Standard Operating Procedure
Preparing Air Quality Statements

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Review Authority: Air Specialist, Tim Wood **Version: 2**

Purpose of This SOP

The purpose of this standard operating procedure (SOP) is to explain how to prepare comprehensive project specific air quality statements for inclusion in the project file or environmental review document.

Subject Overview

This SOP affects projects that are developed by or for review by the Texas Department of Transportation (TxDOT) Environmental Affairs Division (ENV) for roadway/highway projects, including Federal Highway Administration (FHWA)/ Federal Transit Administration (FTA) projects. Certain air quality information needs to be documented in the project file and/or addressed in the air quality section of an environmental review document. The air quality elements that must be addressed for every project are: conformity including hotspot analyses; carbon monoxide (CO) traffic air quality analysis (TAQA); mobile source air toxics (MSAT); Congestion Management Process (CMP); and construction air emissions. However, the specific documentation for each element varies based on project specifics. This SOP is intended to assist project sponsors identify, customize, and document the specific language for any given project, resulting with a project-specific statement that address all the air quality elements.

Authorities

There is no specific authority or requirement to use this SOP, but there are multiple statutes that require the previously mentioned air quality elements to be addressed for transportation projects, including: the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and 23 USC. This SOP is intended to help document preparers satisfy those requirements by properly documenting compliance with each, as applicable.

Toolkit

If a conformity report, hot-spot analysis technical report, CO TAQA technical report, or quantitative MSAT technical report was prepared for the project; those reports are required to prepare the air quality statement. The information in the statements must be consistent with the reports.

Personnel

The audience for this SOP includes any TxDOT personnel, contractors, and consultants responsible for maintaining a legally sufficient project file and/or preparing environmental review documents for transportation projects.

Hyperlinks in the Procedures

In the procedure, there are hyperlinks on references to numbered statements that are routed to Appendix A, and following these hyperlinks routes users to the appendix. Therefore, before selecting one of these hyperlinks, note the step the hyperlink is set on to be able to easily return to that step.

Procedure

1. Determine if this project has a federal lead[1] other than FHWA/ FTA. If so, consult with the ENV air specialist about appropriate air quality disclosure language, include it in the air quality section of the applicable environmental review document[2], and proceed to Step 9. If not, continue to Step 2.
2. Identify the appropriate finding statements for conformity by completing Steps 2.1 through 2.9 as directed, and place those statements in the conformity section of the environmental review document[3].
   - 2.1 Determine if the project is located in an attainment or unclassifiable area. If so, include Statement 1 from Appendix A and proceed to Step 3. If not, continue to Step 2.2.
   - 2.2 Determine if this project is an FHWA/FTA project. If so, proceed to Step 2.4. If not, continue to Step 2.3.
   - 2.3 Determine if the project is considered regionally significant. If so, continue to Step 2.4. If not, include Statement 2 from Appendix A, and customize the statement with project specifics; proceed to Step 3.
   - 2.4 Determine if the project is located in a nonattainment or maintenance area (NA/MA) for ozone, CO, particulate matter (PM), or nitrogen dioxide (NO_2). If so, include Statement 3 from Appendix A, and customize it to address the project specifics; continue to Step 2.5. If not, proceed to Step 2.8.
   - 2.5 Determine if the project is exempt from conformity under 40 CFR 93.126 or 40 CFR 93.128. If so, include Statement 4 from Appendix A, and customize the statement with project specifics; proceed to Step 2.8. If not, continue to Step 2.6.
   - 2.6 Determine if the project is exempt from the regional conformity analysis under 40 CFR 93.127. If so, include Statement 5 from Appendix A, and customize the statement with project specifics; proceed to Step 2.8. If not, continue to Step 2.7.
   - 2.7 Determine if the project is consistent[4] with the area's current Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP). If so, include Statement 6 from Appendix A. If not, include Statement 7 from Appendix A. Customize the appropriate statement with project specifics, and continue to Step 2.8.
   - 2.8 Determine if the project is located within the Collin county nonattainment area for lead. If so, include Statement 8 from Appendix A and continue to Step 2.9. If not, continue to Step 2.9.
   - 2.9 Determine if the project is located with one of the nonattainment areas for sulfur dioxide (SO2). If so, include Statement 24 from Appendix A and continue to Step 3. If not, continue to Step 3.

