APPENDIX: INTERAGENCY CONSULTATION

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1. Reason for the Transportation Conformity Regional Emissions Analysis (§93.104) Beginning 08/04/2021

Table 1: Explanation

x	New Metropolitan Transportation Plan (demographics, horizon year, etc.)
	Modify Existing Metropolitan Transportation Plan (interim year adjustments)
x	New or Amended Transportation Improvement Program
	State Implementation Plan (SIP) Requirement
x	Newly Designated Nonattainment Area
	Other

A new Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP) are being developed. Development of the RMS 2050 MTP will incorporate new analysis years, demographic projections, regionally significant projects and fiscal/financial forecast.

The City of El Paso (1991 city limits) is in non-attainment for particulate matter of10 microns (Effective on January 6, 1991) and a portion of Doña Ana County near Sunland Park, NM is marginal non-attainment for 2015 Ozone NAAQS (Effective on June 4,2018). For the purpose of this conformity determination, regional emissions analysis for Carbon Monoxide (CO) will not be conducted based upon the EPA approval of the El Paso CO Limited Maintenance Plan (LMP) in September 2017. In accordance with CO LMPs a regional emissions analysis for analysis years beyond 2020 is not required. The Travel Demand Model (TDM) has a conformity base year of 2017 and was developed with analysis years of 2022, 2032, 2040 and 2050. Demographics Control totals for the MPO area have been developed for the stated analysis years based on Texas Demographic Center projections (Table 5). The TIP will cover the Fiscal Years (FY) 2023-2026.

A new conformity determination is required for the new RMS 2050 MTP and RMS 2023-2026 TIP.

2. Planning Detail (§93.110)

Table 2: Metropolitan Transportation Plan/Transportation Improvement Program

Plan or Programs	Years Covered
RMS 2050 Metropolitan Transportation Plan	2022-2050
RMS Transportation Improvement Program	2023-2026

Table 3: State Implementation Plan

SIP Element	Description
Title of Applicable SIP(s)	1. Revisions to the State Implementation Plan for Inhalable Particulate Matter (PM_{10}):1991 PM_{10} SIP for Moderate Area- El Paso-PM_{10} SIP. The EPA Approved the SIP on January 18, 1994 (Effective on February 17, 1994). 2. Revisions to the State Implementation Plan (SIP) for the Control of Carbon Monoxide Air Pollution: El Paso CO Limited Maintenance Plan SIP Revision. The EPA approved the SIP on September 8, 2017(Effective on October 10, 2017). 3. Revision to the New Mexico PM_{10} State Implementation Plan for Anthony, New Mexico – Nov. 8, 1991. 4. Ozone Maintenance Plan for the Sunland Park, New Mexico Nonattainment Area. (Effective on July 15, 2011). 5. Revision to the New Mexico State Implementation Plan for Ozone (1997). 6. Revisions to the State Implementation Plan (SIP) for the control of Ozone Air Pollution (June 10, 1999).[1]

Motor Vehicle Emissions Budgets El Paso CO Limited Maintenance Plan (LMP) SIP Revision was approved on 2017. In accordance with CO LMPs a regional emissions analysis for analysis years beyond 2020 is not required.	PM_{10} SIP: PM_{10} - 12.05 TPD (1994)[2] Doña Ana County conformity test will be a no-greater-than-baseline year as appropriate for marginal ozone nonattainment area. Ozone SIP: 36.23 tons/day for VOCs and 39.76 tons/ day for NOX [1]
Transportation Control Measures	None
Other: This is for information purposes only, there is no SIP in New Mexico, so a qualitative analysis is recommended.	Doña Ana County, New Mexico Natural Events Action Plan Reevaluation 2005 The El Paso County Area Natural Events Action Plan (NEAP) Project Number 2006-040-0TH-NR. Adopted on February 21, 2007. Doña Ana County Erosion Control Regulations Ordinance No. 194-2000, Effective January 19, 2001. 2015 Ozone NAAQS Designation Recommendation Report, 2016

[1] It is a possibility that El Paso County being designated nonattainment for the 2015 ozone NAAQS. On May 24, 2021, EPA acted in response to the July 2020, D.C. Circuit Court remand. In the case of the Doña Ana County, NM and Denver Metro/North Front Range, Ozone nonattainment areas, upon further review, EPA intends to revise its initial designation. Because EPA's intended designations for the associated remanded counties of El Paso, TX and Weld, CO, respectively, disagree with the states' area recommendations, EPA on May 25, 2021 sent letters to each state opening a 120-day period for the states to provide additional information based on the existing record. EPA's action also opened a 30-day period for the public to comment. The state deadline for response to the "120-day letters" was July 26, 2021 both Texas and Colorado issued responses to EPA. Further, 119 public comments were received (there was a letter-writing campaign in the CO area), EPA is currently reviewing these comments and responses, and will finalize these challenged designations after the conclusion of the 120-day period. The final decision will be published by Fall 2021. As result of a non-attainment designation the one-hour budget approved under this SIP may be used.

[2] On August 17, 2021, the TCEQ executive director approved initiation of a redesignation request and maintenance SIP revision for the El Paso PM10 nonattainment area. The adoption date is tentatively planned for late July 2022, so it is not expected to impact the PM10 MVEB used for this conformity demonstration.

Table 4: Conformity Analysis Years

Requirement	Year
Conformity Base Year	2017 – Analysis year required for the no-greater-than-baseline interim emissions test for the Doña Ana County ozone nonattainment area.

