

# Transportation Conformity Pre-Analysis Consensus Plan

## ALAMO AREA METROPOLITAN PLANNING ORGANIZATION

### 2024 Transportation Conformity

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Consensus by:	Date:
EPA	4/26/2024
FHWA/FTA	4/26/2024
TCEQ	4/9/2024
TxDOT	4/26/2024

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# 1 THE PURPOSE OF TRANSPORTATION CONFORMITY EMISSIONS ANALYSIS

Table 1. Reasons for the Transportation Conformity Emissions Analysis (40 CFR § 93.104)

Check Box	Reasons	Years Covered
	<b>a. New Metropolitan/Regional Transportation Plan (demographics, horizon year, etc.)</b>	
X	<b>b. Modify Existing Metropolitan/Regional Transportation Plan (interim year adjustments)</b>	2023-2050
X	<b>c. New or Amended Transportation Improvement Program</b>	2025-2028
	<b>d. State Implementation Plan (SIP) Requirements</b>	
	<b>e. Newly Designated Non-Attainment Area</b>	
	<b>f. Other</b>	

**Explanation:**

- a. Alamo Area MPO (AAMPO) is proposing an amendment to its current Mobility 2050 Metropolitan Transportation Plan (MTP) and is developing its 2025-2028 Transportation Improvement Program (TIP) (estimated approval by its Transportation Policy Board by June 2024).
- b. Bexar County comprises the San Antonio, TX non-attainment area for ground level ozone based on the 2015 Ozone NAAQS. Effective on November 11, 2022, Bexar County is a moderate nonattainment area for Ozone. AAMPO’s current Travel Demand Model (TDM) has a conformity base year of 2020 and was developed with analysis years of 2025, 2035, 2045, and 2050. Demographics Control totals for the MPO area have been developed for the stated analysis years based on Texas Demographic Center projections (Table 7). The TIP will cover the Fiscal Years (FY) 2025-2028, with MTP project list amended to include projects in FY 2025-2050.

## 2 TIMELINE FOR THE TRANSPORTATION CONFORMITY DOCUMENT DEVELOPMENT

Table 2. Anticipated Transportation Conformity Timeline

#	Task Items	Timeframe
1	Pre-Analysis Consensus Plan Review and Approval	1/4/2024 – 4/26/2024
2	Travel Model Networks Development and Emissions Analysis	1/25/2024 – 4/11/2024
3	Regional Technical and Policy Board Information	5/3/2024 – 5/13/2024
4	Public Meetings and Comment Period	4/15/2024 – 5/29/2024
5	Regional Technical and Policy Board Approval	6/7/2024 – 6/24/2024
6	Consultative Partner Review Period	6/25/2024 – 8/26/2024
7	USDOT Air Quality Conformity Determination Anticipated	8/27/2024 - 9/25/2024
8	New MTP Update Required	8/3/2027

## 3 METROPOLITAN TRANSPORTATION PLAN (MTP) OR REGIONAL TRANSPORTATION PLAN (RTP) / TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Table 3. MTP or RTP / TIP

Plan / Program Name	Years Covered	Fiscally Constrained
Amended Metropolitan Transportation Plan <i>Mobility 2050</i>	2023-2050	Yes
New FY 2025-2028 Transportation Improvement Program	2025-2028	Yes

### 3.1 DEFINITION OF REGIONALLY SIGNIFICANT PROJECTS (FROM 40 CFR § 93.101)

A regionally significant project means a transportation project (other than projects that may be grouped in the TIP and/or Statewide Transportation Improvement Program (STIP) or exempt projects as defined in EPA’s transportation conformity regulation [40 CFR § part 93]) is a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers, or transportation terminals) and would normally be included in the modeling of the metropolitan area’s transportation network. At a minimum, this includes all principal arterial highways and all fixed guided way transit facilities that offer a significant alternative to regional highway travel.