[1] Federal leads may include, but are not limited to, the Surface Transportation Board or the Federal Railroad Administration.

[2] When this SOP refers to including the statement in the environmental review document and the project does not require one, prepare the statement as a standalone document, and save it in the project file.

[3] When this SOP refers to including the statement in the environmental review document and the project does not require one, prepare the statement as a standalone document, and save it in the project file.

[4] The project's conformity report will be helpful in making this consistency determination.

3. Identify the appropriate finding statement for a hot-spot analysis by completing Steps 3.1 through 3.5 as directed, and place the statement in the hot-spot analysis section of the environmental review document.

   3.1 Determine if the project is within a nonattainment or maintenance area for CO or PM. If so, continue to Step 3.2. If not, include Statement 9 from Appendix A, and proceed to Step 4.

   3.2 Determine if the project is an FHWA/FTA project. If so, continue to Step 3.3. If not, include Statement 10 from Appendix A, and proceed to Step 4.

   3.3 Determine if the project is exempt from conformity under 40 CFR 93.126 or 40 CFR 93.128. If so, include Statement 11 from Appendix A, and customize the statement with project specifics; proceed to Step 4. If not, continue to Step 3.4.

   3.4 Identify whether the Consultation Partners determined[5] that this is a project of air quality concern. If so, continue to Step 3.5. If not, include Statement 12 from Appendix A, and customize the statement with project specifics; proceed to Step 4.

   3.5 Using the hot-spot analysis technical report determine whether the No Build Alternative was also analyzed. If so, include Statement 14 from Appendix A to summarize the analysis. If not, include Statement 13 from Appendix A to summarize the analysis. Customize the appropriate statement with project specifics, and continue to Step 4.

4. Identify the appropriate finding statement for the CO traffic air quality analysis (TAQA) by completing Steps 4.1 through 4.2 as directed, and place it in the CO TAQA section of the environmental review document[6].

   4.1 Determine if the project is adding capacity[7]. If so, continue to Step 4.2. If not, include Statement 15 from Appendix A, and proceed to Step 5.

   4.2 Determine if the project estimated time of completion (ETC) and design year annual average daily traffic (AADT)[8] is less than 140,000 vehicles per day[9]. If so, include Statement 16 from Appendix A, and customize the statement with project specifics. If not, use the information in the CO TAQA technical report to customize Statement 17 from Appendix A to summarize the results. Continue to Step 5.

[5] The project's conformity report or Consultation Partner meeting minutes will be helpful in identifying the Consultation Partner's decision for this project.

6 Note that if a CO hot-spot analysis is required for a project, then a CO TAQA would not be necessary since a hot- spot analysis would look at potential CO impacts in significantly more detail.

[7] Added capacity projects typically include but are not limited to: new location roadways, adding main lanes, adding through lanes (high occupancy vehicle lanes, managed lanes, tolled lanes, collector-distributor lanes and frontage roads). Adding auxiliary lanes > 1mi require a case-by-case decision, except that continuous center turn lanes are not added capacity.

[8] Please note that the traffic data either needs to come from the TxDOT TPP Division or otherwise be found to be reasonable by the TxDOT TPP Division

[9] The AADT shall be for the entire cross-section of the roadway, including main lanes and frontage roads.

5. Identify the appropriate finding statement for MSAT by completing Steps 5.1 through 5.3 as directed, and place it in the MSAT section of the environmental review document. Use bullets whenever it is necessary to list things that are not steps in the procedure.

