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AIR QUALITY TRANSPORTATION CONFORMITY

This chapter describes TxDOT's process for ensuring the projects in the STIP are in compliance with federal air quality regulations.



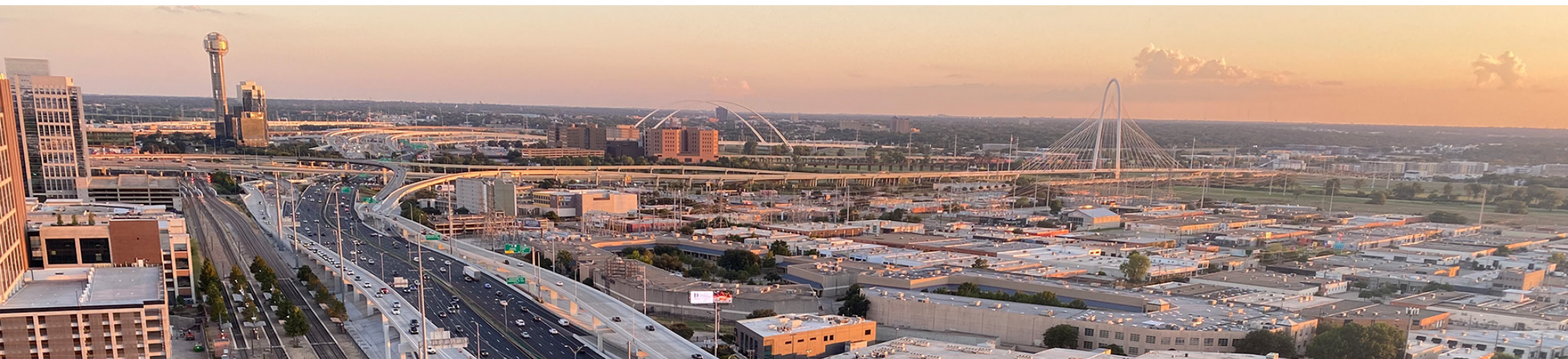
Air Quality Transportation Conformity Process

The US Environmental Protection Agency (EPA) establishes National Ambient Air Quality Standards (NAAQS) for air pollutants which can be harmful to public health and the environment, as required by the Clean Air Act of 1970 (CAA). Areas that do not meet or previously have not met the NAAQS for ozone (O3), carbon monoxide (CO), nitrogen dioxide (NO2), or particulate matter (PM10 and PM2.5) are designated as nonattainment or attainment-maintenance areas.

MTP and TIP highway and transit projects that will be constructed or implemented in nonattainment or attainment-maintenance areas are subject to transportation conformity and must be consistent with the state's [Statewide Implementation Plan \(SIP\)](#), completed by the Texas Commission on Environmental Quality (TCEQ). Transportation conformity is required, under the CAA Section 176(c), to ensure that federally supported transportation activities are consistent with and conform to the purpose of the SIP for air quality and will not worsen existing air quality violations, cause new violations, or delay timely attainment of the relevant air quality standard, or any interim milestone.

The SIP is a compilation of legally enforceable rules and regulations prepared by a state or local air quality agency and approved by the EPA. A SIP is designed to achieve better air quality by attaining, making progress toward attaining, or maintaining the NAAQS. The SIP assigns emissions reductions for each pollutant or precursor for each source type (on-road motor vehicles, non-road equipment and vehicles, stationary, and area sources).

Current areas of nonattainment or attainment-maintenance in Texas and their associated MPO include Houston-Galveston-Brazoria (HGAC), Dallas-Fort Worth (NCTCOG), El Paso (El Paso MPO), San Antonio (Alamo Area MPO), and Beaumont-Port Arthur (SETRPC) are shown in **Figure 9**.



