

1. Reason for the Transportation Conformity Regional Emissions Analysis (§93.104) Beginning September 1, 2023

This plan is being submitted to the interagency consultation partners for soliciting consensus before commencement of a full-scale regional transportation conformity analysis. The plan and procedures may be revised as the North Central Texas Council of Governments (NCTCOG) staff proceeds with the analysis. Notification of such changes will be made to the interagency consultation partners.

Per TxDOT's direction regarding Regional Toll Analysis, no new analysis is required unless significant changes to the proposed tolling facilities occur that would void the results of previous analyses. As a part of the transportation conformity analysis, no changes are being proposed to the tolling facilities. Staff will continue to monitor any changes to recommendations to tolling facilities for future plan amendments or updates and reassess at that time the need for an updated Regional Toll Analysis.

Table 1: Explanation

X_a	State Implementation Plan Requirement (New Motor Vehicle Emissions Budgets)
	Other

- a. Based on monitoring data from 2015, 2016, and 2017, the DFW area did not attain the 2008 eight-hour ozone NAAQS in 2017, and neither qualified for a one-year attainment date extension per federal Clean Air Act (FCAA), §181(a)(5). On August 23, 2019, the United States Environmental Protection Agency (EPA) published the final notice reclassifying the DFW nonattainment area from moderate to serious for the 2008 eight-hour ozone NAAQS, effective on September 23, 2019. The DFW area then became subject to the serious nonattainment area requirements in FCAA, §182(c), and as required, the TCEQ submitted serious classification AD and RFP SIP revisions to the EPA. On April 24, 2023, the Environmental Protection Agency (EPA) published a Notice of Adequacy for the 2020 MVEBs for the purpose of transportation conformity, with an effective date of May 24, 2023. This adequacy determination requires a transportation conformity to be performed within two years of the effective date. As a result, these approved budgets will be used for this transportation conformity determination.

Here is a link to the [federal transportation conformity rule](#)

2. Planning Detail (§93.110)

Table 2: Metropolitan Transportation Plan/Transportation Improvement Program

Plan or Programs	Years Covered
<u>Mobility 2045: The Metropolitan Transportation Plan for North Central Texas, 2022 Update</u>	2023-2045
<u>2023–2026 Transportation Improvement Program (TIP) for North Central Texas</u>	2023-2026

Table 3: Projects

Project Element	Description
Regionally Significant Definition	Regionally Significant Roadways document can be shared upon request.
Capacity Changes	No changes are expected in all analysis years.
Congestion Mitigation and Air Quality Projects	Projects funded with CMAQ funds are included in the TIP.
Non-Federal Projects	NCTCOG identified regionally significant projects in the MTP and TIP that do not receive federal funding (local initiatives, private ventures, etc.).
Exempt Projects	NCTCOG identified exempt projects in the TIP according to the specifications outlined in the Conformity Regulations (§93.126, §93.127, and §93.128).
Other	N/A

Table 4: State Implementation Plan

SIP Element	Description
Title of Applicable SIP(s)	<i>Dallas-Fort Worth (DFW) Serious Classification Reasonable Further Progress (RFP) (TCEQ Adopted: 03/04/2020; EPA Adequacy Determination for MVEBs Effective: 05/24/2023)¹</i>
Motor Vehicle Emissions Budgets	MVEBs for 2020 (2008 Ozone NAAQS Serious - Attainment Year RFP SIP) NO _x : 107.25 tons/day VOC: 62.41 tons/day
Transportation Control Measures	<i>Dallas-Fort Worth 1997 8-Hour Ozone Moderate Nonattainment Area Attainment Demonstration State Implementation Plan Revision (TCEQ Adopted 05/23/07)</i> <i>Dallas-Fort Worth Environmental Speed Limit Control Strategy Conversion to a Transportation Control Measure² (TCEQ Adopted 08/25/2010)</i> <i>Approval and Promulgation of Air Quality Implementation Plans; Texas; Environmental Speed Limit Revision for the Dallas-Fort Worth 8-Hour Ozone Nonattainment Area Approval of Substitution for Transportation Control Measures (EPA Approved in 79 FR 1596³ on 1/09/2014)</i> <i>HOV Lane TCM Replaced with Traffic Signalization Projects (Adopted 5/31/2016; Approved 11/09/2016) and Transportation Control Measure Substitution in Dallas-Fort Worth Ozone Nonattainment Area⁴ (TCEQ Adopted 2/18/2020, EPA Approved 6/17/2020)</i>