Consistent with federal definition AAMPO has developed the following local definition to classify projects as regionally significant:

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- Those facilities federally functionally classified as interstate freeways, other freeways or expressways
- Those facilities federally functionally classified as principal arterials
- Roadways and intermodal connectors included in the federally adopted National Highway System
- Roads designated as SH or US routes
- Community connections that provide direct, continuously signed connections between nearby or adjacent census defined urbanized areas, urban clusters and population centers with more than 5,000 people
- Roadways between activity centers that serve as primary regional connectors to an otherwise unserved regional activity center
- Extensions of Regionally Significant Roadways to connect non-connecting termini
- Fixed guideway transit facilities that offer an alternative to regional highway travel
- Tollways as documented in the Metropolitan Transportation Plan
- Grade-separated interchange projects on Regionally Significant Roadways where no access existed previously

Projects determined to be regionally significant, except as specifically exempted under 40 CFR Part 93.126, 40 CFR Part 93.127 or 40 CFR 93.128, must come from a conforming MTP and TIP or be individually found to conform prior to the issuance of federal approvals and other actions.

## 4 APPLICABLE STATE IMPLEMENTATION PLAN (SIP), RELATED EMISSIONS BUDGET, AND TRANSPORTATION CONTROL MEASURES (TCM)

Table 4. Applicable SIP and Emissions Budget(s)

SIP	Attainment Year <sup>1</sup>	Pollutant	Emission Budget (TPD)
Ozone SIP	N/A	VOC	N/A
Ozone SIP	N/A	NO <sub>x</sub>	N/A

<sup>1</sup>As of December 2023, TCEQ has not adopted or submitted SIP revisions with MVEBs to EPA for adequacy/approval.

Table 5. TCM strategies, if applicable.

#	TCM	Strategies	Effective Date
1	TCM	N/A	

## 5 CONFORMITY ANALYSIS YEARS

Per CFR § 93.106(a)(1)(i) – Analysis years cannot be more than 10 years apart.

Table 6. Conformity Analysis Years

Variable	Information
Baseline Conformity Year, if applicable.	2017
Attainment Year	N/A <sup>1</sup>
Analysis Years	2025, 2035, 2045, and 2050
TIP year(s)	2025-2028
Last Year of Maintenance Plan (if applicable)	N/A
Other	N/A

<sup>1</sup> The attainment year is not required to be an analysis year when relying on interim tests as per the § 93.119 Criteria and procedures: Interim emissions in areas without motor vehicle emissions budgets.

## 6 DEMOGRAPHIC USED IN CONFORMITY ANALYSIS

Table 7. Demographics

Variables	Forecasting method
<b>Population</b>	<p><b>No change.</b></p> <p><i>County-Level Control Totals:</i> Texas Demographic Center (TDC) 2018 population  <i>Disaggregate Data:</i> AAMPO 2015 TAZ Data; ACS 5-year data and 1-year data projections</p>
<b>Employment</b>	<p><b>No change.</b></p> <p><i>County-Level Control Totals:</i> Texas Demographic Center (TDC)  <i>Disaggregate Data:</i> 2020 point-level employment data by NAICS code (InfoUSA); Texas Education Agency (TEA)</p>
<b>Socio-economic</b>	<p><b>No change.</b></p> <p><i>Avg. household (HH) size:</i> ratio of residential pop. to households</p> <p><i>Median HH income:</i> ACS 5- and 1-yr data, utilized directly and adjusted to Base Year 2020 Dollars (USD)</p> <p><i>Avg. workers per HH:</i> ACS 5- and 1-yr data, utilized directly</p> <p><i>Area type:</i> calculated based on household and employment totals</p>

