

**1. Reason for the Transportation Conformity Regional Emissions Analysis (§93.104) Beginning 12/13/2019**

Table 1: Explanation

	New Metropolitan Transportation Plan (demographics, horizon year, etc.)
x	Modify Existing Metropolitan Transportation Plan (Destino 2045 MTP)
x	New or Amended Transportation Improvement Program (Destino 2021-2024 TIP)
	State Implementation Plan (SIP) Requirement
	Newly Designated Nonattainment Area
	Other

The El Paso Metropolitan Planning Organization (EPMPO) is proposing an amendment to the Destino 2045 Metropolitan Transportation Plan (MTP) (approved on November 5, 2018) and the Destino 2021-2024 TIP which will require a conformity determination.

The Transportation Policy Board (TPB) approved El Paso Mobility Plan 2019 during the Friday December 13, 2019 meeting. This Transportation Conformity Pre-Analysis Consensus Plan includes several proposed changes to the Destino 2045 MTP, which will be included in the Destino 2021-2024 TIP. The Destino 2021-2024 TIP will be submitted for inclusion in the 2021-2024 STIP.

**A. Projects moved from the 2030 to 2040 network year:**

**A1.-** P402X-05A (1046-03-004) widening from 4 to 6 lanes State Spur 601 from Airport Road to State Loop 375 (Purple Heart Highway).

**A2.-** P428X-CAP-2 (1046-01-020) widening FM 659 (Zaragoza Rd/George Dieter Dr.) segment 2 from 4 to 6 lanes including roadway and operational improvements on existing 6 lanes segment from IH10 to SL 375 (Joe Battle Blvd).

**A3.-** P530X-MOD (1046-01-022) widening FM 659 (Zaragoza Rd) segment 3 from 4 lanes to 6 lanes including operational improvements from IH10 to FM 76 (North Loop Dr.)

**A4.-** F407D-CAP (0374-02-102) US 62 (Montana) Expressway Ph4 widening from 4-lanes undivided to 6-lanes divided and construct overpass from FM 659 (Zaragoza Rd) to Desert Meadows.

**A5.-** F405X-CAP (0924-06-532) reconstruction of existing mainlanes (6 lanes, 3 in each direction) at Global Reach Dr. and addition of frontage roads, construct 4 lane frontage roads (2 in each direction), and single lane direct connectors at SS 601 NB to WB and EB to SB from US 62/180 Montana Avenue to SS 601.

**A6.-** F059X-CAP-1 (0924-06-591) Border Highway East (BHE), Phase 1 build 4 lanes divided highway including 2-lanes direct connectors at SL 375 (WB-WB and EB-EB direction coming in/out of BHE) and connection to Pan American at Winn Road, from SL 375 (Americas Avenue) to Old Hueco Tanks Extension.

**A7.-** P428X-MOD (1046-01-021) FM 659 (Zaragoza Road) widening 4 lanes to 6 lanes divided from Loop 375 to US 62/180 (Montana), and include transitional work from LP 375 to Sunfire.

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**A8.-** A136X-CAP (0924-06-590) Mesa Park extension: build 4 lanes undivided road extension from IH-10 to SH 20 (Doniphan Dr.).

### **B. Projects moved from 2020 to 2030 network year:**

**B1.-**F057X-CAP (2552-02-028) Loop 375 (Purple Heart) widening from 4 to 6 lanes on mainlanes and construction of 2 lanes frontage roads in each direction from Spur 601 to US 62/180 (Montana Ave).

### **C. Projects moved from 2040 to 2030 network year:**

**C1.-** A527X-CAP-1 (0924-06-595) Nuevo Hueco Tanks extension- Phase I build 4 lane roadway from FM 76 North Loop Dr. to SH 20 - Alameda Avenue (this project was split on two phases).

**C2.-** P002X-CAP Tierra Este (Arterial 1) build 6 lanes divided with bicycle lanes from Pellicano to Cozy Cove.

### **D) New phases:**

**D1.-** A527X-CAP-2 (0924-06-595) Nuevo Hueco Tanks (street name updated from "Old" Hueco Tanks to "Nuevo" Hueco Tanks) Extension-Phase II Build 4 lane roadway from SH 20 - Alameda Avenue to Border Highway East (BHE).

### **E) Road Diets**

The EPMPPO held a consultative call on November 8, 2019 to request recommendation on projects which include road diets, as a final recommendation has not been received, these will be included as part of the project list on this amendment, unless otherwise directed. The projects previously mentioned are:

**E1.-**R307D (0924-06-562) Central Business District Phase 4 (CBD 4). Road diets will be detail coded at several locations where lanes will be removed to accommodate for bicycle facilities and the project is proposed to move from 2020 to 2030 network.

**E2.-**M089A (0924-06-570) Downtown Bicycle Improvements Phase I. Road diets will be detail coded at several locations where lanes will be removed to accommodate for bicycle facilities.

**E3.-**E303X (0924-06-571) Stanton Two-Way Cycle Track Roadway Improvements. Road diets will be detail coded at several locations where lanes will be removed to accommodate for bicycle facilities.