¹ <https://www.govinfo.gov/content/pkg/FR-2023-04-24/pdf/2023-08436.pdf>

² http://www.tceq.texas.gov/assets/public/implementation/air/sip/dfw/080610/SIP_WEB_06AUG10.pdf

³ <https://www.federalregister.gov/d/2014-00047>

⁴ <https://www.federalregister.gov/documents/2020/06/17/2020-10835/air-plan-approval-texas-approval-of-substitution-for-dallas-fort-worth-area-transportation-control>

Table 5: Conformity Analysis Years

Requirement	Year
Conformity Base Year	N/A
Reclassification and Attainment Dates	<p>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 of 2026)</p> <p>9 of those 10 DFW nonattainment counties (excluding Rockwall County) were reclassified as a moderate nonattainment area for the 2015 8-hour Ozone NAAQS with an attainment date of August 03, 2024 (attainment year of 2023)</p>
Last Year of Maintenance Plan	N/A
First Analysis Year ⁵	2023
Intermediate Analysis Year ⁶	2026
Intermediate Analysis Year ⁷	2036
Last Year of Transportation Plan (MTP)	2045
Interpolation Years	N/A
Other	N/A

⁵ Per *Code of Federal Regulations* §93.106(a)(1)(ii), the first analysis year cannot be more than 10 years from the base year used to validate the transportation demand planning model. Per *Code of Federal Regulations* §93.118(d)(2) The attainment year, if within the timeframe of the plan, is a required analysis year for conformity. 2023 will be the potential attainment year when the area is reclassified under the 2015 8-hour Ozone NAAQS.

⁶ Per *Code of Federal Regulations* §93.106(a)(1)(i), analysis years cannot be more than 10 years apart. Per *Code of Federal Regulations* §93.118(d)(2) The attainment year, if within the timeframe of the plan, is a required analysis year for conformity. 2026 will be the potential attainment year when the area is reclassified under the 2008 8-hour Ozone NAAQS.

⁷ Per *Code of Federal Regulations* §93.106(a)(1)(i), analysis years cannot be more than 10 years apart.

3. Demographics

Table 6: Demographics Used in Conformity Analysis

Data Element	2023 and 2026 Analysis Years Detail and Source of Data	2036 and 2045 Analysis Years Detail and Source of Data
Population	<p>Population estimates for years between 2020 and 2030 were an interpolation between 2020 and the long-term forecast of 2030.</p> <p>The 2020 population comes from Census 2020.</p> <p>The long-term forecast was built upon 2005, 2010, and 2015 observed data. County Control totals are based on various independent estimates. Small geographic distribution within counties was based on land use/demographic model, comprehensive plans, and input from local governments.</p>	<p>The long-term forecast was used for 2036 and 2045.</p>
Employment	<p>Employment estimates for years between 2020 and 2030 were an interpolation between 2020 and the long-term forecast for 2030.</p> <p>The 2020 employment used county control totals from Bureau of Economic Analysis. Small geographic distribution within counties is based on Census Transportation Planning Products, Longitudinal Employer-Household Dynamics, and external sources.</p> <p>The long-term forecast was built upon 2005, 2010, and 2015 observed data. County Control totals are based on various independent estimates. Small geographic distribution within counties was based on land use/demographic model, comprehensive plans, and input from local government.</p>	<p>The long-term forecast was used for 2036 and 2045.</p>
Other	N/A	N/A

4. Activity Detail

Table 7: Travel Demand Model

Model Factor	Detail and Methodology
Model Validation Year	2014
Software	TransCAD, Transportation Analytical Forecasting Tool (TAFT)
Vehicle Miles Travel (VMT) Adjustments (Highway Performance Monitoring System (HPMS) Factor)	0.9889
Seasonal Correction Factor	Represents summer weekday from non-summer weekday activities; based on an average from 2015-2019 TxDOT Automatic Traffic Recorder (ATR) factors.
Hourly Distribution Factors	Regionally specific hourly VMT distributions reflected in the hourly link-VMT estimates; based on 2015-2019 TxDOT ATR factors.
Counties Covered by Model	Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, Wise, and Hill (Hill employed for modeling purposes only and will not be reported). All nonattainment counties are contained within modeled area.
Other	N/A

5. Emissions Detail (Motor Vehicle Emission Simulator (MOVES) Emission Factor Model Information)

Development of Emission Factors: NCTCOG will use the MOVES3 model to determine emission factors for this conformity analysis. Detailed MOVES input parameter data and sources will be forwarded for review by consultation partners.

