New Mexico
Midpoint Report and Update to 4-year PM-10 On-road Mobile Source Emissions Target

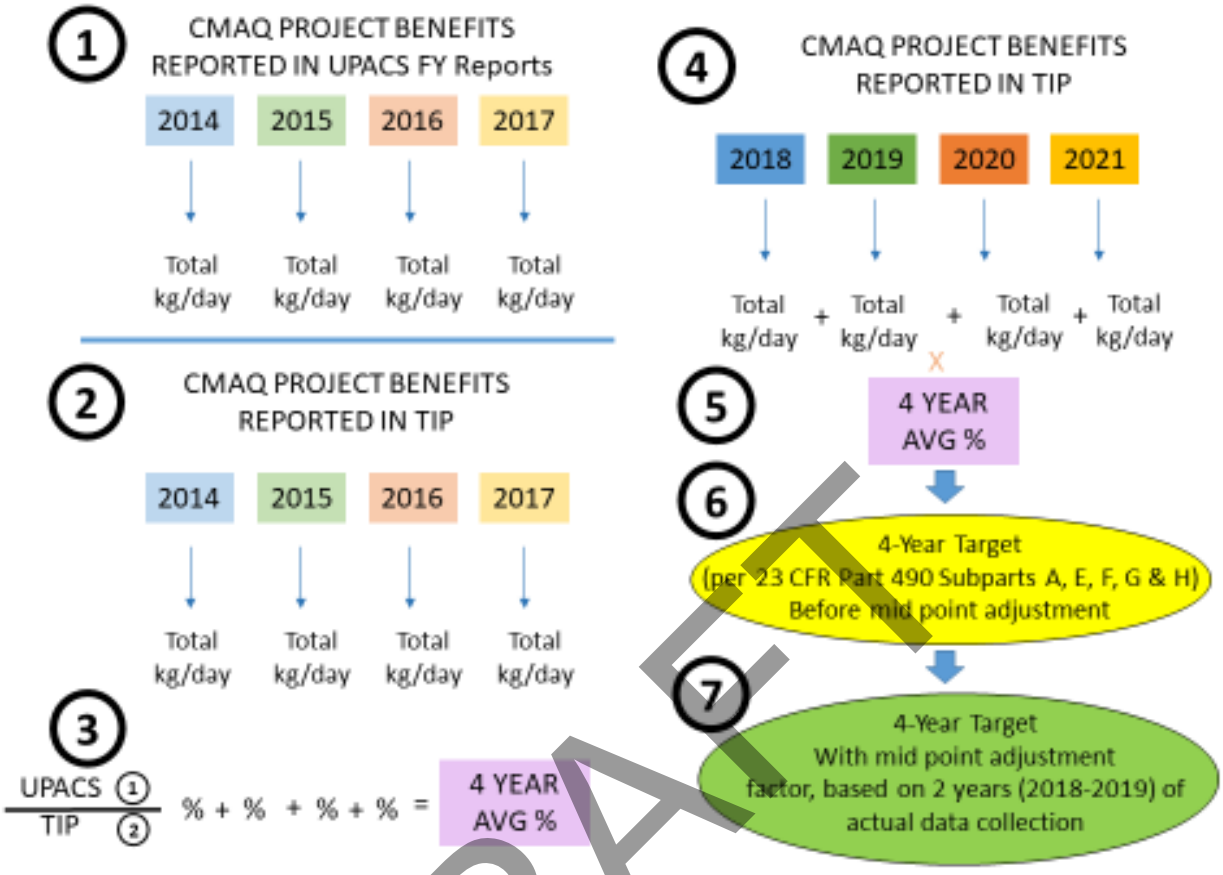
The El Paso Metropolitan Planning Organization (EPMPO) is required to establish targets and report progress for the performance measures related to the Congestion Mitigation and Air Quality (CMAQ) program as established in 23 CFR Part 490 (§ 490.707 and § 490.807) for on-road mobile source emissions.

MPOs that contain all or part of any one or more area(s) designated as nonattainment or maintenance for ozone (O3), carbon monoxide (CO), or particulate matter (PM-10 and PM-2.5) National Ambient Air Quality Standards (NAAQS) are required to set targets for the on-road mobile source emissions measure (23 CFR 490.105(f)(6) and 490.803). The first performance period for the on-road mobile source emissions measure is October 1, 2017-September 30, 2021.

The list of urban areas in the United States as defined by the United States Census Bureau, ordered according to their 2010 census populations ranks the El Paso TX-NM urbanized area as 53rd with a population of 803,086. For the first performance period the EPMPO is not subject to 2-year targets or the requirement of a CMAQ Performance Plan, due to the threshold of population of greater than one million.