### **F) Model updated**

Technical Memorandum will be provided as Appendix in the Transportation Conformity Report.

**2.Planning Detail (§93.110)**

Table 2: Metropolitan Transportation Plan/Transportation Improvement Program

Plan or Programs	Years Covered
Amended Destino 2045 Metropolitan Transportation Plan	2019-2045
Destino 2021-2024 Transportation Improvement Program	2021-2024

Table 3: State Implementation Plan

SIP Element	Description
Title of Applicable SIP(s)	<ol style="list-style-type: none"> <li data-bbox="743 684 1313 884">1. Revisions to the State Implementation Plan for Inhalable Particulate Matter (PM10):1991 PM10 SIP for Moderate Area- El Paso-PM10 SIP. The EPA Approved the SIP on January 18, 1994 (Effective on February 17, 1994).</li> <li data-bbox="743 919 1313 1119">2. Revisions to the State Implementation Plan (SIP) for the Control of Carbon Monoxide Air Pollution: El Paso Revised Maintenance Plan for Carbon Monoxide. The EPA approved the SIP on August 4, 2008 (Effective on October 3, 2008).</li> <li data-bbox="743 1155 1313 1383">3. 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).</li> <li data-bbox="743 1419 1313 1518">4. Revision to the New Mexico PM10 State Implementation Plan for Anthony, New Mexico – Nov. 8, 1991.</li> <li data-bbox="743 1554 1313 1688">5. Ozone Maintenance Plan for the Sunland Park, New Mexico Nonattainment Area. (Effective on July 15, 2011).</li> <li data-bbox="743 1724 1313 1787">6. Revision to the New Mexico State Implementation Plan for Ozone (1997).</li> </ol>

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Motor Vehicle Emissions Budgets	<p><u>PM<sub>10</sub> SIP:</u> PM<sub>10</sub> - 12.05 TPD (1994)</p> <p><u>CO SIP:</u> CO – 29.66 TPD (2020) This will use only for the 2020 analysis year.</p> <p>Doña Ana County conformity test will be a no-greater-than-baseline year as appropriate for marginal ozone nonattainment area.</p>
Transportation Control Measures	None
Other	<p>Doña Ana County, New Mexico Natural Events Action Plan Reevaluation 2005</p> <p>The El Paso County Area Natural Events Action Plan (NEAP) Project Number 2006-040-0TH-NR. Adopted on February 21, 2007.</p> <p>Doña Ana County Erosion Control Regulations Ordinance No. 194-2000, Effective January 19, 2001.</p> <p>2015 Ozone NAAQS Designation Recommendation Report, 2016</p> <p>This is for information purposes only, there is no SIP in New Mexico, so a qualitative analysis is recommended.</p>

Table 4: Conformity Analysis Years

Requirement	Year
Conformity Base Year Used to Validate the TDM	2012
Conformity Baseline Year for the Baseline Interim Ozone Test	2017 (the required baseline year for the baseline interim test for the Doña Ana ozone nonattainment area under the 2015 Ozone NAAQS)
Attainment Year	N/A
Last Year of Maintenance Plan Last Year of Limited Maintenance Plan	CO-2020 CO-2028
Motor Vehicle Emissions Budget Years	CO – 2020 (SIP maintenance horizon year) This will used only for the 2020 analysis year.

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First Analysis Year <sup>1</sup>	2020
Intermediate Analysis Year(s) <sup>2</sup>	2030 and 2040
Last Year of Transportation Plan (MTP/RTP)	2045
Interpolation Years	N/A
Other	N/A

Table 5: Demographics Used in Conformity Analysis

Data Element	Detail and Source of Data
Population	The demographics from the Destino 2045 TDM have not been changed for this Amendment.
Employment	The demographics from the Destino 2045 TDM have not been changed for this Amendment.
Socio-economic	The demographics from the Destino 2045 TDM have not been changed for this Amendment.
Other	The demographics from the Destino 2045 TDM have not been changed for this Amendment.

**Reference:** El Paso 2045 Destino TDM. (Prepared by Cambridge Systematics, Inc. with AECOM Transportation, Inc. and ETC institute; Nov 15, 2016; pgs.3-1 to 3-24.)

## 2. Activity Detail

- Land-Use Model Used

Land use projections for the Destino 2045 MTP are based on the City of El Paso's studies and/or plans, recent developments/annexations as well as other studies and/or plans from other municipalities. Municipality zoning ordinances and County regulations are also considered.

Table 6: Travel Demand Model

Model Factor	Detail and Methodology
Model Validation Year	2012
Software	TransCAD
Mode Split/Mode Choice	Multinomial logit model

<sup>1</sup> 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 40 *Code of Federal Regulations* §93.119(g)(1), the first analysis year must be a year no more than five years beyond the year in which the conformity determination is being made.

<sup>2</sup> Per *Code of Federal Regulations* §93.106(a)(1)(i) and 40 CFR 93.119(g)(1), Analysis years cannot be more than 10 years apart.