Emission Model Version:	MOVES3
Analysis Year Runs:	2023, 2026, 2036, and 2045
Time Periods:	Hourly
Pollutants Reported:	Oxides of Nitrogen (NO _x) & Volatile Organic Compounds (VOC)
Functional Class:	Urban Restricted, Rural Restricted, Urban Unrestricted, and Rural Unrestricted
VMT Mix:	EPA's 24-vehicle class; applied post-process
Speed:	1-75 miles per hour (mph) at 5 mph increments; in between speeds are interpolated
Vehicle Age Distribution Data:	End-of-year 2018

MOVES3 inputs:

Table 8: MOVES3 Modeled Pollutants

Command	Function/Description	Input Parameter Source/Value
Pollutant	Defines the basic set of pollutants to report.	NO _x and VOC

Table 9: MOVES3 External Conditions

Command	Function/Description	Input Parameter Values	Description
MOVES Model	Identifies the model version to be utilized for the analysis.	MOVES3	MOVES3, released in November 2020
Calendar Year(s)	Identifies calendar year for which emissions factors are to be calculated (required to run model).	2023, 2026, 2036 and 2045	Potential attainment demonstration years and plan forecast years (as mentioned above in Table 5)
Evaluation Month	Provides option of calculating emissions factors for each month of the calendar year	7	Representing summer ozone season

Table 10: MOVES3 Input Parameters and Source

Input Parameter Name	Description	Source
Source Type Population	Input the number of vehicles in the geographic area, which is to be modeled for each vehicle, and apply the appropriate growth factors for each analysis year. A methodology similar to Texas A&M Transportation Institute's TTI's MOVESpopulationBuild module is used to convert TxDMV registration data for each county into the MOVES SUT.	End-of-year 2018 TxDMV registration data
Source Type Age Distribution	Input that provides the distribution of vehicle counts by age for each calendar year and vehicle type. TxDMV registration data is used to estimate the age distribution of vehicle types up to 30 years. The distribution of Age fractions should sum up to 1.0 for all vehicle types for each analysis year.	End-of-year 2018 TxDMV registration data; MOVES default used for buses
Vehicle Type VMT	County specific VMT is distributed to HPMS Vehicle types.	Travel Model Output
Average Speed Distribution	Input average speed data specific to vehicle type, road type, and time of day/type of day into 16 speed bins. The sum of speed distribution to all speed bins for each road type, vehicle type, and time/day type is 1.0.	Travel Model Output
Road Type Distribution (VMT Fractions)	Input County specific VMT by road type. VMT fraction is distributed between the road type and must sum to 1.0 for each source type.	Travel Model Output
Fuel Supply	Input to assign existing fuels to counties, months, and years, and to assign the associated market share for each fuel.	TCEQ, EPA Fuel Surveys and default MOVES input where local data unavailable (<i>See table 11a</i>)
Fuel Formulation	Input county specific fuel properties in the MOVES database.	TCEQ, EPA Fuel Surveys and default MOVES input where local data unavailable (<i>See Table 11b</i>)
Meteorology	County specific data on temperature, relative humidity and barometric pressure.	Regional data from TCEQ (<i>See Tables 12a, 12b, and 12c showing data</i>) ⁸
Inspection and Maintenance (I/M) Coverage	Input I/M coverage record for each combination of pollutants, process, county, fuel type, regulatory class, and model year are specified using this input.	TCEQ (<i>See Table 13</i>)
Fuel Engine Fraction/Diesel Fraction	Input fuel engine fractions (i.e. Gasoline vs. Diesel Engines types in the vehicle population) for all vehicle types.	End-of-year 2018 TxDMV registration data; MOVES default used for light-duty vehicles and buses

⁸ Data provided by the TCEQ based on combined data from Leading Environmental Analysis and Display System, NWS, and U.S. Air Force

Table 11a: MOVES3 Fuel Supply

Fuel Formulation ID	Market Share	Market Share CV ⁹
14714/14702	1	0
30600	1	0

Table 11b: MOVES3 Future Year Fuel Properties¹⁰

Fuel Type	Gasoline		Diesel
County Group	Core	Perimeter	All Counties
Fuel Formulation ID	14714	14702	30600
Fuel Subtype ID	12	12	21
RVP	7.09	7.80	-
Sulfur Level	10.00	10.00	6
ETOH Volume	9.56	9.56	-
MTBE Volume	0	0	-
ETBE Volume	0	0	-
TAME Volume	0	0	-
Aromatic Content	16.96	22.22	-
Olefin Content	10.13	8.69	-
Benzene Content	0.37	0.99	-
e200	47.00	49.64	-
e300	84.95	84.60	-
Vol to Wt Percent Oxy	0.3653	0.3653	-
BioDieselEster Volume	-	-	4.86
Cetane Index	-	-	-
PAH Content	-	-	-
T50	210.35	202.53	-
T90	325.30	319.75	-