Attainment Year	PM_{10} – N/A (1994 attainment year) CO – N/A (attainment/maintenance area) NM O_3 – N/A (Since there are no adequate or approved budgets for the Doña Ana County ozone nonattainment area, an interim emissions test will be used. Per §93.119(g), the first analysis year may be no more than five years beyond the year in which the determination is being made. When reclassified to moderate, the attainment year for the Doña Ana County ozone nonattainment area will be 2023.) TX O_3 – Unknown (Per §93.118(d)(2), the attainment year, if within the MTP and conformity determination years must be an analysis year when conducting a budget test. If El Paso County is designated nonattainment for the 2015 ozone NAAQS and classified as moderate, the attainment year (unknown) is expected to be 2023. If the county is designated nonattainment and classified as marginal, then the attainment year (unknown) may be 2020, which is prior to the MTP years and the conformity determination. One-hour ozone NAAQS budgets will be used for the initial conformity demonstration.)
Last Year of Maintenance Plan	PM_{10} – N/A (nonattainment area) CO – N/A (limited maintenance plan) O_3 – N/A (nonattainment area)
Motor Vehicle Emissions Budget Years	PM_{10} – 1994 (SIP attainment year) CO – N/A (limited maintenance plan) NM O_3 – N/A (Interim emissions test) TX O_3 – 1996 (If El Paso County is designated nonattainment for the 2015 ozone NAAQS and classified as moderate, approved one-hour ozone NAAQS budgets will be used for the initial conformity demonstration.)
First Analysis Year[1]	2022

[1] 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.

Intermediate Analysis Year(s)[2]	2032 and 2040
Last Year of Transportation Plan (MTP/RTP)	2050
Interpolation Years	N/A
Other	N/A

Table 5. Demographics Used in Conformity Analysis

Data Element	Detail and Source of Data
Population	At the TAZ level, the data was gathered from a mixture of sources, including public domain data sources, published commercial datasets, stakeholder input via the Delphi Process, table-top GIS analysis, and limited field review of the study area. To allocate demographics to the TAZ level, 2017 population and household estimates were developed at the block level. The county control total for household population, group quarter population, and total households are first allocated to the census block group level based on 2017 ACS 5-year block group level data. The block group level group quarter population was directly allocated to the block level based on the 2010 census block level group quarter population. There was a lack of detailed information on growth patterns below the block group level. Therefore, the change in the number of workers living in each block from 2010 to 2017 (reported in the 2010 and 2017 LEHD LODES data set) and the number of households (from 2010 U.S. Census and 2017 ACS 5-year data) were used to estimate changes in the number of households at the block level. To ensure accuracy of the 2017 household total at the block level, ACS 2017 block group level household data were used as a population control, and accuracy checks were performed to ensure the accuracy of high-growth areas. The population (in households) in each block was estimated multiplying total households by household size (averages from 2010 data).The subarea control totals were used as population growth constraints. The subarea growth in the number of households was derived in proportion to subarea total population growth.

[2] Per *Code of Federal Regulations* §93.106(a)(1)(i).Analysis years cannot be more than 10 years apart.

Employment	The data was gathered from a mixture of sources, including public domain data sources, published commercial datasets, stakeholder input via the Delphi Process, table-top GIS analysis, and limited field review of the study area. 2017 base year employment was allocated to the TAZ level using the 2017 InfoUSA data. Since the InfoUSA data contains latitude and longitude attributes, the data can be directly aggregated to the TAZ level. To ensure accuracy, an extensive review of the InfoUSA data was conducted. This review focused on the accuracy of the locational information of the businesses and reasonableness of the level of employment presented in the data. Once reviewed and any necessary adjustments made, employment was aggregated to the TAZ level. The subarea employment growth within each subarea by employment type was first developed proportionally to the county level employment growth by employment type. The subarea employment-by-type growth rate was assumed to be the same as the county's .
Socio-economic	The development of 2050 demographics adopted a Delphi process to develop subarea control totals. The interim year demographics was developed based on interpolation of base year 2017 and forecast year 2050. As part of the development of reasonable horizon year forecasts for the El Paso TDM at TAZ level, a Delphi Process was conducted to help formulate population and employment projections for the region based on local knowledge. 74 community leaders throughout the El Paso region with expertise in a variety of areas participated as panel members in the El Paso Delphi Process.
Other	Socioeconomic forecasts to year 2050 were established using the Texas Demographics Center's control totals and guidelines. Allocation of these control totals down to the TAZ level was done through a Delphi process, considering constraints and opportunities as well as the availability of developable land and existing development density.

Reference: El Paso Travel Demand Model Demographic Development and El Paso MPO Regional Mobility Strategy (RMS) Travel Demand Model

3. Activity Detail

- Land-Use Model Used

The El Paso MPO study area covers 1,235 square-miles, and is composed of a total of 848 Traffic Analysis Zones (TAZs), of which 793 are in Texas (El Paso County), and 55 are in New Mexico (53 in Doña Ana County, and 2 in Otero County).