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Vehicle Miles Travel (VMT) Adjustments (HPMS FACTOR)	0.964066834 <sup>1</sup>
Seasonal Correction Factor	<u>2017,2020,2030, 2040 &amp; 2045 TDM (ANSWT) Seasonal Summer Weekday Factor:</u> 0.96030  <u>2017,2020,2030, 2040 &amp; 2045 TDM (ANSWT) Seasonal Winter Weekday Factor:</u> 0.99055
Hourly Distribution Factors	Regionally specific hourly VMT distributions 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

<sup>1</sup>The HPMS Factor is calculated using TDM VMT excluding New Mexico VMT.

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Table 7: Seasonal Weekday Hourly VMT Distributions

Hour	Summer Factor	Hour	Winter Factor
Sum_Hr01	0.010597	Win_Hr01	0.009094
Sum_Hr02	0.006866	Win_Hr02	0.006144
Sum_Hr03	0.005479	Win_Hr03	0.005004
Sum_Hr04	0.005063	Win_Hr04	0.004685
Sum_Hr05	0.007203	Win_Hr05	0.006649
Sum_Hr06	0.017748	Win_Hr06	0.015805
Sum_Hr07	0.036495	Win_Hr07	0.036753
Sum_Hr08	0.062671	Win_Hr08	0.066676
Sum_Hr09	0.066374	Win_Hr09	0.068141
Sum_Hr10	0.05721	Win_Hr10	0.057149
Sum_Hr11	0.053052	Win_Hr11	0.053629
Sum_Hr12	0.055426	Win_Hr12	0.056343
Sum_Hr13	0.058595	Win_Hr13	0.059402
Sum_Hr14	0.059748	Win_Hr14	0.060959
Sum_Hr15	0.061757	Win_Hr15	0.063428
Sum_Hr16	0.066345	Win_Hr16	0.070123
Sum_Hr17	0.071152	Win_Hr17	0.074285
Sum_Hr18	0.073687	Win_Hr18	0.074387
Sum_Hr19	0.062303	Win_Hr19	0.061951
Sum_Hr20	0.047317	Win_Hr20	0.045767
Sum_Hr21	0.037687	Win_Hr21	0.034912
Sum_Hr22	0.0323	Win_Hr22	0.02952
Sum_Hr23	0.02612	Win_Hr23	0.023014
Sum_Hr24	0.018802	Win_Hr24	0.01618

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

**3. Emissions Detail (MOVES Emission Factor Model Information)**

- Development of Emission Factors:

Emission Model Version:	MOVES2014a
MOVES Run Years:	2017,2020,2030,2040,2045
Time Periods:	<ol style="list-style-type: none"> <li>1) Summer: June through August weekday (average Monday through Friday).</li> <li>2) Winter: December through February weekday (average Monday through Friday).</li> </ol>
Pollutants Reported:	<ol style="list-style-type: none"> <li>1) Summer –PM10, VOC and NOx</li> <li>2) Winter – CO (only 2020) and PM10</li> </ol>
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:	<p>Using latest available vehicle classification counts (2005-2014) and associated year-end registration data (2013), 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.</p>
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:	Mid-year registration data by analysis year will be used (for age distributions) except latest available (2014) will be used for future years.



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- MOVES2014a inputs:

Table 9: MOVES2014a Modeled Pollutants

Command	Function/Description	Input Parameter Source/Value
<b>Pollutant</b>	Defines the basic set of pollutants to report.	Summer: Primary PM <sub>10</sub> – Total Exhaust, PM <sub>10</sub> Brakewear, PM <sub>10</sub> Tirewear, VOC and NOx.  Winter: CO (only 2020), Primary PM <sub>10</sub> – Total Exhaust, PM <sub>10</sub> Brakewear, PM <sub>10</sub> Tirewear.

Table 10: MOVES2014a External Conditions

Command	Function/Description	Input Parameter Values	Description
<b>MOVES Model Version</b>	Identifies the model version to be utilized for the analysis.	MOVES2014a	MOVES2014a was released December 2015, and updated November 2016. MOVES2014a is the model to be utilized for the analysis.
<b>Calendar Year</b>	Identifies calendar year for which emissions factors are to be calculated. (Required to run model).	Baseline year for the baseline interim test (2017); applicable first analysis year (2020); and plan forecast years (2030, 2040, and 2045).	Attainment demonstration year and plan forecast years.
<b>Evaluation Month</b>	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.

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Table 11: MOVES2014a Input Parameters and Source

Input Parameter Name	Description	Source
<b>Source Type Population</b>	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) mid-year vehicle registration data (2014) and VMT mix, and in the case of future years, population scaling factors.
<b>Source Type Age Distribution</b>	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 all vehicle types for each analysis year.	Age distributions developed using TxDMV analysis year-specific mid-year vehicle registration data were aggregated at the county level for all vehicle classes except the single-unit long-haul and combination long-haul source-types, which are statewide level. All source type age distributions were estimated using the TxDMV data except for refuse trucks, motor homes, and buses which were MOVES defaults. TxDMV latest available [2014] for all future analysis years.