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Variables	Forecasting method
<p><b>Other</b></p>	<p><b>No change.</b></p> <p>A panel of local experts was constituted to help identify and confirm specific opportunities and constraints to development, and to guide the allocation of growth in the AAMPO model area. AAMPO’s Travel Demand Modelling (TDM) consultant, Cambridge Systematics (CS,) prepared detailed information on existing development patterns and the latest thinking on future economic activity for the region to a panel of local experts to spur discussion and feedback. The panel of local experts ensured a multifaceted understanding of the full region and the growth potential of communities and environments that comprise the region. This approach led to a defensible demographic forecast to support transportation planning for the region.</p> <p>Population, households, and employment were utilized for the TDC county-level totals as control totals. County-level data were apportioned to the block-group level based on ACS data and then further disaggregated to TAZs using the 2015 AAMPO TAZ data. County-level totals of employment were apportioned to TAZs based on a combination of InfoUSA and Texas Education Agency (TEA ) data. The InfoUSA point data were categorized into Basic, Retail, Service, and Education employment (as per Table 2) and aggregated to the TAZ-level. The TEA data was a secondary source of data for Education employment. Both sets of inputs were adjusted by comparing to the 2015 AAMPO TAZ dataset, satellite imagery, and available GIS layers of zoning, development type, and developability of vacant land.</p> <p>The special generators were retained from the 2015 AAMPO dataset and updated as appropriate. The special generator population and employment were manually updated based on demographic update data sets. For some special generators, primary sources of population and employment totals were obtained by directly contacting the special generator institution. Block-group level median household income and workers per household were obtained directly from ACS and allocated to TAZs based on share of TAZs within each block-group. All other TAZ-level TripCAL6 inputs were calculated based on the other input data, such as average household size and area type, or left blank.</p>

## 7 TRAVEL DEMAND MODEL

**Table 8. Land-Use Model**

Model Factor	Detail and Methodology
Study Area (sq-mi)	4001 (Bexar Co. Only)
Traffic Analysis Zones (TAZs)	1248
Counties	Bexar, Comal, Guadalupe, Kendall, Wilson

**Table 9. Travel Demand Model**

Model Factor	Detail and Methodology
Model Validation Year	2020 (Pre-Covid-19)
Software	SAMM 5.1 and TransCAD 8.0
VMT HPMS Factor	0.823578
Mode Split Method	FTA-compliant nested logit model
Countries Covered by Model	Bexar, Comal, Guadalupe, Kendall, Wilson
Other	N/A

**Table 10. Seasonal Factor**

Factor	Information	
Base Data	TxDOT ATR data	
Year of the Base Data	2013-2021	
Season	Summer	
Seasonal Period	2017 June, July, August	Future years: June, July, August
Adjustment Factor	1.059054 <sup>1</sup>	1.016998 <sup>2</sup>

<sup>1</sup> The adjustment factor converts annual average daily VMT to seasonal weekday VMT for historical years.

<sup>2</sup> The adjustment factor converts annual non-summer weekday VMT to seasonal weekday VMT for future years.

**Table 11. Hourly Distribution Factors**

Season	Summer
Hour	Factor
00:00-1:00	0.010179
1:00-2:00	0.006953
2:00-3:00	0.006082
3:00-4:00	0.006675
4:00-5:00	0.010915
5:00-6:00	0.027253
6:00-7:00	0.051057
7:00-8:00	0.063415

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<b>8:00-9:00</b>	0.055830
<b>9:00-10:00</b>	0.049034
<b>10:00-11:00</b>	0.048956
<b>11:00-12:00</b>	0.052019
<b>12:00-13:00</b>	0.055056
<b>13:00-14:00</b>	0.056194
<b>14:00-15:00</b>	0.058966
<b>15:00-16:00</b>	0.066296
<b>16:00-17:00</b>	0.072336
<b>17:00-18:00</b>	0.077721
<b>18:00-19:00</b>	0.064289
<b>19:00-20:00</b>	0.047634
<b>20:00-21:00</b>	0.038526
<b>21:00-22:00</b>	0.032755
<b>22:00-23:00</b>	0.024753
<b>23:00-24:00</b>	0.017106
<b>Total<sup>1</sup></b>	1.00

<sup>1</sup>The hourly factors for summer weekday scenario are calculated based on the 2013 to 2021 TxDOT San Antonio District ATR data. The sum of hourly factors over the 24-hour period must add up to 1. Highlight the values in the "Total" row and press the "F9" key to refresh and verify the total sum.