Table 6: Travel Demand Model

Model Factor	Detail and Methodology
Model Validation Year	2017 (validation of model using 2017 saturation counts)
Software	TransCAD
Mode Split/Mode Choice	Multinomial logit model
Vehicle Miles Travel (VMT) Adjustments (HPMS FACTOR)	1.037120
Seasonal Correction Factor	For all analysis years, ANSWT conversion factors to seasonal weekday, based on latest available TxDOT 2010 through 2019 El Paso County ATR data: Summer (June through August) weekday (M-F): -- 0.95702 Winter (Dec., Jan., & Feb.) weekday: -- 0.99892
Hourly Distribution Factors	Regionally specific hourly VMT distributions (based on latest TxDOT 2010 through 2019 El Paso County ATR data) reflected in the hourly link-VMT estimates. (See Table 7)
Counties Covered by Model	El Paso County, Southern Doña Ana County, and a portion of Otero County.
Other	N/A

Table 7: Seasonal Weekday Hourly VMT Distributions

Hour	Summer Factor	Hour	Winter Factor
Sum_Hr01	0.010690	Win_Hr01	0.009305
Sum_Hr02	0.006882	Win_Hr02	0.006240
Sum_Hr03	0.005450	Win_Hr03	0.005020
Sum_Hr04	0.005067	Win_Hr04	0.004699
Sum_Hr05	0.007153	Win_Hr05	0.006539
Sum_Hr06	0.017523	Win_Hr06	0.015201
Sum_Hr07	0.036106	Win_Hr07	0.035478
Sum_Hr08	0.062185	Win_Hr08	0.064951
Sum_Hr09	0.066994	Win_Hr09	0.068941
Sum_Hr10	0.057865	Win_Hr10	0.058433
Sum_Hr11	0.053275	Win_Hr11	0.053984
Sum_Hr12	0.055382	Win_Hr12	0.056367
Sum_Hr13	0.058583	Win_Hr13	0.059427
Sum_Hr14	0.059663	Win_Hr14	0.061039
Sum_Hr15	0.061642	Win_Hr15	0.063315

Sum_Hr16	0.066094	Win_Hr16	0.069420
Sum_Hr17	0.070800	Win_Hr17	0.073751
Sum_Hr18	0.073354	Win_Hr18	0.073982
Sum_Hr19	0.062700	Win_Hr19	0.062717
Sum_Hr20	0.047659	Win_Hr20	0.046628
Sum_Hr21	0.037833	Win_Hr21	0.035381
Sum_Hr22	0.032092	Win_Hr22	0.029584
Sum_Hr23	0.026099	Win_Hr23	0.023220
Sum_Hr24	0.018909	Win_Hr24	0.016377

Table 8: Projects

Project Element	Description
Regionally Significant Definition	See page 17
Capacity Changes	Project list will be provided.
CMAQ Projects	Project list will be provided.
Non-Federal Projects	Project list will be provided.
Exempt Projects	Project list will be provided.
Other	N/A

4. Emissions Detail (MOVES Emission Factor Model Information)

- Development of Emission Factors:

Emissions Model Version: MOVES2014b

Analysis Year Runs: 2017, 2022, 2032, 2040 & 2050

Time Periods: 1) Summer – June through August weekday (avg. Mon-Fri.)
2) Winter – December through February weekday (avg. Mon-Fri.)

Pollutants Reported: 1) Summer –PM_{10}, VOC and NOx
2) Winter –PM_{10}

Functional Class: TTI will estimate El Paso County four-period, time-of-day VMT mixes by the four MOVES road types - urban and rural restricted access and un-restricted access - for use with each analysis year.

VMT mix: Using latest available vehicle classification counts (2009-2018) and associated year-end registration data (2018), TTI will estimate El Paso County four-period, time-of-day VMT mixes (for conventional gasoline and diesel-powered MOVES source use

types) by the four MOVES road types, for use with each analysis year. No seasonal adjustments are made for VMT mix. The methodology is described in Developing MOVES Source Use Types and VMT Mix for Conformity Analysis (TTI, August 2016). (Note – VMT mix is used external to MOVES in the link-level emissions calculations.

Speed: TTI will use MOVES county scale/emission rates mode to model urban and rural, restricted and unrestricted access road type emissions factors for each of the 16 speed bin average speeds (i.e., 2.5 and 5 through 75 at 5 mph increments) for rates lookup tables.

Vehicle Registration: For age distributions latest available (year-end 2018) registration data will be used for base and future years.

- MOVES2014b inputs:

Table 9: MOVES2014b Modeled Pollutants

Command	Function/Description	Input Parameter Source/Value
Pollutant	Defines the basic set of pollutants to report.	Summer: Primary PM_{10} – Total Exhaust, PM_{10} Brakewear, PM_{10} Tirewear, VOC and NOx. Winter: Primary PM_{10} – Total Exhaust, PM_{10} Brakewear, PM_{10} Tirewear.

Table 10: MOVES2014b External Conditions

Command	Function/Description	Input Parameter Values	Description
MOVES Model Version	Identifies the model version to be utilized for the analysis.	MOVES2014b	MOVES2014b (latest release - December 2018) is the model to be utilized for the analysis, along with the applicable MOVES2014b guidance.
Calendar Year	Identifies calendar year for which emissions factors are to be calculated. (Required to run model)	2017(baseline year for baseline test), 2022[1] (initial analysis year) and, 2032, 2040 & 2050 (plan forecast years).	Attainment demonstration year and plan forecast years.

Evaluation Month	Provides option of calculating emissions factors for each month of the calendar year	7 (July for summer season), 1 (January for winter season).	Representing summer and winter seasons.