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<b>Vehicle Type VMT</b>	County specific VMT is distributed to 6 HPMS Vehicle types	MOVES defaults for rates runs. MOVES. Local activity estimates are applied in emissions calculations external to MOVES.
<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. 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.
<b>Road Type Distribution (VMT Fractions)</b>	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.
<b>Ramp Fraction</b>	Input county specific fraction of ramp driving time on rural and urban	Set to zero.
<b>Fuel Supply</b>	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 conventional diesel formulation. See Table 12.b.
<b>Meteorology</b>	County Specific data on temperature and humidity	For Ozone and PM10 (all analysis years) average June-July-August (summer) and average December-January-February (winter), hourly temperature and hourly relative humidity inputs for El Paso County (produced by TCEQ for inventory development using 2017 weather station data)...  For CO (analysis year 2020) 1990 meteorology data will be used.  See Tables 13 a, b.

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<p><b>Fuel Formulation</b></p>	<p>Input county specific fuel properties in the MOVES database.</p>	<p>See Table 12 a. Fuel formulations were based on El Paso fuel survey data and MOVES defaults for particular parameters.</p>
<p><b>I/M Coverage</b></p>	<p>Input I/M coverage record for each combination of pollutants, process, county, fuel type, regulatory class and model year are specified using</p>	<p>See Table 14.</p>
<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>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 mid-year registration data, for each analysis year, aggregated to the statewide level. The diesel fractions were based on TxDMV data. MOVES defaults were used for the other MOVES source types.</p>

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Table 12.a: MOVES2014a Fuel Supply

Fuel Formulation ID	Market Share	Market Share CV <sup>1</sup>
ID for Gasoline(see Table 12.b )	1	0
ID for Diesel (see Table 12.b)	1	0

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

Table 12.b: MOVES2014a Fuel Properties<sup>1</sup>

Fuel Type	Gasoline				Diesel	
	Summer		Winter		Summer and Winter	
Year	2017	2020+	2017	2020+	2017	2020+
Fuel Formulation ID	17703	18703	17101	18101	30637	30011
Fuel Subtype ID	12	12	12	12	20	20
RVP	6.94	7.00	11.36	11.36	0	0
Sulfur Level	19.56	10.00	19.39	10.00	6.37	11.00
ETOH Volume	9.60	9.60	10.00	10.00	0	0
MTBE Volume	0	0	0	0	0	0
ETBE Volume	0	0	0	0	0	0
TAME Volume	0	0	0	0	0	0
Aromatic Content	26.67	26.67	21.36	21.36	0	0
Olefin Content	5.50	5.50	6.66	6.66	0	0
Benzene Content	1.30	0.63	0.63	0.63	0	0
e200	48.74	48.74	53.72	53.72	0	0
e300	87.84	87.84	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	/N	/N
Cetane Index	/N	/N	/N	/N	/N	/N
PAH Content	/N	/N	/N	/N	/N	/N
T50	206.12	206.12	192.22	192.22	0	0
T90	306.72	306.72	309.50	309.50	0	0

<sup>1</sup>TTI (June 2018) based the CG formulations on TCEQ's summer 2017 (latest available) fuel survey samples from El Paso County. The 2017 CG properties are actual averages (fuel grade averages weighted by relative sales volumes). The Future Years CG properties are latest available 2017 actual values except with RVP, average sulfur level, and average benzene content set to the "expected" values (MOVES defaults, consistent with the pertinent regulatory standards). The 2017 diesel sulfur level is the statewide average from TCEQ's 2017 survey. Future Years diesel sulfur was conservatively set to the maximum level of the last three of TCEQ's statewide diesel surveys (2011, 2014, 2017), within the federal ultralow sulfur diesel 15 ppm average annual standard. Fuel subtype IDs 12 and 20 are 10% ethanol-blend gasoline and conventional diesel, respectively.

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Table 13a: MOVES2014a Hourly Meteorological Data 2017 (used for PM and Ozone inventories)

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 data from weather stations within El Paso County—June through August 2017 (provided by TCEQ). Temperatures in °F and percent relative humidity. .These inputs apply to Ozone precursors (VOC, NOx) and PM10 pollutants for all analyses.

Table 13b: MOVES2014a Hourly Meteorological Data 1990 (used for 2020 CO inventory)

Hours	Winter Temperature	Winter Relative Humidity
12:00 a.m.	34.3	50.1
1:00 a.m.	32.7	53.6
2:00 a.m.	31.0	55.0
3:00 a.m.	29.9	57.4
4:00 a.m.	28.6	58.7
5:00 a.m.	27.9	60.0
6:00 a.m.	26.0	63.9
7:00 a.m.	27.7	62.0
8:00 a.m.	34.5	51.9
9:00 a.m.	42.9	40.7

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<b>10:00 a.m.</b>	49.0	33.8
<b>11:00 a.m.</b>	54.6	28.1
<b>12:00 p.m.</b>	58.0	25.3
<b>1:00 p.m.</b>	59.9	23.2
<b>2:00 p.m.</b>	62.0	21.3
<b>3:00 p.m.</b>	63.0	20.4
<b>4:00 p.m.</b>	62.5	21.2
<b>5:00 p.m.</b>	59.1	23.8
<b>6:00 p.m.</b>	52.8	30.5
<b>7:00 p.m.</b>	50.0	33.1
<b>8:00 p.m.</b>	44.2	41.9
<b>9:00 p.m.</b>	40.8	44.3
<b>10:00 p.m.</b>	39.1	46.4
<b>11:00 p.m.</b>	37.3	50.5

**Note:** The average hourly inputs based on 1990 meteorology data for El Paso County apply only to CO for the 2020 analysis year (winter season).