## 8 EMISSION MODELING

**Table 12. Emission Modeling**

<b>Pollutants Reported</b>	
<b>Pollutants</b>	VOC and NOx
<b>Emission Factor Development</b>	
<b>Emission Model Version<sup>1</sup></b>	MOVES 3.1.0 (Henceforth "MOVES")
<b>Years Modeled</b>	2017, 2025, 2035, 2045, 2050
<b>Time periods</b>	Summer Weekday
<b>Functional Class</b>	Urban restricted, Rural restricted, Urban unrestricted, Rural unrestricted, off-network
<b>VMT mix</b>	Using latest available VMT mix. TTI estimated San Antonio TxDOT District, four-period time-of-day, weekday VMT mixes, for conventional gasoline and diesel-powered MOVES source use types (SUT), by the five MOVES road types (including four on-network road types and one off-network road type), for use with historical and future analysis years.
<b>Speed</b>	MOVES county scale/emission rates mode will be used to model urban and rural, restricted,

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		and unrestricted access functional class emissions factors for each of the 16 speed bin average speeds (i.e., 2.5 and 5 through 75 at 5 mph increments).
<b>Vehicle Registration</b>		The 2018 and 2021 registration data will be used for age distribution.
<b>MOVES External Condition</b>		
<b>Calendar Year</b>	<b>Baseline Year, if Applicable</b>	2017
	<b>Other Years</b>	2025, 2035, 2045, and 2050
<b>Evaluation Month</b>		July

<sup>1</sup> The emission model used in this analysis is EPA's MOVES 3.1.0 (referred to as just MOVES in this document). The latest version of MOVES is MOVES4, which was released on September 12, 2023. However, there is a 2-year conformity grace period in effect with the release and ends on September 12, 2025. After this date, MOVES4 must be used for new transportation conformity analyses. The federal register notifying this release is available at: <https://www.federalregister.gov/documents/2023/09/12/2023-19116/official-release-of-the-moves4-motor-vehicle-emissions-model-for-sips-and-transportation-conformity>

## 9 MOVES INPUT

**Table 13. MOVES Input Parameters and data source**

<b>Input Parameter</b>	<b>Description</b>	<b>Base Data Source</b>	<b>Notes</b>
<b>Vehicle Population by Source Type</b>	Input the number of vehicles in the geographic area which is to be modeled for each vehicle. (Baseline and Future Analysis Years)	TxDMV data (year-end 2021), MOVES defaults for rates runs.	<ul style="list-style-type: none"> <li>Local gasoline and diesel-powered source type populations by analysis year is estimated for use external to MOVES in the estimation of county level vehicle starts and source-hours-parked, needed in the external emissions calculations, per TTI's rates-per-activity, TDM-based method.</li> <li>Populations by SUT and fuel type are a function of TxDMV year-end vehicle registration data and VMT mix, and in the case of base and future years, population scaling factors.</li> </ul>
<b>Fleet Age Distribution by Source Type</b>	Input that provides the distribution of vehicle counts by age for each calendar year and vehicle type. TxDMV	TxDMV data (year-end 2018 and 2021), MOVES defaults for refuse trucks, motor homes, and buses.	<ul style="list-style-type: none"> <li>Age distributions will be developed using TxDMV registration data aggregated at the county level for all source types except the single-unit long-haul source types, which will be statewide level.</li> <li>Since no 2017 registration data is available for use with the 2017 baseline, the 2018 TxDMV data will be used for</li> </ul>