Legend

- Air Quality Attainment Maintenance Area
- Air Quality Nonattainment Area
- County

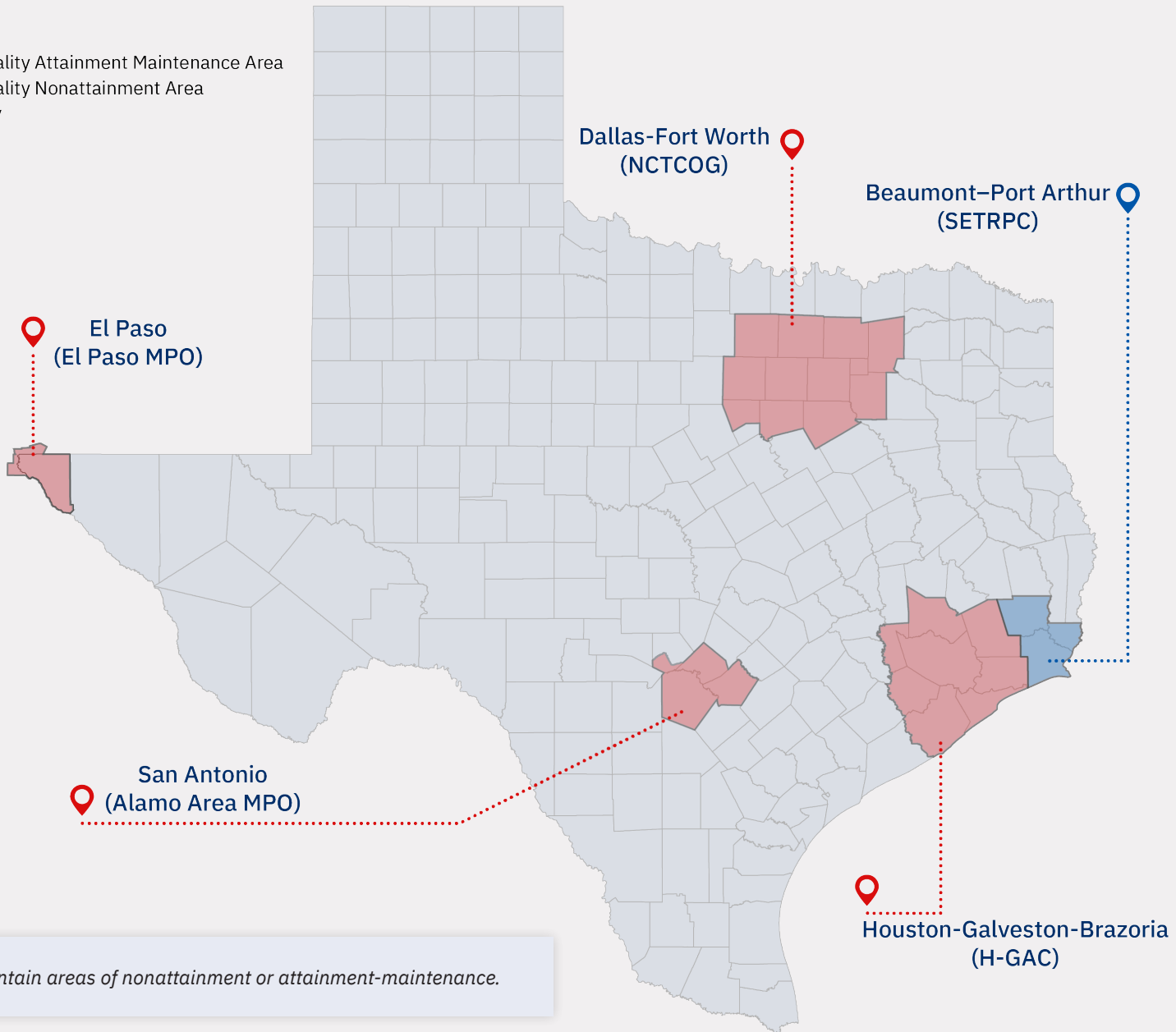


Figure 9. MPOs in Texas that contain areas of nonattainment or attainment-maintenance.

A conformity determination is required:



When an MTP or TIP is amended to include new project(s) or changes to existing projects of air quality significance that were not included in a previously conforming MTP and TIP,



When a region's air quality goals change (typically under the NAAQS),



When there are changes in the SIP related to an area's motor vehicle emissions budget; and/or,



Every four years at a minimum as required by federal regulation; more often if an update to an MTP and TIP necessitate the re-determination of conformity.