[1]Analysis year 2022- As Doña Ana County doesn't have adequate or approved budget so an interim emissions test will be used. The first analysis year is a year no more than five years beyond the year in which the determination is being made (2022), for the purpose of this conformity the first analysis year will be 2022.

Table 11: MOVES2014b 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.	MOVES defaults for rates runs. TTI estimates local gasoline and diesel-powered source type populations by analysis year 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. Populations by SUT and fuel type are a function of Texas Department of Motor Vehicles (TxDMV) year-end vehicle registration data (2018) and VMT mix, and in the case of base and future years, population scaling factors.
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 31 years. The distribution of Age fractions should sum up to 1.0 for each source use type for each analysis year.	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. All source type age distributions will be estimated using the TxDMV data except for refuse trucks, motor homes, and buses which will be MOVES defaults. Since no 2017 registration data is available for use with the 2017 baseline, the latest available TxDMV data (year-end 2018) will be used for the 2017 baseline as well as the future analysis years.

Vehicle Type VMT	County specific VMT is distributed to 6 HPMS Vehicle types	MOVES defaults for rates runs. Local activity estimates are applied in emissions calculations external to MOVES.
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 would be 1.0.	MOVES defaults for rates runs. Local activity estimates are applied in emissions calculations external to MOVES.
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.	MOVES defaults for rates runs. Local activity estimates are applied in emissions calculations external to MOVES.
Ramp Fraction	Input county specific fraction of ramp driving time on rural and urban restricted roadway type	Ramp fractions will be set to zero so that rural and urban restricted access road type emission factors will exclude emissions from ramps. To model ramp emissions, TDM network ramp links will use unrestricted access emission factors to represent ramp emissions factors, since separate ramp rates are not available from MOVES.
Fuel Supply	Input to assign existing fuels to counties, months, and years, and to assign the associated market share for each fuel	For each analysis year and season, the fuel supply will consist of one conventional gasoline formulation and one biodiesel formulation. See Table 12.a.

Meteorology	County Specific data on temperature and humidity	The summer and winter season temperature and humidity data in Table 13 are the same values used in the previous MOVES2014a-based Destino 2045 Amendment transportation conformity emissions analysis. These inputs were based on 2017 El Paso County weather station data, provided by TCEQ, and are consistent with the TCEQ's latest (2017) El Paso periodic emissions inventory submittal to EPA required under the Air Emissions Reporting Rule [AERR]).
Fuel Formulation	Input county specific fuel properties in the MOVES database.	See Table 12.b Fuel formulations were based on El Paso fuel survey data, Department of Energy state-level biodiesel consumption estimates, and MOVES defaults for particular parameters.
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.	See Table 14.
Fuel Engine Fraction / Diesel Fraction	Input fuel engine fractions (i.e. Gasoline vs. Diesel Engines types in the vehicle population) for all vehicle types.	Locality-Specific/MOVES default. TTI developed the evaluation year-specific local diesel fractions for the MOVES single unit and combination truck source use types using the TxDMV year-end 2018 registration data, for all analysis years, aggregated to the statewide level. The diesel fractions were based on TxDMV data. MOVES defaults were used for the other MOVES source types.

Table 12.a: MOVES2014b Fuel Supply

Fuel Formulation ID	Market Share	Market Share CV[3]
ID for Gasoline(see Table 12.b)	1	**0**
ID for Diesel (see Table 12.b)	1	**0**

[3]Market Share CV – the coefficient variation of the market share.

Table 12.b: MOVES2014b Fuel Properties

Fuel Type	Gasoline[1]				Diesel[2]	
Season	Summer		Winter		Summer and Winter	
Year	2017	2020+	2017	2020+	2017	2020+
Fuel Formulation ID	17703	18703	17101	18101	30637	30600
Fuel Subtype ID	12	12	12	12	21	21
RVP	6.94	7.00	11.36	11.36	0	0
Sulfur Level	19.56	10.00	19.39	10.00	6.37	6.00
ETOH Volume	9.6	9.50	10.00	10.00	0	0
MTBE Volume	0	0.00	0	0	0	0
ETBE Volume	0	0.00	0	0	0	0
TAME Volume	0	0.00	0	0	0	0
Aromatic Content	26.67	24.24	21.36	21.36	0	0
Olefin Content	5.50	5.94	6.66	6.66	0	0
Benzene Content	1.30	0.63	0.63	0.63	0	0
e200	48.74	44.61	53.72	53.72	0	0
e300	87.84	84.63	87.38	87.38	0	0
Vol to Wt Percent Oxy	0.3653	0.3653	0.3653	0.3653	0	0
BioDieselEster Volume	/N	/N	/N	/N	4.68	4.86
Cetane Index	/N	/N	/N	/N	/N	/N
PAH Content	/N	/N	/N	/N	/N	/N
T50	206.12	220.24	192.22	192.22	0	0
T90	306.72	317.73	309.50	309.50	0	0

[1]TTI based the CG formulations on TCEQ's summer 2017 and summer 2020 (latest available) fuel survey samples from El Paso County. The 2017 CG properties are actual 2017 averages (fuel grade averages weighted by relative sales volumes). The Future Years CG properties are latest available actual 2020 averages except with RVP, average sulfur level, and average benzene content set to the "expected" values (MOVES2014b defaults, consistent with the pertinent regulatory standards).

