**CMAQ Cost-Effectiveness Threshold Documentation**
**for the San Joaquin Council of Governments *(SJCOG)* 2023 FTIP**

The Congestion Mitigation and Air Quality (CMAQ) program provides funding for transportation projects or programs that contribute to attainment or maintenance of the national ambient air quality standards. All San Joaquin Valley Metropolitan Planning Organizations (MPOs) adopted policies in 2007 for distributing at least 20 percent of the CMAQ funds to projects that meet a cost-effectiveness threshold for emission reductions. For the 2023 Federal Transportation Improvement Program (FTIP), this applies to years 2022/2023 through 2025/2026. *SJCOG* has made every effort to expend the minimum 20 percent funding for cost-effective projects over the course of the FTIP and the attached documentation demonstrates that *SJCOG* has achieved the 20 percent funding goal.

Project eligibility continues to be based on federal CMAQ guidance. MPOs can fund projects within local jurisdictions or contribute funding to the San Joaquin Valley Air Pollution Control District (SJVAPCD) grant incentive programs to meet the cost-effectiveness threshold requirements. Funds contributed to the SJVAPCD grant incentive programs will be assumed to have met the threshold, as that threshold is more stringent than the one established by the CMAQ cost-effectiveness policy.

Emission benefits and cost-effectiveness calculations are based on the applicable pollutants for the region, including the components of ozone (nitrogen oxides ($NO_X$) and reactive organic gases (ROG) and particulate matter (PM10 and PM2.5). The “Methods to Find the Cost-effectiveness of Funding Air Quality Projects” document developed by the Air Resources Board (ARB) is currently the appropriate methodology for calculating cost-effectiveness. In addition, FHWA has published “CMAQ Improvement Program Cost-effectiveness Tables and Development Methodology” on December 3, 2015 and this methodology will be used to establish project eligibility for project types not addressed in the state guidance. Another appropriate cost-effectiveness calculation methodology may be used upon consultation with IAC partners. Cost-effectiveness is expressed as dollars spent per pound of pollutant reduced (ROG + $NO_X$ + $PM_{2.5}$ + $PM_{10}$). The cost effectiveness threshold for the 2023 FTIP was recommended to be increased to $63 per pound ($126,000/ton) from a previous level of $45 per pound ($90,000 per ton) and is based on CMAQ dollars only, not total project cost.

*SJCOG* has identified, through existing programmed projects in those years or other selection methods, projects that qualify for the cost-effectiveness policy.

When programmable CMAQ capacities exist, staff would request the SJCOG Board’s authorization to release a “call for projects.” Staff will also provide a reminder of the Board-adopted goal to program 20 percent of the FTIP’s total CMAQ capacity to highly cost-effective projects/programs. Following Board approval, staff will release the “call for projects.” The CMAQ committee, which is made up of technical staff of local agencies, will be convened to review and evaluate the submitted applications and make a recommendation for the programming of available funds.

During the evaluation process, the CMAQ committee will prioritize and recommend highly cost-effective projects/programs, which will help to achieve the region's 20 percent programming goal. This recommendation will be put before the SJCOG committees before going to the SJCOG Board for official approval of FTIP programming.

The process and materials from the prior "Call for Projects," conducted in the Spring/Summer 2023, are posted on the SJCOG CMAQ webpage, https://www.sjcog.org/291/Congestion-Mitigation-Air-Quality-CMAQ

As stated in the Cost-effectiveness Policy, *SJCOG* has agreed to post information related to the implementation of the cost-effectiveness CMAQ policy on its website. Attached is documentation that fulfills this requirement and demonstrates that *SJCOG* has estimated the amount of funding in the 2023 FTIP necessary to meet the 20 percent cost-effectiveness goal and provided a summary of the CMAQ projects that meet the minimum cost-effectiveness threshold.

# CMAQ Cost-Effectiveness Documentation
# for the San Joaquin Council of Governments (SJCOG) 2023 FTIP

| | Year | Estimated CMAQ Apportionments | | 20 Percent Minimum |
|---|---|---|---|---|
| FY 2023 | FFY 2022-2023 | $ 10,454,522 | $ | 2,090,904.40 |
| FY 2024 | FFY 2023-2024 | $ 10,663,613 | $ | 2,132,722.60 |
| FY 2025 | FFY 2024-2025 | $ 10,876,885 | $ | 2,175,377.00 |
| FY 2026 | FFY 2025-2026 | $ 11,094,423 | $ | 2,218,884.60 |
| | | $ 43,089,443 | **$** | **8,617,888.60** |

| Year | FTIP ID | Agency | Project Description | CMAQ Funding Amount | Cost-Effectiveness |
|---|---|---|---|---|---|
| 2023 | 212-0000-0608 | SJCOG | TDM (Rideshare/Vanpool Program) | $ 4,391,325 | 26.09 |
| 2023 | 212-0000-0761 | City of Stockton | Transportation Management Center Equipment Upgrade | $ 371,000 | 15.27 |
| 2023 | 212-0000-0630 | Lodi Unified School District | Replace 5 old diesel school buses with new CNG school buses | $ 482,000 | 11.00 |
| 2024 | 212-0000-0758 | San Joaquin County | San Joaquin General Hospital Solar EV Charger | $ 790,000 | 10.99 |
| 2024 | 212-0000-0638 | City of Lodi | Replacement CNG Street Sweeper | $ 205,000 | 1.62 |
| 2024 | 212-0000-0754 | City of Manteca | 2019 Street Sweeper Replacement | $ 929,565 | 26.52 |
| 2024 | 212-0000-0756 | City of Ripon | CNG Solid Waste Collection Vehicle | $ 100,000 | 28.85 |
| 2024 | 212-0000-0821 | SJRRC | Operational Assistance for Valley Rail New Service | $ 2,382,613 | 19.17 |
| 2025 | 212-0000-0821 | SJRRC | Operational Assistance for Valley Rail New Service | $ 7,617,387 | 19.17 |
| 2025 | 212-0000-0822 | City of Stockton | Stockton Fiber Optics Phase 2 | $ 885,000 | 13.27 |
| 2026 | 212-0000-0822 | City of Stockton | Stockton Fiber Optics Phase 2 | $ 4,658,921 | 13.27 |

| | | |
|---|---|---|
| **Total CMAQ Funding Amount** | **$** | **22,812,811** |
| CMAQ Cost-Effectiveness Goal | **$** | **8,617,889** |
| **CMAQ Cost-Effectiveness Goal Met?** | | **YES** |
| **Percent of CMAQ Funds Awarded to Cost-Effectiveness Projects** | | **53%** |

**NOTE:**
Cost-effectiveness for each project identified as meeting the cost-effectiveness threshold ($63 per pound, or $126,000 per ton) or better.