   5.1 Identify whether the project meets any of the following criteria.

   - It is a Categorical Exclusion; or
   - It is NOT added capacity, not affecting an intermodal facility or port, and not involving a specific public concern regarding air quality; or
   - It is a project type identified in 40 CFR 93.126.

   If so, include Statement 18 from Appendix A, and customize the statement with project specific; proceed to Step 6. If not, continue to Step 5.2.

   5.2 Determine if an approved technical report already includes the current qualitative MSAT language. If so, summarize the analysis and continue to Step 5.3. If not, include Statement 19 from Appendix A, and customize the statement with project specifics according to Steps 5.2.1 through 5.2.3.

   5.1.1. Include, without change, the Background Section, including the graph of emissions. Continue to Step 5.2.2.

   5.1.2. In the Project-Specific MSAT Information Section of Statement 19, four examples of qualitative MSAT statements for various project types have been provided.

   - Widening Projects[10]
   - New Interchange Connecting an Existing Roadway with a New Roadway[11],
   - New Interchange Connecting New Roadways[12], and
   - Minor Improvements or Expansions to Intermodal Centers or Other Projects that Affect Truck Traffic[13].

   Include the option[14] that best represents the project and customize the statement to reflect the unique circumstances of the project, particularly those areas of the statement that are shaded. Continue to Step 5.2.3.

   5.1.3. Include without change, the Incomplete or Unavailable Information for Project Specific MSAT Health Impacts Analysis Section. Continue to Step 5.3.

[10] Widening projects are defined as those projects that are adding capacity to an existing roadway.

[11] This is oriented toward projects where a new roadway segment connects to an existing limited access highway. The purpose of the roadway is primarily to meet regional travel needs, e.g., by providing a more direct route between locations.

[12] This scenario is oriented toward interchange projects developed in response to or in anticipation of economic development, e.g., a new interchange to serve a new shopping/residential development.

[13] The description for these types of projects depends on the nature of the project. The key factor from an MSAT standpoint is the change in truck and rail activity and the resulting change in MSAT emissions patterns.

[14] Because each project is different, and some projects contain elements covered in more than one of these examples, the statements are a starting point only for the final project specific statement.

5.3 Identify whether a quantitative MSAT analysis was required for this project. If so, include a summary of the analysis results from the quantitative MSAT technical report; at a minimum the summary must include the following:

- A brief description of the analysis methodology and the emissions model used
- A table with total MSAT emissions for each priority MSAT and traffic volumes for each year analyzed for both the Build and the No Build scenario
- A bar chart showing the emission changes per MSAT for each year analyzed, and showing the vehicles-miles traveled (VMT) charted on a secondary axis
- A summary of the quantitative MSAT analysis results
- A conclusion statement for MSAT[15]

Continue to Step 6

6. Identify the appropriate finding statement for the CMP analysis by completing Steps 6.1 through 6.3 as directed, and place it in the CMP section of the environmental review document.

6.1 Determine if the project meets all the following criteria.

- Is a FHWA/FTA project
- Is in a nonattainment area of ozone or CO
- Is adding Single Occupancy Vehicle (SOV) capacity
- Is within a Transportation Management Area (TMA) (Appendix C)

6.2 If so, include and customize Statement 21 from Appendix A with project specifics and continue to Step 6.3. If not, include Statement 20 from Appendix A and proceed to Step 7.

6.3 Determine if the project is located within either the Dallas or Fort Worth Districts. If so, include Statement 22 from Appendix A. Regardless, continue to Step 7.

7. Include Statement 23 as the appropriate finding statement for construction emissions and place it in the construction emissions section of the environmental review document. Continue to Step 8.
8. Remove all grey highlighting and any remaining bits of the fields. Continue to Step 9.
9. Ensure that all acronyms are called out the first time they are used. In environmental review documents, include the acronyms and full names consistently with the rest of the document; refer to the Appendix A for acronyms' full names, Continue to Step 10.
10. Proofread the complete air quality statement, and ensure that no grey highlighting or fields remain.

