2. TRANSPORTATION CONFORMITY REQUIREMENTS

2.1 WHAT IS TRANSPORTATION CONFORMITY?

As mandated under CAAA Section 176(c), transportation conformity ensures that federally supported transportation activities align with and conform to the objectives outlined in a state's SIP. An SIP serves as the state air quality blueprint for meeting the NAAQS. The SIP consists of a compilation of legally enforceable rules and regulations crafted by a state or local air quality agency. The governor of the state submits this plan to EPA for approval. The primary goal of a SIP is to enhance air quality by achieving, progressing toward, or maintaining compliance with the NAAQS. Each SIP specifies emissions reductions for every pollutant or precursor, categorized by source type, including on-road motor vehicles, non-road equipment and vehicles, stationary sources, and area sources.

Before an RTP/MTP or TIP can be adopted, approved, or accepted in nonattainment areas, MPOs and the U.S. Department of Transportation (DOT) must make conformity determinations on these documents. As described in Section 176(c)(1) of the CAAA, transportation conformity is granted when the following conditions are met:

- (A) Conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards.
- (B) That such activities will not:
 - i. Cause or contribute to any new violation of any standards in any area;
 - ii. Increase the frequency or severity of any existing violation of any standard in any area; or
 - iii. Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

A new conformity determination must be performed any time an RTP/MTP is amended in a significant manner when a region or state's air quality goals change and/or every 4 years.

2.2 CONFORMITY REQUIREMENTS

The CAAA requires transportation plans, programs, and projects in nonattainment and maintenance areas, which are funded or approved by FHWA or FTA, to conform to the MVEBs established in the SIP, or to satisfy applicable interim emissions tests, absent MVEBs. A regional emissions analysis is the key analytic component of the transportation conformity process. It is conducted to demonstrate that:

- Regional emissions from on-road sources do not exceed the established MVEB or satisfy interim emissions test(s), absent an MVEB.
- Regional emissions from on-road sources do not cause or contribute to violations of EPA's NAAOS.
- Transportation activities are consistent with air quality goals identified in the SIP.

- As stipulated by the CAAA, requirements for conformity analysis include:
- Use of the latest planning assumptions (40 CFR 93.110).
- Analysis based on the latest emission estimation model available (40 CFR 93.111).
- Interagency consultation and a public involvement process, which must be conducted during the analysis (40 CFR 93.112).
- Timely implementation of transportation control measures (TCMs) (40 CFR 93.113).
- A transportation plan and TIP that are consistent with the MVEBs established in the applicable SIP (if there is an adequate or approved SIP budget) (40 CFR 93.118).
- Inclusion of all regionally significant projects expected in the nonattainment and maintenance area in the transportation plan and/or TIP (40 CFR 93.114 and 93.115).

The determination of the analysis is a two-step process in metropolitan areas. The first step is for the MPO to make the initial Transportation Conformity determination at the local level. For the Dallas Fort Worth region, the NCTCOG policy body makes this decision. The second step is for the FHWA and the FTA to make a joint Transportation Conformity determination at the federal level. Upon federal approval, a four-year window begins during which projects, programs, and policies identified in the RTP/MTP and TIP may move toward implementation.

2.3 EMISSION ANALYSIS

A regional emissions analysis is the key analytic component of the transportation conformity process. The emissions analysis is conducted to demonstrate that:

- Regional emissions from on-road sources do not exceed the established MVEBs (or, if no MVEB exists for the area, analysis-year build emissions do not exceed analysis-year nobuild emissions and do not exceed baseline-year emissions).
- Regional emissions from on-road sources do not cause or contribute to violations of the EPA NAAQS.
- Transportation activities are consistent with air quality goals identified in the SIP.

2.3.1 Regional Inventory

This conformity analysis of the Dallas Fort Worth nonattainment area accounts for emissions resulting from the nonattainment area's Mobility 2050 that includes all regionally significant projects located within the Dallas Fort Worth nonattainment area and the effects of emission control programs adopted by an enforcing jurisdiction.

2.3.2 Emissions Tests

Conformity determinations must demonstrate consistency between expected emissions from implementing the RTP/MTP and TIP with the MVEBs in the applicable implementation plan.

For nonattainment or maintenance areas with adequate or approved SIP MVEB(s):

This conformity analysis requires MVEB test(s) that must demonstrate that the total emissions for the nonattainment or maintenance area is less than or equal to the applicable SIP MVEB(s), which establish emissions ceilings for the regional transportation network.

As the Dallas Fort Worth nonattainment area's MPO, the NCTCOG is responsible for conducting the air quality conformity analysis to address 2008 8-hour ozone NAAQS. The MVEB for the Dallas Fort Worth region is summarized in Table 2-1.

Table 2-1. NAAQS and MVEB

NAAQS	Pollutant	MVEB (tons/day)
2008 8-Hour Ozone	VOC	62.41
2008 8-Hour Ozone	NOx	107.25

2.3.3 Analysis Years

For the emission budget test, according to the conformity rule, <u>40 CFR 93.106</u>, the regional emission analysis years should be selected according to the following:

- Any years within the timeframe of the transportation plan, provided they are not more than ten years apart.
- Any year with an emission analysis budget.
- The attainment year.
- The transportation plan horizon year.