Table 14. MOVES2014a I/M Descriptive Inputs for Subject Counties

<b>YearID</b>	<b>Begin Model Year<sup>1</sup></b>	<b>End Model Year<sup>1</sup></b>	<b>Test Standards ID (Description)</b>	<b>Source Use Type (I/M Compliance)<sup>2</sup></b>	<b>Other<sup>3</sup></b>	
<b>2007 – 2019</b>	X	1995	12 (2500 RMP/Idle)	Passenger Car (93.12 %), Passenger Truck (91.26 %) Light Commercial Truck (85.67 %)	See Note 3	
	X	1995	41 (Evp Cap)			
		1996	Y			51 (Exh OBD)
		1996	Y			45 (Evp Cap, OBD)
<b>2020 - 2050</b>	X	Y	51 (Exh OBD)			
	X	X	45 (Evp Cap, OBD)			

<sup>1</sup>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.

<sup>2</sup> I/M compliance factor estimates were calculated per MOVES Technical Guidance (EPA, November 2015) and Texas modeling protocol (using compliance and waiver rates of 96 % and 3 %, respectively).

<sup>3</sup> 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: MOVES2014a Emissions Factor Post-Processing to Be Performed by County and Year

<b>Strategy and Post-Processing Result</b>	<b>Baseline Year (ozone inventory)</b>	<b>Analysis Run Year</b>	<b>Counties</b>
<b>Texas Low Emission Diesel Fuel (TxLED)</b>	2017	2020,2030,2040 & 2045	N/A

Transportation Conformity Pre-Analysis Consensus Plan (§93.105)

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.

ELP 2020 Pre-Analysis Plan (PAP)				
TCEQ Comments as sent on 02/05/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
1.	General	This conformity references updating the 2019-2021 TIP, but isn't the conforming TIP for 2019-2022? This conformity also indicates it would cover a new 2021-2024 TIP, but can't there only be one approved TIP at a time? Please provide a brief explanation in the PAP to address these questions.	N/A	Document revised. For this conformity determination only the 2021-2024 TIP will be included. The El Paso MPO is developing the 2021-2024 TIP for submittal to the 2021-2024 STIP, as required by all MPOs in Texas. The 2021-2024 TIP will include projects from the Amended Destino 2045 MTP. Capacity projects changes in the Amended Destino 2045 MTP that are included 2021-2024 TIP may be approved contingent to the required conformity determination.
2.	General	TCEQ accepts the use of MOVES2014a for this conformity since MOVES2014b updated the non-road components of the model and didn't impact the on-road components.	N/A	EPMPO agrees.
3.	General	Suggest editing to make font characteristics and formatting consistent throughout the PAP. Right now, there are tables that use two or three different font families/sizes without a clear purpose.	N/A	Document revised.
4.	Pg. 4, Table 3, MVEB Row	I suggested two options for the PM10 MVEB last conformity, but MVEBs calculated in the SIP for TCEQ go out two decimal places, and the MVEB in the 1991 SIP revision is 12.05 (Page 39). This document should reflect 12.05 instead of 12.1 or 12.10. I apologize for the mis-information last time, and I'm glad that the regional emissions were well below the MVEB so that this wasn't an issue.	Pg. 4, Table 3, MVEB Row	Document revised, the MVEB for PM10 will be 12.05.

ELP 2020 Pre-Analysis Plan (PAP)				
TCEQ Comments as sent on 02/05/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
5.	Pg. 5, Table 4, Base Year Row	Consider making two rows out of the information currently in R1: R1/C1: Base Year Used to Validate the TDM; R1/C2: 2012 R2/C1: Baseline Year for the Baseline Interim Ozone Test; R2/C2: 2017 (the required baseline year for the baseline interim test for the Doña Ana ozone nonattainment area under the 2015 Ozone NAAQS)	Pg. 4, Table 4, Base Year Row	Document revised.
6.	Pg. 5, Table 4, Attainment Year Row	Since there are no applicable attainment year conformity runs, consider revising R3/C2 to state something akin to the following: PM10 – 1994 (not a required analysis year, §93.106(a)(1)(iii)) CO – Not applicable for maintenance areas (§93.109(e) and §93.118(b)) Ozone – 2020 (not a required analysis year, 40 CFR 93.119(g)(1))	Pg. 4, Table 4, Attainment Year Row	Document revised. The table was updated N/A at R3/C2 as any pollutant(CO, PM10 and Ozone) on analysis required a conformity attainment year and under Motor Vehicle Emissions Budget Years R5/C2 PM10 was removed as only CO requires 2020 as part of SIP maintenance horizon year.
7.	Pg. 6, Table 4, Footnote 1	To account for requirements for new ozone areas, consider revising to the following:  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.  Also, per 40 CFR 93.119(g)(1), the first analysis year must be a year no more than five years beyond the year in which the conformity determination is being made.	Pg. 5, Table 4, Footnote 1	Document revised.