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Input Parameter	Description	Base Data Source	Notes
	registration data is used to estimate the age distribution of vehicle types up to 31 years.		<p>the 2017 baseline. The 2021 TxDMV data will be used for the future analysis years.</p> <ul style="list-style-type: none"> <li>The distribution of Age fractions should sum up to 1.0 for each source use type for each analysis year.</li> </ul>
<b>Fleet VMT by HPMS Vehicle Type</b>	County specific VMT is distributed to five HPMS Vehicle types	MOVES defaults for rates runs.	<ul style="list-style-type: none"> <li>Local activity estimates are applied in emissions calculations external to MOVES.</li> </ul>
<b>Road Type VMT distributions</b>	Fractions of VMT across the four on-network MOVES road types (with off-network road type fraction at 0), for each source type.	MOVES defaults for rates runs.	<ul style="list-style-type: none"> <li>Local activity estimates are applied in emissions calculations external to MOVES.</li> <li>VMT fraction is distributed between the road type and must sum to 1.0 for each source type.</li> </ul>
<b>Average Speed Distribution</b>	Input average speed data specific to vehicle type, road type, and time of day/type of day into 16 speed bins.	MOVES defaults for rates runs.	<ul style="list-style-type: none"> <li>Local activity estimates are applied in emissions calculations external to MOVES.</li> <li>The sum of speed distribution to all speed bins for each road type, vehicle type, and time/day type would be 1.0.</li> </ul>
<b>Fuel Supply ( Table 14)</b>	Input to assign existing fuels to counties, months, and years, and to assign the associated market share for each fuel	Combination of MOVES defaults and local information	<ul style="list-style-type: none"> <li>For each analysis year and season, the local fuel supply will consist of one conventional gasoline formulation and one biodiesel formulation. (Although only the predominant fuels gasoline and diesel will be modeled, the other MOVES fuel type formulations will be input as required to run the MOVES model.)</li> </ul>
<b>Fuel Formulation (Table 15)</b>	Input county specific fuel properties in the MOVES database.	Department of Energy (DOE) state-level biodiesel (BD) consumption estimates and MOVES defaults for parameters.	<ul style="list-style-type: none"> <li>Conventional gasoline (CG) formulations based on TCEQ's summer 2017 and summer 2023 (latest available) fuel survey samples from <b>Bexar County</b>. <ul style="list-style-type: none"> <li>The 2017 CG properties are actual 2017 averages (fuel grade averages weighted by relative sales volumes).</li> <li>The Future Years (2024+) CG properties are latest available actual</li> </ul> </li> </ul>

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Input Parameter	Description	Base Data Source	Notes
			<p>2023 averages except with RVP, average sulfur level, and average benzene content set to the "expected" values (MOVES3 defaults, consistent with the pertinent regulatory standards).</p> <ul style="list-style-type: none"> <li>• The 2017 diesel sulfur level is the statewide average from TCEQ's 2017 survey.</li> <li>• Future years (2024+) diesel sulfur was set to the current expected future year value (6 ppm), which is conservative and consistent with the statewide diesel sulfur average from TCEQ's latest (2023) survey.</li> <li>• The BD ester volume percentages for 2017 and future years were based on 2017 and the latest available (2021) DOE state-level transportation sector BD consumption estimates.               <ul style="list-style-type: none"> <li>○ Fuel subtype IDs 12 and 21 are 10% ethanol-blend gasoline and biodiesel, respectively.</li> </ul> </li> </ul>
<p><b>Fuel Engine Fraction / Diesel Fraction</b></p>	<p>Input fuel engine fractions (i.e., Gasoline vs. Diesel Engines types in the vehicle population) for all vehicle types.</p>	<p>TxDMV year-end 2021 and year-end 2018 registration data for particular source type diesel fractions; MOVES defaults for other source types.</p>	<ul style="list-style-type: none"> <li>• Locality-Specific/MOVES default (renormalized with setting CNG fractions to zero).</li> <li>• Since no 2017 registration data is available for use with the 2017 baseline, the 2018 TxDMV data will be used for the 2017 baseline. The 2021 TxDMV data will be used for the future analysis years.</li> <li>• TTI developed the evaluation year-specific local diesel fractions for the MOVES single unit and combination truck source use types using the corresponding TxDMV data, for all analysis years, aggregated to the statewide level.</li> </ul>
<p><b>Meteorology (Table 16)</b></p>	<p>County Specific data on temperature and humidity</p>	<p>Average hourly from weather stations within Bexar County</p>	<ul style="list-style-type: none"> <li>• The summer season temperature and humidity data are the same values used in the previous MOVES2014b-based Mobility 2050 transportation conformity emissions analysis.</li> <li>• These inputs were based on 2017 Bexar County weather station data, provided by TCEQ, and are consistent with the</li> </ul>