The procedure is complete.

[15] This should be a combined conclusion for the both the qualitative and quantitative MSAT analyses

Appendix A: Air Quality Statements for Environmental Review Documents

Acronyms should be spelled out with the acronym added in parenthesis the first time it is used in the document. Fields in grey need to have project specific data inserted as directed.

1. The project is located in an area in attainment or unclassifiable for all national ambient air quality standards (NAAQS); therefore, the transportation conformity rules do not apply.
2. This project is located within an area that has been designated by EPA as a <insert area's classification level: (e.g., marginal, moderate, serious or severe)> <insert nonattainment or attainment-maintenance> area for <insert the applicable one of the following: the 2008 ozone NAAQS, CO, NO2, PM2.5, and/or PM10>; however, in accordance with 40 CFR 93.102(a)(2), the transportation conformity rules do not apply because the project has no federal funding, is not regionally significant, and requires no United States Department of Transportation decision.
3. This project is located within an area that has been designated by EPA as a <insert area's classification level: (e.g., marginal, moderate, serious or severe)> <insert nonattainment or attainment maintenance> area for <insert the applicable one of the following: the 2008 ozone NAAQS, CO, NO2, PM2.5, and/or PM10>; therefore, transportation conformity rules apply.
4. However, in accordance with federal guidelines in Section 93.126 and 93.128, of Title 40 CFR, the proposed project, <identify the type of exempt project>, is exempt from a conformity determination.
5. However, in accordance with federal guidelines in Section 93.127, of Title 40 CFR, the proposed project, <identify the type of exempt project>, is exempt from the project level conformity requirement to be included in the regional emissions analysis.
6. The proposed action is consistent with the <insert local MPO's name>'s financially constrained <insert MTP title and date identifier> and the <insert TIP date identifier> TIP, as amended, which were initially found to conform to the TCEQ State Implementation Plan (SIP) by FHWA and FTA on <insert date MTP conformity was determined> and <insert date TIP conformity was determined>, respectively. Copies of the MTP and TIP pages are included in Appendix <insert Appendix number or identifier>. All projects in the <insert name of MPO> TIP that are proposed for federal or state funds were initiated in a manner consistent with federal guidelines in Section 450, of Title 23 CFR and Section 613.200, Subpart B, of Title 49 CFR.
7. Both the MTP and the TIP were initially found to conform to the TCEQ State Implementation Plan (SIP) by FHWA and FTA on <insert date MTP conformity was determined> and <insert date TIP conformity was determined>, respectively; however, the proposed project is not consistent with this conformity determination, because <insert reason that the project is not consistent with the MTP/TIP>. TxDOT will not take final action on this environmental document until the proposed project is consistent with a currently conforming MTP and TIP.
8. This project is located within the portion of Collin County that has been designated by EPA as a nonattainment area for the 2008 Lead National Ambient Air Quality Standard (NAAQS), effective December 31, 2010. Transportation conformity is required under CAA Section 176(c) (42 U.S.C. 7506(c)) to ensure that federally supported highway and transit project activities are consistent with the purpose of the SIP for transportation-related criteria pollutants. However, in light of the elimination of lead additives from gasoline, transportation conformity does not apply to the Lead NAAQS (2008 Final Lead NAAQS Rule, preamble page (73 FR 67043), November 12, 2008).
9. The project is not located within a CO or PM nonattainment or maintenance area; therefore, a project level hot-spot analysis is not required.

10. Sections 93.104(d), 93.116 and 93.117 of Title 40 CFR indicate that project level conformity analyses (i.e., hot-spot analyses) only apply to FHWA/FTA projects. The proposed project has no federal funding and requires no United States Department of Transportation decision; therefore, a project level hot-spot analysis is not required.