[2] The 2017 diesel sulfur level is the statewide average from TCEQ's 2017 survey. Future years 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 (2020) survey. The biodiesel (BD) ester volume percentages for 2017 and future years were based on 2017 and the latest available (2018) DOE state-level transportation sector BD consumption estimates. Fuel subtype IDs 12 and 21 are 10% ethanol-blend gasoline and biodiesel, respectively.

Table 13: MOVES2014b Hourly Meteorological Data

Hours	Summer Temperature	Summer Relative Humidity	Winter Temperature	Winter Relative Humidity
12:00 a.m.	79.77	42.73	48.57	45.01
1:00 a.m.	78.51	45.05	47.44	46.81
2:00 a.m.	77.31	47.11	46.44	48.65
3:00 a.m.	76.27	49.05	45.46	50.32
4:00 a.m.	75.38	50.63	44.62	51.63
5:00 a.m.	74.47	52.45	43.71	53.29
6:00 a.m.	73.96	53.51	43.08	54.26
7:00 a.m.	75.19	51.26	43.39	52.85
8:00 a.m.	77.54	46.95	45.76	48.11
9:00 a.m.	80.13	42.42	48.91	43.16
10:00 a.m.	82.81	37.98	52.31	38.25
11:00 a.m.	85.38	33.88	55.29	34.22
12:00 p.m.	87.54	30.66	57.39	31.80
1:00 p.m.	89.27	28.03	59.07	29.61
2:00 p.m.	90.68	25.90	60.29	27.94
3:00 p.m.	91.85	24.01	60.83	27.40
4:00 p.m.	92.09	24.18	60.37	28.06
5:00 p.m.	91.62	24.77	58.77	30.20
6:00 p.m.	90.74	25.75	56.88	32.70
7:00 p.m.	89.02	28.24	55.16	35.17
8:00 p.m.	86.68	32.05	53.66	37.07
9:00 p.m.	84.78	34.61	52.16	39.26
10:00 p.m.	82.97	37.00	50.77	41.34
11:00 p.m.	81.28	40.04	49.58	42.97

Note: Average hourly from weather stations within El Paso County—June through August 2017 for summer and January, February, and December for winter (provided by TCEQ). Temperatures in °F and percent for relative humidity.

Table 14: MOVES2014b I/M Descriptive Inputs for Subject Counties

YearID	Begin Model Year[1]	End Model Year[1]	Test Standards ID (Description)	Source Use Type (I/M Compliance)[2]	Other[3]
2007 - 2019	*X*	1995	12 (2500 RMP/Idle)	For 2017: Passenger Car (95.20); Passenger Truck (93.30); Light Commercial Truck (87.58) Latest available 2019 for future years: Passenger Car (94.50); Passenger Truck (92.61); Light Commercial Truck (86.94).	See Note 3
	X	1995	41 (Evp Cap)		
	1996	*Y*	51 (Exh OBD)		
	1996	*Y*	45 (Evp Cap, OBD)		
2020 - 2050	*X*	*Y*	51 (Exh OBD)		
	X	Y	45 (Evp Cap, OBD)		

[1]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.
[2] I/M compliance factor estimates were calculated by TTI using the new MOVES I/M compliance factor equation (MOVES3 Technical Guidance, EPA, November 2020); El Paso I/M-program-specific I/M waiver rates and failure rates, and statewide average I/M compliance rates (TCEQ, March 2021); in combination with MOVES2014b regulatory class coverage adjustments (MOVES2014b Technical Guidance, EPA, August 2018).
[3] Also - 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.

Table 15: MOVES2014b 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)	2017,2022,2032,2040 & 2050	N/A

Table 16: Emissions Controls Used for Conformity Credit

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

Regionally Significant Projects Definition (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 STIP or exempt projects as defined in EPA's transportation conformity regulation [40 CFR part 93]) that is on a facility which 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.

Pre-Analysis Consensus Plan Comment and EPMPO Response Matrix

Friday September 10th, 2021 – Follow up Comments

#	Page, etc.	FHWA – PPD -TX Comments, dated August 12, 2021	EPMPO Response 8/30/2021	FHWA – PPD -TX Comments 9/10/2021	EPMPO Response 9/10/2021
1	Misc.	**FHWA.** Suggest only one approved MPO TIP at a time	The TIP that will be submitted with the RMS 2050 MTP and Transportation Conformity report will be the RMS 2023-2026 TIP. The MPO will continue to operate with the Destino 2021-2024 TIP until the RMS 2023-2026 TIP, RMS 2050 MTP and Transportation Conformity report are approved by the consultative partners.		
2	Misc.	**FHWA.** Suggest routine updates re. major projects e.g., Reimagine I-10.	MPO staff will provide routine updates to the Consultative Partners on the status of major projects, such as Downtown 10 (a.k.a. Reimagine I-10 Segment 2), as they go through the coordination efforts between the El Paso MPO and TxDOT."		
3	1	**FHWA.** Suggest clarifying 'planning area' for PM 10.	Document has been revised "The City of El Paso (1991 city limits) is in non-attainment for particulate matter of 10 microns (Effective on January 6, 1991)".		
4	1	**FHWA.** Suggest including a robust description of the status of CO. (NOTE: Prior Regional Conformities included many references to CO, that have been removed in this Regional Conformity.)	Document has been revised "For the purpose of this conformity determination, regional emissions analysis for Carbon Monoxide (CO) will not be conducted based upon the EPA approval of the El Paso CO Limited Maintenance Plan (LMP) in September 2017. In accordance with the CO LMP the final maintenance year is 2020, a regional emissions analysis for analysis years beyond 2020 is not required."	**From:** For the purpose of this conformity determination, regional emissions analysis for Carbon Monoxide (CO) will not be conducted based upon the EPA approval of the El Paso CO Limited Maintenance Plan (LMP) in September 2017. In accordance with the CO LMP the final maintenance year is 2020, a regional emissions analysis for analysis years beyond 2020 is not required.	Document has been revised.