⁹ Market Share CV – the coefficient variation of the market share

¹⁰ Fuel subtype ID 12 is E10 gasoline, either conventional (CG) or RFG, with a nominal 10 percent by volume ethanol content. Fuel subtype ID 21 is biodiesel (BD), currently in Texas, ULSD estimated with a near 5% biodiesel ester volume content.

Gasoline: Texas latest available (2020) summer survey data were the basis of both the CG and RFG input estimates, updated with MOVES defaults as needed, for particular expected future year properties. For RFG TTI estimated the average fuel properties by fuel grade combined into overall averages using EIA latest available (2019) Texas RFG relative sales volumes by grade. EPA summer 2020 RFG survey data were used (with hundreds of RFG samples) for Dallas and Houston RFG areas, separately. For CG, TTI used the TCEQ summer 2020 CG survey-based regional estimates produced by ERG for TCEQ's fuel study. TTI updated CG and RFG summer 2020 fuel formulations for use in future years by replacing particular fuel property values with the expected future year values (MOVES3 defaults). These include sulfur level for RFG, and RVP, sulfur level, and benzene content for CG.

Diesel: Diesel sulfur for future years is set to the MOVES3 default expected value, which is close to the actual, relatively stable, statewide averages observed in the last four TCEQ fuel surveys (2011, 2014, 2017, 2020). TTI based the estimated biodiesel ester volume content on EIA 2018 (latest available), Texas, transportation sector biodiesel and diesel consumption data.

Table 12a: 2011 Hourly Temperature Data¹¹

	Collin	Dallas	Denton	Ellis	Johnson	Kaufman	Parker	Rockwall	Tarrant	Wise
12:00 AM	85.18	85.18	85.18	85.18	85.55	85.18	85.55	85.18	85.55	85.55
1:00 AM	84.01	84.01	84.01	84.01	84.40	84.01	84.40	84.01	84.40	84.40
2:00 AM	82.97	82.97	82.97	82.97	83.06	82.97	83.06	82.97	83.06	83.06
3:00 AM	81.91	81.91	81.91	81.91	81.82	81.91	81.82	81.91	81.82	81.82
4:00 AM	80.79	80.79	80.79	80.79	80.87	80.79	80.87	80.79	80.87	80.87
5:00 AM	79.73	79.73	79.73	79.73	79.56	79.73	79.56	79.73	79.56	79.56
6:00 AM	78.85	78.85	78.85	78.85	78.64	78.85	78.64	78.85	78.64	78.64
7:00 AM	80.01	80.01	80.01	80.01	79.29	80.01	79.29	80.01	79.29	79.29
8:00 AM	82.83	82.83	82.83	82.83	82.76	82.83	82.76	82.83	82.76	82.76
9:00 AM	86.30	86.30	86.30	86.30	86.59	86.30	86.59	86.30	86.59	86.59
10:00 AM	89.61	89.61	89.61	89.61	89.88	89.61	89.88	89.61	89.88	89.88
11:00 AM	92.62	92.62	92.62	92.62	93.30	92.62	93.30	92.62	93.30	93.30
12:00 PM	95.10	95.10	95.10	95.10	95.90	95.10	95.90	95.10	95.90	95.90
1:00 PM	97.02	97.02	97.02	97.02	97.72	97.02	97.72	97.02	97.72	97.72
2:00 PM	98.43	98.43	98.43	98.43	99.34	98.43	99.34	98.43	99.34	99.34
3:00 PM	99.36	99.36	99.36	99.36	100.26	99.36	100.26	99.36	100.26	100.26
4:00 PM	99.83	99.83	99.83	99.83	100.72	99.83	100.72	99.83	100.72	100.72
5:00 PM	99.57	99.57	99.57	99.57	100.42	99.57	100.42	99.57	100.42	100.42
6:00 PM	98.38	98.38	98.38	98.38	99.30	98.38	99.30	98.38	99.30	99.30
7:00 PM	96.03	96.03	96.03	96.03	97.18	96.03	97.18	96.03	97.18	97.18
8:00 PM	92.57	92.57	92.57	92.57	93.54	92.57	93.54	92.57	93.54	93.54
9:00 PM	89.93	89.93	89.93	89.93	90.73	89.93	90.73	89.93	90.73	90.73
10:00 PM	88.10	88.10	88.10	88.10	88.71	88.10	88.71	88.10	88.71	88.71
11:00 PM	86.49	86.49	86.49	86.49	86.90	86.49	86.90	86.49	86.90	86.90

¹¹ Data provided by the TCEQ based on combined data from LEADS, NWS, and U.S. Air Force.