11. The project is located within a <insert CO maintenance area and/or PM10 nonattainment area, as appropriate>; however, in accordance with federal guidelines in Sections 93.126 and 93.128 of Title 40 CFR, the proposed project, <identify the type of exempt project>, is exempt from a conformity determination and project level hot-spot analysis.

12. The project is located within a <insert CO maintenance area and/or PM10 nonattainment area, as appropriate> and the conformity consultation process was initiated. On <insert date of consultation partner decision>, the conformity Consultation Partners made the determination that this is not a project of air quality concern as defined in 40 CFR 93.123 because <describe the Consultation Partners' rationale for this decision>. Therefore, this project does not require a project level hot-spot analysis. Documentation of the Consultation Partners' decision can be found at <insert link or include as an Appendix the documentation of the Consultation Partners' decision>.

13. The project is located within a <insert CO maintenance area and/or PM10 nonattainment area, as appropriate> and the conformity consultation process was initiated. On <insert date of consultation partner decision>, the conformity Consultation Partners made the determination that this is a project of air quality concern as defined in 40 CFR 93.123 because <describe the Consultation Partners' rationale for this decision>. Therefore, this project does require a project level hot-spot analysis. Documentation of the Consultation Partners' decision can be found at <insert link or include as an Appendix the documentation of the Consultation Partners' decision>.

    <Insert CO, PM2.5, and/or PM10, as appropriate> concentrations for the proposed action were modeled using <insert dispersion model used (i.e., CAL3QHCR or AERMOD)> and <insert emissions model used (e.g., MOVES2014a)> and factoring in background concentrations and other potential sources of constituent emissions. Local concentrations of <insert CO, PM2.5, and/or PM10, as appropriate> are not expected to exceed national standards at any time. <If mitigation was needed to meet these thresholds, include a couple of sentences here stating that the analysis incorporates mitigation reductions and what that mitigation is.>

Project Hot Spot Concentrations

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Years Modeled	<insert CO, PM2.5 and/or PM10, as appropriate> Concentration*	% Primary NAAQS	% Secondary NAAQS
<>	<>	<>	<>
<>	<>	<>	<>

* The National Ambient Air Quality Standard (NAAQS) for <insert CO, PM2.5, and/or PM10, as appropriate> is <insert applicable primary NAAQS> ppm for the primary NAAQS and <insert applicable secondary NAAQS> ppm for the secondary NAAQS. Analysis includes a background concentration of <insert background concentration> ppm.

14. The project is located within a <insert CO maintenance area and/or PM10 nonattainment area, as appropriate> and the conformity consultation process was initiated. On <insert date of consultation partner decision>, the conformity Consultation Partners made the determination that this is a project of air quality concern as defined in 40 CFR 93.123 because <describe the Consultation Partners' rationale for this decision>. Therefore, this project does require a project level hot-spot analysis. Documentation of the Consultation Partners' decision can be found at <insert link or include as an Appendix the documentation of the Consultation Partners' decision>.

    <Insert CO, PM2.5, and/or PM10, as appropriate> concentrations for the proposed action were modeled using <insert dispersion model used (i.e., CAL3QHCR or AERMOD)> and <insert emissions model used (e.g., MOVES2014)> and factoring in background concentrations and other potential sources of constituent emissions. Local concentrations of <insert CO, PM2.5, and/or PM10, as appropriate> for the Build Alternative are not expected to exceed the respective concentration for the No Build Alternative. <If mitigation was needed to meet these thresholds, include a couple of sentences here stating that the analysis incorporates mitigation reductions and what that mitigation is.>

Project Hot Spot Concentrations

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Years Modeled	Build Alternative <insert CO, PM2.5 and/or PM10, as appropriate> Concentration*	No Build Alternative <insert CO, PM2.5, and/or PM10, as appropriate> Concentrations
<>	<>	<>
<>	<>	<>

* Analysis includes a background concentration of <insert background concentration> ppm.