				To: For the purpose of this conformity determination, regional emissions analysis for Carbon Monoxide (CO) will not be conducted based upon the EPA approval of the El Paso CO Limited Maintenance Plan (LMP) in September 2017. In accordance with CO LMPs a regional emissions analysis for analysis years beyond 2020 is not required.	
5	1	**FHWA.** Suggest revision from RMS 2050 2023-2026 to RMS 2023-2026.	Document has been revised "RMS 2023-2026 TIP."		
~~**6**~~	~~2 Table 3 Title of Applicable SIPs~~	~~**FHWA.** Suggest clarification of 4. being included in this (ozone) Regional Conformity?~~	Comment is DISREGARDED as recommend by FHWA (8/26/21)		
~~**7**~~	~~2 Table 3 Title of Applicable SIPs~~	~~**FHWA.** Suggest clarification of 5. being included In this (ozone) Regional Conformity~~	Comment is DISREGARDED as recommend by FHWA (8/26/21)		
~~**8**~~	~~2 Table 3 Title of Applicable SIPs~~	~~**FHWA.** Suggest clarification of 6. Being included in this (ozone) Regional Conformity?~~	Comment is DISREGARDED as recommend by FHWA (8/26/21)		
9	3 Table 3 MVEBs	**FHWA.** Suggest including LMP CO information	Document has been revised "El Paso CO Limited Maintenance Plan SIP Revision was approved on 2017 and the final maintenance year is 2020."	**From:** El Paso CO Limited Maintenance Plan SIP Revision was approved on 2017 and the final maintenance year is 2020. **To:** El Paso CO Limited Maintenance Plan (LMP) SIP Revision was approved on 2017. In accordance with CO LMPs a regional emissions analysis for analysis years beyond 2020 is not required.	Document has been revised.
10	3 Table 3 Other	**FHWA.** Suggest explaining this statement for this (ozone) Regional Conformity	Document has been revised "[1]This is for information purposes only, there is no SIP in New		

			Mexico, so a qualitative analysis is recommended."		
11	3 Table 4 AY	**FHWA.** Suggest clarifying PM10 Attainment YR on p. 1 (January 6, 1991) versus Attainment YR on p. 3 (January 6, 1992).	Document has been revised (p.3) "PM10 – N/A (1994 attainment year)", as recommend by TCEQ (comment 5).		
~~**12**~~	~~4~~ ~~MVEBs~~	~~**FHWA.** Suggest clarification of PM 10 – 1994 (SIP Attainment YR). Resources: https://www.tceq.texas.gov/airquality/sip/elp/elp-particulate-matter-history https://www.tceq.texas.gov/assets/public/implementation/air/sip/elp/ELP_PM_Nov1991.pdf~~	Comment is DISREGARDED as recommend by FHWA (8/26/21)		
13	4 Population	**FHWA.** Suggest clarifying the following sentence: The number of people in HHs within each block was derived by allocating block group population in HHs based on the total HHs multiply by the 2010 average HH size.	Document has been revised "The population (in households) in each block was estimated multiplying total households by household size (averages from 2010 data)."		
14	5 Employment	**FHWA.** Suggest deleting the following duplicated sentence: The subarea employment growth within each subarea by employment type was first developed proportionally to the county level employment growth by employment type.	Document has been revised "The subarea employment-by-type growth rate was assumed to be the same as the county's."		
15	6 Model	**FHWA.** Suggest confirming Validation YR and Base YR are 2017.	Yes, it is the same YR.		

	Validation YR	Note: Likely a question for TPP/Janie.			
16	6 Hourly Distribution Factors	**FHWA.** Suggest confirming 'latest TxDOT 2010 through 2019 El Paso ATR data' as VMT mix uses (2009-2018). Note: Likely a question for TPP/Janie.	Yes. The 2010 through 2019 El Paso ATR data was used for the hourly distribution factors.		
17	7 VMT mix	**FHWA.** Suggest confirming 'latest available vehicle classification counts (2009-2018)' as Hourly Distribution Factors uses (2010 through 2019). Note: Likely a question for TPP/Janie.	Yes. Confirmed. Unlike ATR data VMT mix is developed using registration and vehicle classification counts data. The 2018 registration data was the latest available.		
18	8 VMT mix	**FHWA.** Suggest confirming year-end of mid-year in the following sentence: '… and associated year=end registration data (2018).' Note: Likely a question for TPP/Janie	Yes. Confirmed. The year-end 2018 registration data was used in the development of the VMT mix.		
19	8 Vehicle Registration	**FHWA.** Suggest confirming mid-year registration data in the following sentence: '…Mid-year registration data by analysis year will be used ….' Note: Likely a question for TPP/Janie.	Mid-year is incorrect. Document has been revised "For age distributions latest available (year-end 2018) registration data will be used for base and future years."		
20	8 Calendar Year	**FHWA.** Suggest confirming marginal attainment year date.	Document has been revised "[1]Analysis year is 2022- As Doña Ana doesn't have adequate or approved budget so an interim emissions test will be used. The first analysis year is a year no more than five years beyond the year in which the determination is being made (2019), for the	**Table 10 CY.** Suggest remove footnote reference from column 4. **Table 10.** Suggest correct footnote from '(2019)' to e.g., '(2021)' or '(2022)'.	Document has been revised.