Since all nonattainment or maintenance areas in Texas are located within MPO boundaries, the required transportation conformity determinations for the TIPs and MTPs are completed by the MPOs shown in **Figure 9**. The conformity determinations are performed separately and independently for each nonattainment and maintenance area. Those MPOs must ensure that the projects included in their respective TIPs collectively contribute to air quality improvement goals for the region. TxDOT works closely with each MPO, as well as state and federal agencies, throughout

the conformity processes to ensure future transportation plans, programs, and projects are consistent with air quality goals.

The timeframe for the Texas transportation conformity process is typically 12 to 18 months for the completion of technical work, review, revisions to address comments (if needed), and public involvement. The transportation conformity process includes the following key requirements:



Interagency Consultation

The conformity rule requires that federal, state, and local transportation and air quality agencies establish formal procedures to ensure interagency coordination on critical issues. Texas interagency consultation includes FHWA, FTA, Environmental Protection Agency (EPA), TxDOT, MPOs and other local transportation agencies, Texas Commission on Environmental Quality (TCEQ), and regional air quality agencies.



Public Involvement

MPOs are required to make MTPs, TIPs, and conformity determinations available for public review, respond to public comment, and provide adequate notice of relevant meetings.



Latest Planning Assumptions and Emissions Model

The latest planning assumptions available at the time the conformity analysis begins include population, employment, travel needs, vehicle fleet composition (proportions of types of vehicles), land use, and economic development. The conformity rule requires that when MTPs and TIPs are developed or updated, the assumptions used to forecast future conditions must be based on the latest available information.



Motor Vehicle Emissions Budget (MVEB)

The SIP accounts for emissions of each pollutant for each source type; on-road mobile, non-road mobile, stationary (e.g., refineries), and area (e.g., dry cleaners). The TCEQ is responsible for the development of the SIP and identifies how pollution from all sources will be reduced sufficiently to achieve the purpose of the SIP. Required emissions reductions are calculated and control measures are adopted to achieve needed reductions. The MVEB is that portion of the total allowable emissions in the SIP that is allocated to on-road mobile sources such as cars, trucks, and buses. For transportation conformity, projected emissions from highway and public transportation use must be less than or equal to the MVEB.



Regional Emissions Analysis

Estimating regional emissions from on-road mobile sources traveling on the planned transportation system is the key analytical component of a conformity determination. The analysis supports the demonstration that transportation investments are consistent with air quality goals. The regional emissions that are forecast through models are compared to the Motor Vehicle Emissions Budget (MVEB) from the SIP, which sets a limit on emissions from on-road sources. This budget cannot be exceeded in order for an area to make a conformity determination.



Timely Implementation of Transportation Control Measures (TCMs)

TCMs are designed to reduce emissions from motor vehicles by reducing vehicle use, changing traffic flow, or changing congestion conditions. Examples include high-occupancy vehicle (HOV) lanes, improving public transportation, and vanpooling programs. If an EPA-approved SIP includes any of these measures, the MPO must show, as part of the conformity determination, that the measures are being implemented on schedule and given priority for federal funding.



Fiscal Constraint

In the first two years of the TIP, projects must be limited to those for which funds are known to be available or committed. This is known as fiscal constraint. MTPs and TIPs in nonattainment or attainment-maintenance areas must be shown to meet the FHWA/FTA fiscal constraint requirements and be based upon reasonable estimates about future revenues. The conformity rule requires that the fiscal constraint requirements of the planning regulations be met prior to determining conformity on a MTP or TIP.

For this STIP, each MPO TIP in a nonattainment or maintenance area has its conformity determination approved by FHWA and FTA, in consultation with EPA and other state agencies. Copies of the conformity determinations and the MVEB for each nonattainment or maintenance area are available from each MPO.

As demonstrated by the air quality dispersion model or other air quality modeling technique used in the attainment demonstration or maintenance plan, projects in this STIP do not cause or contribute to any new violation of any standard in any areas; increase the frequency or severity of any existing violation of any standard in any area; or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.