15. Generally, projects such as the proposed action are considered exempt from a transportation air quality analysis (TAQA) because they are intended to enhance traffic safety and improve traffic flow. The proposed action would not add capacity to an existing facility. Current and future emissions should continue to follow existing trends not being affected by this project. Due to the nature of this project, further carbon monoxide analysis was not required.

16. Traffic data for the estimated time of completion (ETC) year <insert year> and design year <insert year> is <insert estimated ETC year AADT> vehicles per day and <insert estimated design year AADT> vehicles per day, respectively. A prior TxDOT modeling study and previous analyses of similar projects demonstrated that it is unlikely that the carbon monoxide standard would ever be exceeded as a result of any project with an average annual daily traffic (AADT) below 140,000. The AADT projections for the project do not exceed 140,000 vehicles per day; therefore a Traffic Air Quality Analysis was not required.

17. Traffic for the estimated time of completion year (<insert Completion Year>) and design year (<insert Design Year>) is estimated to be <insert Completion year AADT> vehicles per day and <insert Design year AADT> vehicles per day, respectively; therefore triggering the need for a traffic air quality analysis. <Insert a sentence describing whether topography and meteorology would seriously restrict dispersion of the air pollutants.> The traffic data used in the analysis was obtained from the <Identify source of traffic data (e.g., TxDOT TPP, Travel Demand Model, etc...>.

Carbon monoxide concentrations for the proposed action were modeled using <insert dispersion model used (i.e., CAL3QHC)> and <insert emissions model used (e.g., MOVES2014a)> and factoring in adverse meteorological conditions and sensitive receptors at the right-of-way line in accordance with the SOP For Complying with CO TAQA Requirements. Local concentrations of carbon monoxide are not expected to exceed national standards at any time.

Project Carbon Monoxide Concentrations

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Year	1-hour CO Concentration*	1-HR % NAAQS	8-hour CO Concentration	8-HR % NAAQS
<>	<>	<>	<>	<>
<>	<>	<>	<>	<>

* The National Ambient Air Quality Standard (NAAQS) for CO is 35 ppm for 1-hour and 9 ppm for 8-hours. Analysis includes a one-hour background concentration of <insert background concentration> ppm and an 8-hour background concentration <insert background concentration> ppm.

18. The purpose of this project is to <insert major deficiency that the project is meant to address> by constructing <insert major elements of the project>. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the no-build alternative

    Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016 October 12, 2016 - http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

19. **Background**

    Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/iris/). In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the 2011 National Air Toxics Assessment (NATA) (https://www.epa.gov/national-air-toxics-assessment). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and

polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

Motor Vehicle Emissions Simulator (MOVES)

According to EPA, MOVES2014 is a major revision to MOVES2010 and improves upon it in many respects. MOVES2014 includes new data, new emissions standards, and new functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2010.