ELP 2020 Pre-Analysis Plan (PAP)				
TCEQ Comments as sent on 02/05/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
8.	Pg. 6, Table 4, Footnote 2	To account for requirements for new ozone areas, consider revising to the following:  Per Code of Federal Regulations §93.106(a)(1)(i) and 40 CFR 93.119(g)(1), analysis years cannot be more than 10 years apart.	Pg. 5, Table 4, Footnote 2	Document revised.
9.	Pg. 10, No. 3, Analysis Run Years	Suggest revising to 'MOVES Run Years' since 2017 is the baseline year and not an analysis year for the MTP.	Pg. 8, No. 3, Analysis Run Years	Document revised. Analysis Year Runs was change to ' MOVES Run Years' as advise.
10	Pg. 10, No. 3, Time Periods	Is the time period for winter also a weekday average for Monday through Friday? If so, suggest revising to make that clear.	Pg. 8, No. 3, Time Periods	Document revised.
11.	Pg. 10, No. 3, Vehicle Registration	What does the explanation mean? What year(s) will not rely on 2014 registration data? Based on information in Table 11, it seems like maybe 2012, but that's not a conformity analysis year, right?	Pg. 8, No. 3, Vehicle Registration	This is correct. 2012 is not a conformity analysis year. It is a conformity base year. The document was revised and was deleted the references to 2012 as an analysis year.
12.	Pg. 11, Table 9	For all references to 'MOVES2014' in the PAP, please specify 'MOVES2014a' instead.	Pg. 9, Table 9	Document revised.
13.	Pg. 11, Table 10, Calendar Year Row	Since there isn't an applicable attainment demonstration year, consider revising R2/C3 to reflect the following:  Baseline year for the baseline interim test (2017); applicable first analysis year (2020); and plan forecast years (2030, 2040, and 2045)	Pg. 9, Table 10, Calendar Year Row	Document revised.
14.	Pg. 12, Table 11, Source Type Age Distribution Row	The last sentence in R3 indicates that 2012 is a MOVES run year. Is that true?	Pg. 10, Table 11, Source Type Age Distribution Row	2012 is not an analysis year. The document was revised. The analysis year 2012 was deleted.

ELP 2020 Pre-Analysis Plan (PAP)				
TCEQ Comments as sent on 02/05/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
15.	Pg. 14, Table 11, Meteorology Row	Is the description provided in R3 accurate?	Pg. 11, Table 11, Meteorology Row	<p>During the consultative partners' conference call on February 20, 2020 was recommend that used 2017 meteorology data for Ozone and PM10 analysis and 1990 meteorology data for CO analysis (2020).</p> <p>The description was updated as follow:            "For Ozone and PM10 (all analysis years) average June-July-August (summer) and average December-January-February (winter), hourly temperature and hourly relative humidity inputs for El Paso County (produced by TCEQ for inventory development using 2017 weather station data).</p> <p>For CO (analysis year 2020) 1990 meteorology data will be used.</p> <p>See Tables 13 a, b."</p>
16.	Pg. 15, Table 12b, Footnote	It looks like Footnote 2 merged with Footnote 1	Pg. 13, Table 12b, Footnote	Document revised. The footnotes on table 12a) and 12.b) were updated.

ELP 2020 Pre-Analysis Plan (PAP)				
TCEQ Comments as sent on 02/05/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
17.	Pg. 16, Table 13	<p>The summer T and RH data are consistent with the 2015 Ozone Conformity Report for NM, and both summer and winter are consistent with the AERR. They are not consistent with the data included in the previous conformity of the 2045 MTP for PM10 and CO. Do the data included in Table 13 satisfy §93.122(a)(6)?</p> <p><i>§93.122(a)(6) The ambient temperatures used for the regional emissions analysis shall be consistent with those used to establish the emissions budget in the applicable implementation plan. All other factors, for example the fraction of travel in a hot stabilized engine mode, must be consistent with the applicable implementation plan, unless modified after interagency consultation according to §93.105(c)(1)(i) to incorporate additional or more geographically specific information or represent a logically estimated trend in such factors beyond the period considered in the applicable implementation plan.</i></p>	Pg. 12, Table 13	<p>TTI is aware and respects the fact that adequacy of the proposed approach is a Consultation Partner / regulatory agency decision.</p> <p>The following information may be useful for this decision:</p> <ul style="list-style-type: none"> <li>• The El Paso Carbon Monoxide (CO) Limited Maintenance Plan (LMP) State Implementation Plan (SIP) revision (FR October 10, 2017) does not require a regional emissions analysis (or use of an MVEB test) for determining conformity.</li> <li>• EPMPO's most recent transportation conformity report for the CO LMP area (EPMPO, August 27, 2018) did apply a CO MVEB test (using 1995 meteorological data) for the 2020 analysis year (the last year of the maintenance plan).</li> <li>• The meteorological information TTI have provided thus far (i.e., that relates to comment 4) is relevant to an analysis that uses 2017 meteorological data inputs for the entire inventory.</li> </ul> <p>TTI can provided you with information during the consultative partner process, and/or when a final decision has been made on the approach/methods.</p> <p>During the consultative partners' conference call on February 20, 2020 was recommend that used 2017 meteorology data for Ozone and PM10 analysis and 1990 meteorology data for CO analysis (2020). See Tables 13a. and 13b.</p>