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Input Parameter	Description	Base Data Source	Notes
			TCEQ's latest (2017) Bexar County periodic emissions inventory submittal to EPA required under the Air Emissions Reporting Rule [AERR]).
<b>I/M Coverage (Table 17)</b>	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, Inspection and Maintenance (I/M) Program Performance Standard Modeling (PSM) for the New I/M Program in the Bexar County 2015 Ozone Nonattainment Area	<ul style="list-style-type: none"> <li>• Begin and end model year (X, Y) define the range of model years covered – where X and Y, respectively, are calculated as YearID – 24, and YearID – 2.</li> <li>• Bexar County does not yet have historical program performance data. So, for 2026 and future analysis years, the compliance factors in such a case are calculated using default values based upon the program design (similar to how it was done in times past for the other areas).</li> <li>• The source data is from TCEQ with EPA guidance on I/M factors.</li> <li>• The model processes/pollutants affected are start and running exhaust HC, CO, NOx, and tank vapor venting HC; fuel type is gasoline; frequency is annual.</li> </ul>

**Table 14. Fuel Supply**

Fuel Type	Fuel Formulation ID	Market Share	Market Share CV <sup>1</sup>
Gasoline	17702, 2472	1.0	N/A
Diesel	30176, 30600	1.0	N/A

<sup>1</sup>Market Share CV – the coefficient variation of the market share.

**Table 15. Fuel Properties**

Factor	Information			
	Gasoline	Diesel	Gasoline	Diesel
<b>Fuel Type</b>	Gasoline	Diesel	Gasoline	Diesel
<b>Fuel Formulation ID</b>	17702	30176	2472	30600
<b>Fuel Subtype ID</b>	12	21	12	21
<b>Analysis Year</b>	2017	2017	2024+	2024+
<b>Season</b>	Summer	Summer	Summer	Summer
<b>RVP</b>	7.54	0	7.8	0
<b>Sulfur Level</b>	21.28	6.37	10.00	6.00
<b>ETOH Volume</b>	9.66	0	9.70	0
<b>MTBE Volume</b>	0	0	0	0
<b>ETBE Volume</b>	0	0	0	0

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<b>TAME Volume</b>	0	0	0	0
<b>Aromatic Content</b>	25.35	0	28.39	0
<b>Olefin Content</b>	8.33	0	9.35	0
<b>Benzene Content</b>	0.76	0	0.99	0
<b>e200</b>	49.45	0	50.25	0
<b>e300</b>	82.68	0	84.40	0
<b>Vol to Wt Percent Oxy</b>	0.3653	0	0.3653	0
<b>BioDieselEster Volume</b>	\N	4.68	\N	3.13
<b>Cetane Index</b>	\N	\N	\N	\N
<b>PAH Content</b>	\N	\N	\N	\N
<b>T50</b>	203.73	0	199.01	0
<b>T90</b>	327.68	0	322.32	0

<sup>1</sup> Summer conventional gasoline (CG) - TTI based the CG formulations on TCEQ's summer 2017 and summer 2023 (latest available) fuel survey samples from Bexar County. The 2017 CG properties are actual 2017 averages (fuel grade averages weighted by relative sales volumes). Future Years (2024+) CG properties are latest available actual 2023 averages except with RVP, average sulfur level, and average benzene content set to the "expected" values (MOVES3 defaults, consistent with the pertinent regulatory standards).

<sup>2</sup> The 2017 diesel sulfur level is the statewide average from TCEQ's 2017 survey. Future years (2024+) diesel sulfur was set to the current expected future year value (6 ppm), which is conservative and consistent with the statewide diesel sulfur average from TCEQ's latest (2023) survey. The biodiesel (BD) ester volume percentages for 2017 and future years were based on 2017 and the latest available (2021) DOE state-level transportation sector BD consumption estimates. Fuel subtype IDs 12 and 21 are 10% ethanol-blend gasoline and biodiesel, respectively.