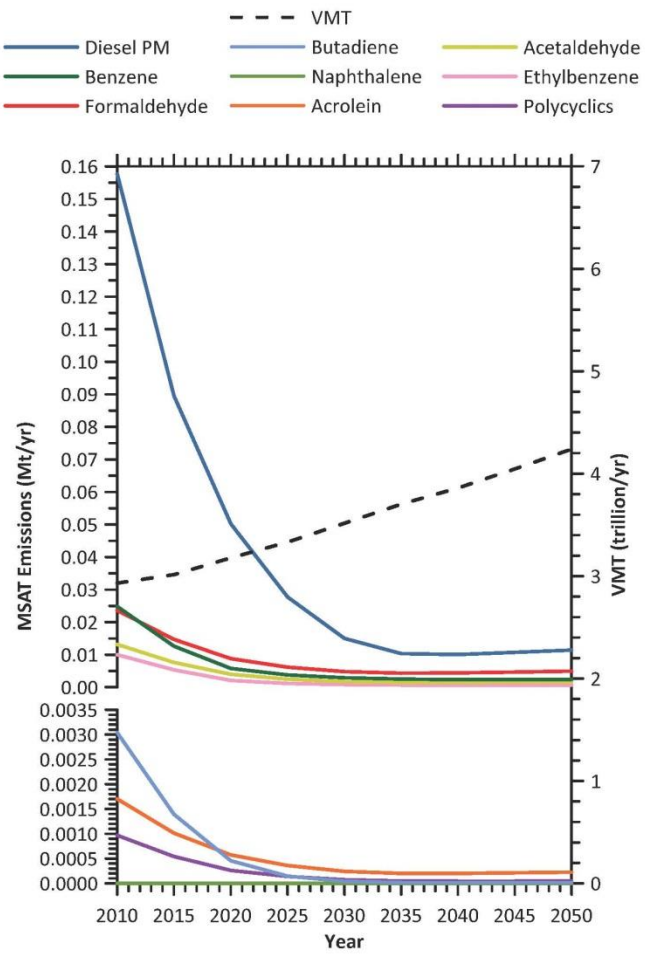
These new emissions data are for light- and heavy-duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES2014 also adds updated vehicle sales, population, age distribution, and vehicle miles travelled (VMT) data. MOVES2014 incorporates the effects of three new Federal emissions standard rules not included in MOVES2010.

These new standards are all expected to impact MSAT emissions and include Tier 3 emissions and fuel standards starting in 2017 (79 FR 60344), heavy-duty greenhouse gas regulations that phase in during model years 2014-2018 (79 FR 60344), and the second phase of light duty greenhouse gas regulations that phase in during model years 2017-2025 (79 FR 60344).

Since the release of MOVES2014, EPA has released MOVES2014a. In the November 2015 MOVES2014a Questions and Answers Guide (https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100NNR0.txt), EPA states that for on-road emissions, MOVES2014a adds new options requested by users for the input of local VMT, includes minor updates to the default fuel tables, and corrects an error in MOVES2014 brake wear emissions. The change in brake wear emissions results in small decreases in PM emissions, while emissions for other criteria pollutants remain essentially the same as MOVES2014.

Using EPA's MOVES2014a model, as shown in Figure <>, FHWA estimates that even if VMT increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

Figure <>:
FHWA PROJECTED NATIONAL MSAT EMISSION TRENDS 2010 – 2050
FOR VEHICLES OPERATING ON ROADWAYS
USING EPA's MOVES2014a MODEL



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Source: EPA MOVES2014a model runs conducted by FHWA, September 2016.
Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorological, and other factors.

Diesel PM is the dominant component of MSAT emissions, making up 50 to 70 percent of all priority MSAT pollutants by mass, depending on calendar year. Users of MOVES2014a will notice some differences in emissions compared with MOVES2010b. MOVES2014a is based on updated data on some emissions and pollutant processes compared to MOVES2010b, and also reflects the latest Federal emissions standards in place at the time of its release. In addition, MOVES2014a emissions

forecasts are based on lower VMT projections than MOVES2010b, consistent with recent trends suggesting reduced nationwide VMT growth compared to historical trends.

MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of NEPA. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

Project Specific MSAT Information

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives, found at: https://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.cfm.

1) Widening Projects

For each alternative in this document, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOVES2014 model, emissions of all of the priority MSAT decrease as speed increases. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016 – http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT could be higher under certain Build Alternatives than the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built at <insert locations>. However, the magnitude and the duration of these potential increases compared to the No Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting

project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region- wide MSAT levels to be significantly lower than today.

2) New Interchange Connecting an Existing Roadway with a New Roadway

For each alternative in this document, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. Because the VMT estimated for the No Build Alternative is higher than for any of the Build Alternatives, higher levels of MSAT are not expected from any of the Build Alternatives compared to the No Build. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016 - http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm).

Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in virtually all locations.