ELP 2020 Pre-Analysis Plan (PAP)				
FHWA-TX-PPD Comments as sent on 02/10/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
1.	General	FHWA-TX requests a Response to Comments matrix. That provides the revisions made between the first and second drafts of the Pre-Analysis Consensus Plans.	N/A	EPMPO agrees with the matrix that FHWA and EPMPO worked on together.
2.	General	FHWA-TX concurs with TCEQs seventeen comments above.	N/A	
3.	General	Please confirm that all 'revisions incl. clean-up' will be documented in a Technical Memo as mentioned in the Feb 7 <sup>th</sup> call.	N/A	Confirmed, EPMPO will provide a technical memorandum with the projects updates and clean-up ( model updates).
4.	pg. 1 Table 1.	From: 2019-2021 TIP To: 2019-2022 TIP	pg. 1 Table 1.	Document revised.
5.	p. 1 (2x)	From: 2019-2021 TIP To: 2019-2022 TIP	p. 1	Document revised.
6.	pg. 1	From: the current Destino . . . To: Destino . . .	pg. 1	Document revised.

ELP 2020 Pre-Analysis Plan (PAP)				
FHWA-TX-PPD Comments as sent on 02/10/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
7.	pg. 1 (2x)	From: new 2021 . . . To: 2021 . . .	pg. 1	Document revised.
8.	pg. 2	Please confirm that <b>1061X-CAP (2121-02-903)</b> will be deleted from the 2030 to 2040 list as mentioned during the Feb 7 <sup>th</sup> call.	pg. 2	This project will remain in the 2030 network and not move to the 2040 network as per the last meeting with TXDOT.
9.	pg. 2	Please confirm EPMPO to TxDOT expectations regarding <b>F057X-CAP (2552-02-028)</b> .	pg. 2	This project could not make its scheduled letting due to utility issues that belong to Fort Bliss. The issues with the utility (gas pipeline) should be worked out in time for a letting in the FY 2021. This is why the project is moving from the 2020 network to the 2030 network in the amendment to the Destino 2045 MTP.  The Destino 2045 MTP and the UTP project description match. The project description in the Pre-analysis Consensus Plan will be updated to match these documents.
10.	pg. 2	Please confirm that CoEP/EPMPO and FHWA staff are reconciling understanding and treatment of 'road diets'.	pg. 2	EPMPO is coordinating with CoEP to address FHWA comments in the November 2019 STIP revision. "For the road diet projects we are looking for crash information and the methodology used to identify road diets by the city and any other agencies."
11.	pg. 3 Table 2.	From: 2019-2021 TIP To: 2019-2022 TIP	pg. 3 Table 2.	Document revised.
12.	pg. 4 Table 3. Title of Applicable SIP(s)	Is 2. applicable given 3.? If yes, what part?	pg. 3 Table 3. Title of Applicable SIP(s)	The 2 (Revisions to the State Implementation Plan (SIP) for the Control of Carbon Monoxide Air Pollution: El Paso Revised Maintenance Plan for Carbon Monoxide) is applicable, because 2020 is an analysis year in this PAP and the horizon year of the CO maintenance plan as shown on table 2-7 on page 20. <a href="https://www.tceq.texas.gov/assets/public/implementation/air/sip/elp/El_Paso_MP_SIP_adoption_package.pdf">https://www.tceq.texas.gov/assets/public/implementation/air/sip/elp/El_Paso_MP_SIP_adoption_package.pdf</a>



ELP 2020 Pre-Analysis Plan (PAP)				
FHWA-TX-PPD Comments as sent on 02/10/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
13.	pg. 4 Table 3. Title of Applicable SIP(s)	Is 6. applicable given 5.? If yes, what part?	pg. 3 Table 3. Title of Applicable SIP(s)	We agree, document was revised and Reference 6 was removed.
14.	pg. 4 Table 3. Title of Applicable SIP(s)	Is 7. applicable given 5.? If yes, what part?	pg. 3 Table 3. Title of Applicable SIP(s)	Reference 7 (now 6) was developed as requirement for the nonattainment designation on July 12,1995 and the intent to include it was to show that in any of the two reference SIPs (5 &7(now 6)) presented does not provide a MVEB.
15.	pg. 7 Table 5. Population	Suggest update language to Destino 2045 to Destino 2045, as Amended (versus Horizon).	pg. 5 Table 5. Population	Document revised and changed it to “The demographics from the Destino 2045 TDM have not been changed for this Amendment.”
16.	pg. 7 Table 5. Employment	Suggest update language to Destino 2045 to Destino 2045, as Amended (versus Horizon).	pg. 5 Table 5. Employment	Document revised and changed it to “The demographics from the Destino 2045 TDM have not been changed for this Amendment.”
17.	pg. 7 Table 5. Socio-economic	Suggest update language to Destino 2045 to Destino 2045, as Amended (versus Horizon).	pg. 5 Table 5. Socio-economic	Document revised and changed it to “The demographics from the Destino 2045 TDM have not been changed for this Amendment.”
18.	pg. 8 Table 5. Other	Suggest update language to Destino 2045 to Destino 2045, as Amended (versus Horizon).	pg. 5 Table 5. Other	Document revised and changed it to “The demographics from the Destino 2045 TDM have not been changed for this Amendment.”