The methodology illustrated on the next page has been mutually agreed on by the Texas Department of Transportation (TxDOT) and the EPMPO to report and develop 2-year and 4-year targets for applicable pollutants, in this case CO and PM-10, to support the state of Texas' on-road mobile source emissions targets. The methodology compares CMAQ project emissions from the Federal Highway Administration's (FHWA) User Profile and Access Control System (UPACS) and the EPMPO Transportation Improvement Program (TIP) using historical data in 2014-2017 to develop a basis for the on-road mobile source emissions targets, and to report on previously established 2-year targets (2018-2019) and update previously established 4-year targets (2018-2021).

It should be noted that the original performance period analysis developed back in 2018, 2-year targets used 2019-2020, and 4-year targets used 2019-2022.



The effective date for pollutant target setting and reporting as defined by the Environmental Protection Agency's (EPA) designation under the NAAQS in 40 CFR part 81, is determined as of the date one year before the State Department of Transportation's Baseline Performance Period Report is due to FHWA for a performance period, therefore, the New Mexico Department of Transportation (NMDOT) is required to set on-road mobile source emission targets for PM-10 for the first performance period for the state of New Mexico. The EPMPO planning area crosses the state line between New Mexico and Texas and the EPMPO works with NMDOT to develop on-road mobile source emissions targets for PM-10.

Below is the cost benefit analysis methodology used in 2018 to develop the original 2-year and 4-year New Mexico on-road mobile source emissions targets for PM-10 for the first performance period. This cost benefit analysis methodology is being used again for to update to the 4-year New Mexico on-road mobile source emissions target for PM-10 at the midpoint reporting period.

Step 1:

TX allocation for 2-years (2018-2019) / 2 year target (2018-2019) for EPMPO TX = 2-year cost for PM-10 emissions benefit in TX

TX allocation for 4-years (2018-2021) / 4year target (2018-2021) for EPMPO TX = 4-year cost for PM-10 emissions benefit in TX

Step 2:

NM allocation for 2-years (2018-2019) / 2-year cost (2018-2019) for PM-10 emissions benefit in TX = 2-year midpoint condition on-road mobile source emissions target for PM-10 for EPMPO-NM

NM allocation for 4-years (2018-2021) / 4-year cost (2018-2021) for PM-10 emissions benefit in TX = 4-year midpoint updated on-road mobile source emissions target for EPMPO-NM

Baseline: Is calculated from the TX 4-year average (2014-2017) per criteria pollutant (PM10 in this case) reported in UPACS * the ratio of NM to TX allocations in the 4-years (2014-2017)

This methodology makes the assumption that the New Mexico on-road mobile source emissions targets for PM-10 are a product of implementing the same project types and strategies in New Mexico as were implemented in Texas, which is not likely to be the case. This methodology was presented at the EPMPO 2018 Federal Certification Review (FCR). FHWA's final FCR report to the EPMPO Transportation Policy Board (TPB) stated that "the MPO developed a reasonable approach to address the CMAQ targets in New Mexico."

For reporting purposes at the end of the first performance period and for future performance periods CMAQ emissions data should be updated in UPACS so that the EPMPO and NMDOT will have reliable PM-10 data to develop a standalone methodology for on-road mobile source emissions targets.

The established baseline was developed with the original targets that were set in 2018 and will remain the same until the development of targets for the next performance period. Because the EPMPO updated the midpoint 4-year on-road mobile source emissions target for PM-10 in Texas (based on actual, rather than projected 2018-2019 TX UPACS data), and the New Mexico methodology is tied to the Texas methodology by way of the cost benefit analysis, the New Mexico 4-year on-road mobile source emissions target for PM-10 has also be updated.

Below are the original New Mexico 2-year and 4-year on-road mobile source emissions targets for PM-10 followed by the midpoint updated New Mexico 4-year on-road mobile source emissions target for PM-10.

The methodology and results presented in this mid-point report for the updated New Mexico 4-year on-road mobile source emissions target for PM-10 has been mutually agreed on by NMDOT and the EPMPO.

Original 2-year and 4-year on-road mobile source emissions targets for PM-10:

- **2-year = 0.65 kg/day for Particulate Matter less than or equal to 10 microns (PM-10)**
- **4-year = 1.79 kg/day for Particulate Matter less than or equal to 10 microns (PM-10)**
- **Baseline = 0.17**

Midpoint updated 4-year on-road mobile source emissions target for PM-10:

- **2-year = 1.14 kg/day for Particulate Matter less than or equal to 10 microns (PM-10)**

(note: this is a 2-year condition target to compare to actual 2018-2019 UPACS PM-10 data, and track New Mexico 2yr and 4-yr targets)

- **4-year = 3.48 kg/day for Particulate Matter less than or equal to 10 microns (PM-10)**