Table 12b: 2011 Hourly Relative Humidity Data¹²

	Collin	Dallas	Denton	Ellis	Johnson	Kaufman	Parker	Rockwall	Tarrant	Wise
12:00 AM	50.15	50.15	50.15	50.15	46.12	50.15	46.12	50.15	46.12	46.12
1:00 AM	52.90	52.90	52.90	52.90	49.02	52.90	49.02	52.90	49.02	49.02
2:00 AM	55.75	55.75	55.75	55.75	52.67	55.75	52.67	55.75	52.67	52.67
3:00 AM	58.76	58.76	58.76	58.76	56.13	58.76	56.13	58.76	56.13	56.13
4:00 AM	61.87	61.87	61.87	61.87	58.63	61.87	58.63	61.87	58.63	58.63
5:00 AM	64.62	64.62	64.62	64.62	61.78	64.62	61.78	64.62	61.78	61.78
6:00 AM	67.70	67.70	67.70	67.70	64.12	67.70	64.12	67.70	64.12	64.12
7:00 AM	66.62	66.62	66.62	66.62	63.75	66.62	63.75	66.62	63.75	63.75
8:00 AM	61.31	61.31	61.31	61.31	57.63	61.31	57.63	61.31	57.63	57.63
9:00 AM	54.11	54.11	54.11	54.11	50.25	54.11	50.25	54.11	50.25	50.25
10:00 AM	47.49	47.49	47.49	47.49	43.90	47.49	43.90	47.49	43.90	43.90
11:00 AM	41.71	41.71	41.71	41.71	37.73	41.71	37.73	41.71	37.73	37.73
12:00 PM	37.19	37.19	37.19	37.19	33.36	37.19	33.36	37.19	33.36	33.36
1:00 PM	33.77	33.77	33.77	33.77	30.55	33.77	30.55	33.77	30.55	30.55
2:00 PM	31.20	31.20	31.20	31.20	27.84	31.20	27.84	31.20	27.84	27.84
3:00 PM	29.42	29.42	29.42	29.42	26.27	29.42	26.27	29.42	26.27	26.27
4:00 PM	28.42	28.42	28.42	28.42	25.32	28.42	25.32	28.42	25.32	25.32
5:00 PM	28.30	28.30	28.30	28.30	25.17	28.30	25.17	28.30	25.17	25.17
6:00 PM	29.47	29.47	29.47	29.47	26.04	29.47	26.04	29.47	26.04	26.04
7:00 PM	32.42	32.42	32.42	32.42	28.45	32.42	28.45	32.42	28.45	28.45
8:00 PM	37.26	37.26	37.26	37.26	32.77	37.26	32.77	37.26	32.77	32.77
9:00 PM	41.36	41.36	41.36	41.36	36.64	41.36	36.64	41.36	36.64	36.64
10:00 PM	44.22	44.22	44.22	44.22	39.91	44.22	39.91	44.22	39.91	39.91
11:00 PM	47.42	47.42	47.42	47.42	43.27	47.42	43.27	47.42	43.27	43.27

¹² Data provided by the TCEQ based on combined data from LEADS, NWS, and U.S. Air Force.

Table 12c: 2011 Barometric Pressure Data¹³

County	Barometric Pressure
Collin	29.87
Dallas	29.87
Denton	29.87
Ellis	29.87
Johnson	29.85
Kaufman	29.87
Parker	29.85
Rockwall	29.87
Tarrant	29.85
Wise	29.85

¹³ Data provided by the TCEQ based on combined data from LEADS, NWS, and U.S. Air Force.