ELP 2020 Pre-Analysis Plan (PAP)				
FHWA-TX-PPD Comments as sent on 02/10/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
19.	pg. 8 Table 6. VMT Adjustments & Seasonal Correction Factor Footnote 1	<p>Please explain why NM VMT is excluded?</p> <p>Is this consistent with 2045 Destino action?</p> <p>If yes, would this not also apply to the Seasonal Correction Factor?</p>	pg. 6 Table 6. VMT Adjustments & Seasonal Correction Factor Footnote 1	<p><b>HPMS Factor</b></p> <ul style="list-style-type: none"> <li>•The HPMS factor provided (0.9640668340) reflects the best practice given current data and methodology. It represents HPMS VMT (El Paso County) / TDM VMT (El Paso County links and TAZ's). The basic procedure is consistent with the Destino 2045 action, however, certain assumptions have been refined.</li> <li>•Ideally, a separate HPMS factor would be developed for the NM area, however sub-county HPMS data is not available for NM. Therefore, it is currently not possible to develop a separate HPMS factor for the small portion of NM within the MPO's travel model / planning area.</li> <li>•The previous HPMS factor used a slightly different calculation and assumption: <ul style="list-style-type: none"> <li>oTotal El Paso (County) HPMS VMT / Total TDM VMT (El Paso County and NM).</li> <li>oThe assumption was that VMT in NM is small relative to El Paso County VMT, and should be included in the calculation.</li> </ul> </li> <li>•The new factor assumes that the NM portion of the TDM scales to HPMS VMT the same way as the El Paso portion of the TDM (i.e., the El Paso based HPMS factor is applicable).</li> <li>•The new best practice HPMS factor (0.9640668340) is conservative relative to the previous factor (0.925442459). This increase translates to a minor change (increase) in the VMT.</li> </ul> <p><b>Seasonal Correction Factor</b></p> <p>Similar arguments apply to the seasonal correction factor. This basis of this factor is a large and statistically robust sample of ATR data for El Paso County. Similar to the logic of applying the new best practice El Paso HPMS factor to NM, it is assumed that seasonal adjustment (and hourly time of day) factors derived from El Paso County ATR data are logically and statistically representative of the entire analysis area (El Paso and NM portions of the system). This approach and the underlying assumption are consistent with prior seasonal factor calculations, as well as with the new best practice HPMS factor approach outlined above.</p>

ELP 2020 Pre-Analysis Plan (PAP)				
FHWA-TX-PPD Comments as sent on 02/10/2020				
	Page/Location	Comment	Page/Location	EPMPO Response
20.	pg. 17 Table 15.	Given the col. heading, we suggest a distinction between 2017 and the rest of the years.	pg. 15 Table 15.	Document Revised.

ELP 2020 Pre-Analysis Plan (PAP)		
EPMPO updates		
	Page/Location	EPMPO update
1.	Pg. 1 & 2	<p>The description of the following projects was updated (<b>changes on red</b>):</p> <ul style="list-style-type: none"> <li>•P402X-05A (1046-03-004) widening <b>from 4 to 6 lanes</b> State Spur 601 from Airport Road to State Loop 375 (Purple Heart Highway).</li> <li>•F059X-CAP-1 (0924-06-591) Border Highway East (BHE), Phase 1 build 4 lanes divided highway including 2-lanes direct connectors at SL 375 (WB-WB and EB-EB direction coming in/out of BHE) <b>and connection to Pan American at Winn Road</b>, from SL 375 (Americas Avenue) to Old Hueco Tanks Extension.</li> <li>•F057X-CAP (2552-02-028) Loop 375 (Purple Heart) widening <b>from 4 to 6 lanes on mainlanes and construction of 2 lanes frontage roads in each direction</b> from Spur 601 to US 62/180 (Montana Ave).</li> <li>•A527X-CAP-2 (0924-06-595) Nuevo Hueco Tanks (<b>street name updated from "Old" Hueco Tanks to "Nuevo" Hueco Tanks</b>) Extension-Phase II Build 4 lane roadway from SH 20 - Alameda Avenue to Border Highway East (BHE).</li> </ul>
2.	Pg. 2 Model updated	The project detail coding description was updated as “Technical Memorandum will be provided as Appendix in the Transportation Conformity Report.”
3.	Pg. 1 & 2	The bullets were replaced for the numbering that will be follow under the Technical memorandum.( A), A1, A2, ...)