



Draft Air Quality Conformity Assumptions for the Federal 2023 Metropolitan Transportation Plan Update and Concurrent Amendment to the 2023 Metropolitan Transportation Improvement Program

INFORMATION

Key Staff: Renée DeVere-Oki, Regional Air Quality Planning Program Manager, (916) 340-6219

Attachments: Yes

Issue:

Should the Air Quality Conformity Assumptions (Assumptions) be recommended for use in the air quality conformity analysis and determination on the Federal 2023 Metropolitan Transportation Plan Update (2023 MTP) and concurrent amendment to the 2023 Metropolitan Transportation Improvement Program (MTIP Amendment)?

Recommendation:

In alignment with federal transportation conformity requirements, SACOG staff is recommending the attached list of assumptions for use in the air quality conformity analysis and determination for the 2023 MTP and MTIP Amendment.

Discussion/Analysis:

SACOG is preparing to update the 2023 MTP and process a concurrent amendment to the 2023 MTIP in November 2023. A call for project updates commenced on April 14, 2023 and concluded on May 12, 2023. The purpose of this update is to meet and maintain compliance with federal requirements. This 2023 MTP and concurrent MTIP Amendment will maintain consistency with the approved 2020 Sustainable Communities Strategy. As such, the update is constrained to projects in the current 2020 MTP/SCS and 2023 MTIP.

A new conformity determination is required as part of this federal update. To initiate and begin the preparation for a future conformity determination, a set of assumptions is presented to the Partnership as part of interagency consultation. The purpose of the set of assumptions (Attachment A) is to outline and document the variables and factors that will be used in preparation of the air quality analysis on the 2023 MTP and concurrent 2023 MTIP amendment. Assumptions account for modeling technique, testing mechanisms, data sharing, and other transportation conformity requirements.

At the conclusion of the air quality conformity analysis, SACOG must make a determination that the 2023 MTP and concurrent amendment 2023 MTIP do not impede the ability of the region to meet and attain air quality standards for specific criteria pollutants. Staff will return to the Partnership with this determination in early Fall 2023 to discuss analysis results.

Table 8**Air Quality Conformity Assumptions**

Assumption 1: The SACOG Board adopted population, household, housing, and employment projections for the years 2035 and 2040 at its November 2019 meeting concurrent with the adoption of the 2020 Metropolitan Transportation Plan / Sustainable Communities Strategy (MTP/SCS). A forecast to 2050 was approved by the SACOG Board in February 2022. These land use projections will be used for this conformity analysis and determination. Vehicle activities for all other milestone years will be interpolated using the available full model runs for 2016, 2027, 2035, and 2040. Horizon year 2044 will be developed utilizing an assignment only model run. These projections meet the current definition of “latest planning assumptions.”

Assumption 2: Emissions Factor (EMFAC) 2017 and approved off-model adjustments will be used to develop emission estimates for the conformity analysis and determination associated with the 2023 MTP and the adoption of the concurrent 2023 Metropolitan Transportation Improvement Program (MTIP) amendment. The emission budgets used in the conformity determination are the 8-Hour Ozone (2008 standard) emission budgets. These budgets were found adequate by EPA on October 22, 2021 and became effective November 22, 2021. Particulate Matter (PM₁₀) will use budgets which were found adequate by EPA on November 23, 2011 and became effective December 8, 2011; or adjusted budgets based upon pending EPA approval of the Second Maintenance Plan. Fine Particulate Matter (PM_{2.5}) will use the Yuba City-Marysville Area budgets found adequate August 25, 2014 and became effective September 9, 2014; the Sacramento Area will follow interim test criteria because there is currently no approved SIP or adequate emission budget for this pollutant.

Assumption 3: SACOG will use the most recent emission control factors supplied by the California Air Resources Board (CARB) for use in any future conformity determination. The EMFAC 2017 model is used to determine emission control factors; it uses vehicle fleet assumptions that meet the current definition of “latest planning assumptions.”

Assumption 4: SACOG will continue to incorporate emission estimates for the part of Solano County within the Sacramento Federal Ozone Nonattainment Area and federal PM_{2.5} nonattainment area in all future conformity determinations as agreed to under SACOG’s existing Memorandum of Understanding (MOU) with the Metropolitan Transportation Commission (MTC).

Assumption 5: On-road control measures from the Ozone SIP that are not reflected in the EMFAC 2017 baseline will be documented.

Assumption 6: SACOG will use the assumptions on transit fares, auto operating costs, and parking costs consistent with the 2020 MTP/SCS analysis in the conformity analysis and determination. The transit fares projections are derived from the financing portion of the 2020 MTP/SCS development. The auto operating costs projections were developed in coordination with other California MPOs for the third round of Sustainable Community Strategies. The parking costs are market-based projections using employment development patterns and densities as the main explanatory variables.