Carbon Monoxide Motor Vehicle Emission Budgets (Budgets are Maximum Allowed Emissions) (pounds/ winter day)	Forecast Carbon Monoxide Motor Vehicle Emissions (pounds/ winter day)
2010	1,033,578	448,398
2017	1,181,341	324,234
2040	1,181,341	290,007

The analysis illustrates federal and state air quality standards for carbon monoxide can easily be met now and in the future in the Metro region considering the combined emissions generated from on-road vehicles using: (1) the existing transportation system, (2) the projects included in the 2018-2021 Metropolitan Transportation Improvement Program, and (3) all other local transportation projects considered regionally significant.

Because the approach for the air quality conformity determination was approved to rely on the emissions analysis which was conducted for the 2014 RTP, the results from the 2014 RTP regional emissions analysis were reported. The transportation projects identified within the 2018-2021 MTIP were able to demonstrate consistency with the 2014 RTP and therefore relying on the results of the 2014 RTP were acceptable. But a demonstration as to whether the region is meeting its commitments towards the transportation control measures were provided and updated.

The transportation projects in the 2018-2021 MTIP were also analyzed to determine whether the performance standards of the region’s transportation control measures (TCMs) are being met. The analysis demonstrates the projects identified in the 2018-2021 MTIP meet the performance standards and remain in compliance.

Public Comment Summary and Responses/Recommendation Actions to Comments Received

A public review draft of the Air Quality Conformity Determination was released for public and technical comment from April 24 through May 23, 2017. This was done jointly with the public review draft of the 2018-2021 MTIP. The public comment period was advertised through Metro News and distributed to members of the land use and transportation news digest email. Notifications were also posted on Metro's Twitter and Facebook feeds and sent to Metro advisory committee interested persons lists (TPAC and JPACT). Additionally print advertisement was placed in several local newspapers including:

- Beaverton Valley Times
- Gresham Outlook
- Clackamas Review
- Portland Tribune
- Tigard Times.

The advertisements had translated text stating the purpose of the notice and providing contact information for more information. Additionally, the public comment was advertised on Metro's newsfeed and emails were sent to Metro's planning enews list. A total of 147 public comments were received through a short online survey. Exhibit A Appendix J provides the full public comment report, a short two-page summary, and Metro staff responses to the major comment themes.

The public comments were shared with TPAC and the local consultation body recommended adoption of this resolution at the June 30, 2017 meeting.

ANALYSIS/INFORMATION

1. Known Opposition None.

2. Legal Antecedents

- Resolution 10-150A, "For the Purpose of Approving the Air Quality Conformity Determination for the 2035 Regional Transportation Plan and the 2010-13 Metropolitan Transportation Improvement Program."
- Resolution 12-4333, "For the Purpose of Adopting the 2012-15 Metropolitan Transportation Improvement Program."
- Resolution 13-4490, "For the Purpose of Adopting the Substitute Transit Transportation Control Measure (TCM) as part of the State Air Quality Strategy and Regional Air Quality Conformity Determination."
- Resolution 14-4493, "For the Purpose of Approving the Use of Federal Streamlining Provisions for Regional Air Quality Conformity Determinations."
- Resolution 14-4527, "For the Purpose of Accepting the 2014 Regional Transportation Plan Project List for the Purpose of Air Quality Conformity Determination."
- Resolution 14-4534 "For the Purpose of Approving the Joint Air Quality Conformity Determination for the 2014 Regional Transportation and the 2018-2021 Metropolitan Transportation Improvement Program."

3. Anticipated Effects: Approval of this resolution allows for funding proposed for transportation projects in the 2018-2021 MTIP. With approval by JPACT and adoption by Metro Council, staff will submit the Air Quality Conformity Determination for review by the U.S. Environmental Protection

Agency and to the Federal Highway Administration and the Federal Transit Administration for approval.

4. **Budget Impacts:** None directly by this action.

RECOMMENDED ACTION

Staff recommends approval of Resolution No. 17-4816.