Table 16. Hourly Meteorological Data

Factor	Information	
County/Area(s)	Bexar	Bexar
Season	Summer	Summer
Hour	Temperature (°F)	Relative Humidity (%)
00:00-1:00	78.99	77.90
1:00-2:00	77.82	81.39
2:00-3:00	76.91	84.04
3:00-4:00	76.21	85.87
4:00-5:00	75.69	87.13
5:00-6:00	75.26	88.00
6:00-7:00	74.88	88.78
7:00-8:00	75.43	87.31
8:00-9:00	77.66	81.44
9:00-10:00	80.33	72.68
10:00-11:00	82.98	64.24
11:00-12:00	85.47	57.70
12:00-13:00	87.72	52.12
13:00-14:00	89.53	48.18
14:00-15:00	91.03	44.94
15:00-16:00	92.13	43.00
16:00-17:00	92.60	42.18
17:00-18:00	92.48	42.81
18:00-19:00	91.50	44.95
19:00-20:00	89.54	50.16
20:00-21:00	86.61	56.89
21:00-22:00	84.11	62.97
22:00-23:00	82.12	68.75
23:00-24:00	80.42	73.82

**Table 17. I/M Inputs**

<b>Factor</b>	<b>I/M Information</b>	
<b>Test Standards Description</b>	Exhaust OBD Check	Evaporative Gas Cap and OBD Check
<b>Test Standards ID</b>	51	45
<b>Year ID</b>	2035, 2045, 2050	2035, 2045, 2050
<b>Source Use Type</b>	21, 31, 32	21, 31, 32
<b>Begin Model Year</b>	X	X
<b>End Model Year</b>	Y	Y
<b>I/M Compliance</b>	21 – 95.77% 31 – 92.05% 32 – 72.08%	21 – 95.77% 31 – 92.05% 32 – 72.08%

Source use type: 21 – Passenger Car, 31 – Passenger Truck, 32 – Light Commercial Truck

**Table 18. MOVES Emissions Factor Post-Processing to be Performed by County and Year**

<b>Strategy and Post-processing Result</b>	<b>Analysis Year</b>	<b>Counties</b>
<b>Texas Low Emission Diesel Fuel (TxLED)<sup>1</sup></b>	All years	Bexar

<sup>1</sup> EPA recently updated the method used to calculate emissions reductions for TxLED. The method used for post processing TxLED should be consistent with latest EPA guidance. EPA's new guidance is available here: [Guidance on Quantifying NOx Benefits for Cetane Improvement Programs for Use in SIPs and Transportation Conformity \(pdf\) \(470 KB, February 2023, EPA-420-B-23-006\)](#) . This guidance updates and supersedes the 2004 Guidance on these programs. Updates were made to account for changes in fleet composition and control technology that have occurred since 2004, which have greatly reduced the emissions reductions attributable to these types of programs.

Table 19. Emission Controls Used for Conformity Credit

Emission Reduction Strategy and Years Covered	Modeling or Post-Processing Approach	Analysis Year
Intersection Improvements	Post	2025-50
Transit Service	Post	2025-50
High Occupancy Vehicle/Managed Lanes	N/A	N/A
Park-n-Ride Lots	N/A	N/A
Vanpools	N/A	N/A
Grade Separations	Post	2025-50
Traffic Signal Improvements	Post	2025-50
Intelligent Transportation Systems	Post	2025-50
Clean Vehicle Commitments	Post	2025-50
Bicycle/Pedestrian Facilities	Post	2025-50
Employer Trip Reduction Programs	N/A	N/A
Sustainable Development	N/A	N/A
Public Education/Ozone Season Fare Reduction	N/A	N/A

Table 20. Project Types by Listed Location

Project Type	MTP Location	TIP Location
Added Capacity	Funded Projects List	Funded Projects List
CMAQ Projects	Funded Projects List	Funded Projects List
Non-Federal Projects	Funded Projects List	Funded Projects List
Exempt Projects	Funded Projects List	Funded Projects List
Other	N/A	N/A