			purpose of this conformity the first analysis year will be 2022."		
21	9 Source Type Age Distribution	**FHWA.** Please clarify the following sentence: 'TxDMV data for 2018 will be used for the 2017 baseline and future analysis years.' Note: Likely a question for TPP/Janie	Document has been revised "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. All source type age distributions will be estimated using the TxDMV data except for refuse trucks, motor homes, and buses which will be MOVES defaults. Since no 2017 registration data is available for use with the 2017 baseline, the latest available TxDMV data (year-end 2018) will be used for the 2017 baseline as well as the future analysis years."		
22	10 Ramp fraction	**FHWA.** Suggest explaining 'Set to zero.' Per TCEQ/Aaron Slevin (August 5, 2021). ' … the ramp fraction is the time that vehicles spend on the ramps to restricted access roads, such as highways. When doing a MOVES rate mode run, which is what TTI uses when developing emission inventories, there is no way for the model to provide separate output for ramp rates. Due to this limitation in MOVES TTI sets the ramp fraction to zero so the ramp activity does not inflate the other rates produced during the MOVES rate development process. '	Document has been revised "Ramp fractions will be set to zero so that rural and urban restricted access road type emission factors will exclude emissions from ramps. To model ramp emissions, TDM network ramp links will use unrestricted access emission factors to represent ramp emissions factors, since separate ramp rates are not available from MOVES."		
23	10 Fuel Supply	**FHWA.** Suggest possible reference is to Table 12a (versus Table 12b.)	Document has been revised ". See Table 12.a.".		

24	11 Fuel Engine Fraction / Diesel Fraction	**FHWA.** Suggest including TxDMV YR. (two occasions)	Document has been revised "…using the TxDMV year-end 2018 registration data, for all analysis years, aggregated to the statewide level."		
25	12 ID for Gasoline	**FHWA**. Suggest possible reference to Table 12.b (versus Table 13b.)	Document has been revised "ID for Gasoline (see Table 12.b)".		
26	12 ID for Diesel	**FHWA.** Suggest possible reference to Table 12.b (versus Table 13b.)	Document has been revised "ID for Diesel (see Table 12.b)".		
27	12	**FHWA.** Suggest separating Footnote 1 and Footnote 2.	Document has been revised "[2]The 2017 diesel sulfur level….."		
28	MOVES14b	**FHWA.** Consultative Partners to confirm use of MOVES14b or MOVES 3.	El Paso MPO sent an email on September 1st, 2021 to the consultative partners requesting confirmation to use MOVES2014b (Emissions Model Version) for this conformity.		El Paso MPO received confirmation from consultation partners.
29				**Table 12a.** For clarity, suggest move footnote under the Table (vs. the bottom of the page); consistent to footnotes 1, 2 for Table 12b. **Table 12b.** For consistency, suggest replace 'MOVES3' reference with 'MOVES 2014b'.	Table12a footnote 3 was moved under the table. Table12b footnote 2 was updated : "The 2017 diesel sulfur level is the statewide average from TCEQ's 2017 survey. Future years 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 (2020) survey. The biodiesel (BD) ester volume percentages for 2017 and future years were based on 2017 and the latest available (2018) DOE state-level transportation sector BD consumption estimates. Fuel subtype IDs 12 and 21 are 10% ethanol-blend gasoline and biodiesel, respectively."

COMMENTS FROM TCEQ ON EL PASO MPO PREANALYSIS PLAN FOR DESTINO 2050 MTP AND 2023-2026 TIP

DOCUMENT: PREANALYSIS PLAN FOR CONSENSUS

Page	Section	TCEQ Comment/Suggestion 8/18/2021	EPMPO Response 8/30/2021	TCEQ Response 9/2/2021	EPMPO Response 9/10/2021
2	Table 3, Row 2, Column 2	**Comment:** You should probably include some discussion here about the possibility of El Paso County being designated nonattainment for the 2015 ozone NAAQS and what MVEBs would be used to demonstrate conformity if the designation happens and it is within the time period of this conformity demonstration.	The following SIP is included: "6. Revisions to the State Implementation Plan (SIP) for the control of Ozone Air Pollution (June 10, 1999)" and a foot note 1 was added to discuss the probably of nonattainment designation for the 2015 Ozone NAAQS.	Resolved	
2	Table 3, Row 2, Column 2, Description (1)	**FYI:** On AUG 17, the TCEQ executive director approved initiation of a redesignation request and maintenance SIP revision for the El Paso PM10 nonattainment area. The adoption date is tentatively planned for late July 2022, so it is not expected to impact the PM10 MVEB used for this conformity demonstration.	Document has been revised and the information is included (Footnote 2).	No additional comment	
2	Table 3, Row 2, Column 2, Description (2)	**Page Check**: The 2008 CO maintenance SIP revision can probably be removed at this point since the 2020 MVEB is no longer being used to demonstrate conformity.	Document has been revised and the 2008 CO maintenance SIP revision has been **removed.**	Resolved	
2-3	Table 3, Row 3, Column 2, Description	**Comment:** If you add discussion of the potential designation to nonattainment for the 2015 ozone NAAQS, then you should probably add the one-hour MVEBs to the MVEB row for Table 3.	Document has been revised "Ozone SIP: 36.23 tons/day for VOCs and 39.76 tons/ day for NOX"	Resolved	
3	Table 4, Row 2	**Comment:** Since the table is meant to list conformity analysis years, it's important to be clear. The table is a template, which can complicate things when your situation deviates from the template layout, but I think it can still be made clear. Consider the following possible solution. It may be too much, but, as you know, the El Paso situation is complex.	Document has been revised and the table has been revised.	Resolved	