Table 2-2 shows the conformity analysis years and describes their corresponding requirements for calculations.

Table 2-2. Conformity Analysis Years

Requirements	Years
Conformity Base Year	N/A
	The existing 10 DFW nonattainment counties were reclassified as a severe nonattainment area for the 2008 8-hour Ozone NAAQS with an attainment date of July 20, 2027
	(attainment year would be 2026)
Attainment Year	9 of those 10 DFW nonattainment counties (excluding Rockwall County) were reclassified as a serious nonattainment area for the 2015 8-hour Ozone NAAQS with an attainment date of August 03, 2027 (attainment year would be 2026)
Last Year of Maintenance Plan	N/A
Analysis Years	2026, 2035, 2040, 2050
Other	N/A

2.4 CHECKLIST

Table 2-3 shows the checklist detailing information relevant to this conformity document.

Table 2-3. Checklist of Items Required in this Conformity Review

Item	Regulation Referenced	Item Format	Location within Report
Mobility 2050	Part 93 Subpart A	Independent self-supporting document (electronic file)	Link as listed in Appendix B - MTP and TIP
2025-2028 Transportation Improvement Program	Part 93 Subpart A	Independent self-supporting document (electronic file)	Link as listed in Appendix B - MTP and TIP

Item	Regulation Referenced	Item Format	Location within Report
2025 Transportation Conformity	Part 93 Subpart A	Independent self-supporting document (electronic file)	This document
Description of version of MOVES model being used	40 CFR 93.111	Discussion contained in conformity document	Chapter 5.1
MOVES input and output files		Electronic (ASCII or txt file format)	Appendix D.1 - MOVES Input and Output
MOVES emission factors		Electronic (ASCII or txt file format)	Appendix D.2 - MOVES Emission Factors
MOVES activity		Electronic (ASCII or txt file format)	Appendix D.3 - Activities
MOVES external reference files		Electronic (ASCII or txt file format)	Appendix D.1 - MOVES Input and Output
MOVES utilities		Electronic (ASCII or txt file format)	Appendix D.4 - Emissions Modeling Utilities
MoSERS Methodology		Electronic file	Appendix E.1 - MoSERS Methodology (Example Calculations)
TERMs		Electronic file	Appendix E.3 - TERMs
Highway Performance Monitoring System adjustment(s), factors, and approach	40 CFR 93.122(b)(3)	Discussion contained in conformity document	Chapter 4.5
Description of TDM validation, including validation year	40 CFR 93.106(a)(1)(ii)	Discussion contained in conformity document and Electronic file	Chapter 4.1 and Appendix Section C.1 Travel Model Validation
Vehicle miles of travel		Discussion contained in conformity document and Electronic file	Chapter 4.6 and Appendix Section D.5 VMT, Speed, and Emissions Summaries

Item	Regulation Referenced	Item Format	Location within Report
Average loaded speeds		Discussion contained in conformity document and Electronic file	Chapter 4.6 and Appendix Section D.5 VMT, Speed, and Emissions Summaries
Centerline mile summaries for each analysis year		Discussion contained in conformity document and Electronic file	Chapter 4.6 and Appendix Section C.2 Centerline and Lane Miles Summaries
Definition of regionally significant roadway system		Discussion contained in conformity document	Chapter 3.2
Link listing and Capacity and Roadway Network Files for each analysis year		Electronic files	Appendix Section C.3 Link Listing and Capacity Staging and Appendix Section C.4 Roadway Network Files
Files containing hourly distribution by county, roadway type, and vehicle type for vehicle miles of travel, vehicle hours, average operational speed, vehicle population, NO _x emissions, and VOC emissions		Electronic files in tab-delimited summary tables	Appendix Section D.5 VMT, Speed, and Emissions Summaries
TCMs in SIP		Discussion contained in conformity document and Electronic File	Chapter 6.2.2.1 and Appendix E.3 - TCMs
List of non-federal projects	In response to March 2, 1999, court ruling	Independent self-supporting document (electronic file)	Link as listed in Appendix B - MTP and TIP
List of exempt projects	40 CFR 93.105(c) 40 CFR 93.126 40 CFR 93.127 40 CFR 93.128	Independent self-supporting document (electronic file)	Link as listed in Appendix B - MTP and TIP

Item	Regulation Referenced	Item Format	Location within Report
Evidence of fiscal constraint	40 CFR 93.108	Independent self-supporting document (electronic file)	Link as listed in Appendix B - MTP and TIP
Evidence of MTP specifically describing the transportation system envisioned for each analysis year	40 CFR 93.106(a)	Independent self-supporting document (electronic file)	Link as listed in Appendix B - MTP and TIP
Evidence of public participation and response to comments	40 CFR 93.105	Discussion contained in conformity document and Electronic File	Chapter 5.1 and Appendix Section G.1 Meeting Information
Endorsements and/or resolutions		Electronic file	Appendix A - Resolution of Adoption
Applicable Federal Register notices and related documents		Discussion contained in conformity document	Throughout the conformity document and appendices
Interagency consultation		Electronic file	Appendix F- Interagency Consultation Process