Table 13: MOVES3 I/M Descriptive Inputs for Subject Counties

2023			
Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant I/M Data ¹⁴			
I/M Program ID	20	24	MOVES3
Pollutant Process ID	101, 102, 201, 202, 301, 302	112	MOVES3
Source Use Type	21, 31, 32	21, 31, 32	MOVES3
Begin Model Year	1999	1999	Annual testing; program specifications
End Model Year	2021	2021	Annual testing; program specifications
Inspection Frequency	1	1	Annual testing; program specifications
Test Standards Description	Exhaust OBD Check	Evaporative Gas Cap and OBD Check	Annual testing; program specifications
Test Standards ID	51	45	MOVES3
I/M Compliance	94.00% for source type 21, 90.35% for source type 31 and 70.74% for source type 32		Expected compliance (%) - MOVES3 Default

Note: Begin Model Year and End Model Year define the range of vehicle model years covered by I/M program.

¹⁴ Wise County does not have I/M program.

Table 13-continued

2026			
Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant I/M Data			
I/M Program ID	20	24	MOVES3
Pollutant Process ID	101, 102, 201, 202, 301, 302	112	MOVES3
Source Use Type	21, 31, 32	21, 31, 32	MOVES3
Begin Model Year	2002	2002	Annual testing; program specifications
End Model Year	2024	2024	Annual testing; program specifications
Inspection Frequency	1	1	Annual testing; program specifications
Test Standards Description	Exhaust OBD Check	Evaporative Gas Cap and OBD Check	Annual testing; program specifications
Test Standards ID	51	45	MOVES3
I/M Compliance	94.00% for source type 21, 90.35% for source type 31 and 70.74% for source type 32		Expected compliance (%) - MOVES3 Default

Note: Begin Model Year and End Model Year define the range of vehicle model years covered by I/M program.

Table 13-continued

2036			
Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant I/M Data			
I/M Program ID	20	24	Differentiates I/M programs
Pollutant Process ID	101, 102, 201, 202, 301,302	112	Identifies the pollutant and vehicle process
Source Use Type	21, 31, 32	21, 31, 32	Identifies the vehicle type
Begin Model Year	2012	2012	Model year I/M Program begins
End Model Year	2034	2034	Model year I/M Program ends
Inspection Frequency	1	1	Annual testing; program specifications
Test Standards Description	Exhaust OBD Check	Evaporative Gas Cap and OBD Check	Identifies test type
Test Standards ID	51	45	Identifies test with MOVES3 database test standards IDs
I/M Compliance	94.00% for source type 21, 90.35% for source type 31 and 70.74% for source type 32		Expected compliance (%) - MOVES3 Default

Note: Begin Model Year and End Model Year define the range of vehicle model years covered by I/M program.

Table 13-continued

2045			
Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant I/M Data			
I/M Program ID	20	24	Differentiates I/M programs
Pollutant Process ID	101, 102, 201, 202, 301, 302	112	Identifies the pollutant and vehicle process
Source Use Type	21, 31, 32	21, 31, 32	Identifies the vehicle type
Begin Model Year	2021	2021	Model year I/M Program begins
End Model Year	2043	2043	Model year I/M Program ends
Inspection Frequency	1	1	Annual testing; program specifications
Test Standards Description	Exhaust OBD Check	Evaporative Gas Cap and OBD Check	Identifies test type
Test Standards ID	51	45	Identifies test with MOVES3 database test standards IDs
I/M Compliance	94.00% for source type 21, 90.35% for source type 31 and 70.74% for source type 32		Expected compliance (%) - MOVES3 Default

Note: Begin Model Year and End Model Year define the range of vehicle model years covered by I/M program.

Table 14: MOVES3 Emissions Factor Post-Processing to be Performed by County and Year

Strategy and Post-Processing Result	Analysis Year	Counties
Texas Low Emission Diesel Fuel (TxLED)	2023, 2026, 2036 & 2045	Applied to all modeled counties

Table 15: Emissions Controls Used for Conformity Credit

Emission Reduction Strategy and Years Covered	Modeling or Post-Processing Approach	Analysis Year
Intersection Improvements	Post Processed	2023
Transit Service	TAFT	All
High Occupancy Vehicle/Managed Lanes	TAFT	All
Park-n-Ride Lots	TAFT/Post Processed	All
Vanpools	Post Processed	2023
Grade Separations	TAFT/Post Processed	All
Traffic Signal Improvements	Post Processed	2023
Intelligent Transportation Systems	Post Processed	2023
Clean Vehicle Commitments	Post Processed	2023
Bicycle/Pedestrian Facilities	Post Processed	2023
Employer Trip Reduction Programs	TAFT	All
Sustainable Development	Post Processed	2023
Public Education/Ozone Season Fare Reduction	Post Processed	2023

Figure 1: 2023 Transportation Conformity Timeline