<table>
<tr><th>Page</th><th>Section</th><th>TCEQ Comment/Suggestion
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9/10/2021</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Requirement</th><th>Year</th></tr>
<tr><td>Conformity Base Year</td><td>2017 – Analysis year required for the no-greater-than-baseline interim emissions test for the Doña Ana ozone nonattainment area</td></tr>
<tr><td>Attainment Year</td><td>PM_{10} – N/A (1994 attainment year)

CO – N/A (attainment/maintenance area)

NM O_3 – N/A (Since there are no adequate or approved budgets for the Doña Ana ozone nonattainment area, an interim emissions test will be used. Per §93.119(g), the first analysis year may be no more than five years beyond the year in which the determination is being made. When reclassified to moderate, the attainment year for the Doña Ana ozone nonattainment area will be 2023.)

TX O_3 – Unknown (Per §93.118(d)(2), the attainment year, if within the MTP and conformity determination years must be an analysis year when conducting a budget test. If El Paso</td></tr>
<tr><td>Last Year of Maintenance Plan</td><td>PM_{10} – N/A (nonattainment area)

CO – N/A (limited maintenance plan)</td></tr>
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Page	Section	TCEQ Comment/Suggestion 8/18/2021	EPMPO Response 8/30/2021	TCEQ Response 9/2/2021	EPMPO Response 9/10/2021
		Motor Vehicle Emissions Budget Years: PM_{10} – 1994 (SIP attainment year); CO – N/A (limited maintenance plan); NM O_3 – N/A (Interim emissions test) First Analysis Year (same footnote): 2022 Intermediate Analysis Year(s) (same footnote): 2032 and 2040 Last Year of Transportation Plan (MTP/RTP): 2050 Interpolation Years: N/A Other: N/A			
7	Section 4. Emissions Detail (MOVES Emission Factor Model Information)	**Comment:** This conformity demonstration is expected to be conducted within the MOVES3 grace period, so using MOVES 2014b is not currently a concern for the TCEQ.		No additional comment	
8	Table 10, Row 3 Calendar Year	**Comment:** The Description column is confusing. It looks like 2017 is described as an attainment demonstration year, with the other analysis years as plan forecast years. Shouldn't the description be *baseline year for baseline test, initial analysis year, and plan forecast years*?	Document has been revised and the table has been revised.	Resolved	

Page	Section	TCEQ Comment/Suggestion 8/18/2021	EPMPO Response 8/30/2021	TCEQ Response 9/2/2021	EPMPO Response 9/10/2021
9	Table 11, Row 3 Source Type Age Distribution, Column 2	**Suggestion:** The distribution of Age fractions should sum up to 1.0 for ~~all vehicle types~~ each source use type for each analysis year.	Document has been revised.	Resolved	
9	Table 11, Row 3 Source Type Age Distribution, Column 3	**Comment:** The Source description for the Source Type Age Distribution row may need to be updated. The newest data should be the EOY 2018, not analysis year specific mid-year.	Document has been revised. Please review comment 21 from FHWA.	Resolved	
12	Table 12a	**Suggestion:** Correct references to Table 13b in this table to Table 12b.	Document has been revised. Same comment as FHWA comment 23.	Resolved	
12	Table 12b	**Comment:** The note references the 2017 summer fuel study, but it was updated last year. (https://www.tceq.texas.gov/airquality/airmod/project/pj_report_mob.html)	The table has been updated, including changing the sulfur level for fuel formulation ID 30011 to 6.00 ppm (the latest MOVES default expected future year value, which is also consistent with TCEQ's observed values from diesel surveys over many years now).	Resolved	
13	Table 13	**Comment:** The meteorological data matches previous analyses, and the TCEQ has no concerns.		No additional comment	
14	Table 14	**Comment:** The historical and most recent in-use compliance factors developed from in use data as part of implementation of MOVES3 is now the most current information for modeling Texas I/M programs. Likely the program input parameters should be updated. The 2017 analysis year would have a set of factors, and all other years would use the latest available.	Document has been revised. Table 14 footnote 2 "I/M compliance factor estimates were calculated per MOVES Technical Guidance (EPA, November 2015August 2018)	For footnote 2: We are not using a 96% compliance rate or 3% waiver rate. The MOVES3 method used to produce the compliance and	Document has been revised. Tables 14 and 12.b were updated.

Page	Section	TCEQ Comment/Suggestion 8/18/2021	EPMPO Response 8/30/2021	TCEQ Response 9/2/2021	EPMPO Response 9/10/2021
			and Texas modeling protocol (using compliance and waiver rates of 96 % and 3 %, respectively)." and the compliance factor values to: "For 2017: PC (95.20); PT (91.51); LCT (71.65) Latest available 2019 for future years: PC (94.50); PT (90.83); LCT (71.12)" have been revised.	waiver rates uses I/M program specific data where available and statewide averages where values are not developed.	