Under each alternative there may be localized areas where VMT would increase, and other areas where VMT would decrease. Therefore, it is possible that localized increases and decreases in MSAT emissions may occur. The localized increases in MSAT emissions would likely be most pronounced along the new roadway sections that would be built at <insert locations>. However, even if these increases do occur, they too will be substantially reduced in the future due to implementation of EPA's vehicle and fuel regulations.

In sum, under all Build Alternatives in the design year it is expected there would be reduced MSAT emissions in the immediate area of the project, relative to the No Build Alternative, due to the reduced VMT associated with more direct routing, and due to EPA's MSAT reduction programs.

3) New Interchange Connecting New Roadways

For each alternative in this document, the amount of MSAT emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for each of the Build Alternatives is slightly higher than that for the No Build Alternative, because the interchange facilitates new development that attracts trips that would not otherwise occur in the area. This increase in VMT means MSAT under the Build Alternatives would probably be higher than the No Build Alternative in the study area. There could also be localized differences in MSAT from indirect effects of the project such as associated access traffic, emissions of evaporative MSAT (e.g., benzene) from parked cars, and emissions of diesel particulate matter from delivery trucks. Travel to other destinations would be reduced with subsequent decreases in emissions at those locations.

For all Alternatives, emissions are virtually certain to be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in

NEPA Documents, Federal Highway Administration, October 12, 2016 - http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future than they are today.

The travel lanes contemplated as part of the project alternatives will have the effect of moving some traffic closer to nearby homes, schools and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT would be higher under certain Alternatives than others. The localized differences in MSAT concentrations would likely be most pronounced along the new/expanded roadway sections that would be built at <insert locations>. However, the magnitude and the duration of these potential increases cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. Further, under all Alternatives, overall future MSAT are expected to be substantially lower than today due to implementation of EPA's vehicle and fuel regulations.

In sum, under all Build Alternatives in the design year it is expected there would be slightly higher MSAT emissions in the study area relative to the No Build Alternative due to increased VMT. There also could be increases in MSAT levels in a few localized areas where VMT increases. However, EPA's vehicle and fuel regulations will bring about significantly lower MSAT levels for the area in the future than today.

4) Minor Improvement or Expansions to Intermodal Centers or Other Projects that Affect Truck Traffic

For each alternative in this document, the amount of MSAT emitted would be proportional to the amount of truck vehicle miles traveled (VMT) and rail activity, assuming that other variables (such as travel not associated with the intermodal center) are the same for each alternative. The truck VMT and rail activity estimated for each of the Build Alternatives are higher than that for the No Build Alternative because of the additional activity associated with the expanded intermodal center. This increase in truck VMT and rail activity associated with the Build Alternatives would lead to higher MSAT emissions (particularly diesel particulate matter) in the vicinity of the intermodal center. The higher emissions could be offset somewhat by two factors: 1) the decrease in regional truck traffic due to increased use of rail for inbound and outbound freight and 2) increased speeds on area highways due to the decrease in truck traffic. The extent to which these emissions decreases will offset intermodal center-related emissions increases is not known.

Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016 - http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the EPA-projected reductions are so significant (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future as well.

The additional freight activity contemplated as part of the project alternatives will have the effect of increasing diesel emissions in the vicinity of nearby homes, schools, and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT would be higher than under the No Build Alternative. The localized differences in MSAT concentrations would likely be

most pronounced under <indicate alternatives>. However, as discussed above, the magnitude and the duration of these potential differences cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific health impacts. Even though there may be differences among the Alternatives, on a region-wide basis, EPA's vehicle and fuel regulations and fleet turnover will cause substantial reductions over time that in almost all cases the MSAT levels in the future will be significantly lower than today.

<Insert description of emissions-reduction activities associated with the project, such as truck/train idling limitations or technologies, such as auxiliary power units; alternative fuels or engine retrofits for container-handling equipment, etc.>

In sum, all Build Alternatives in the design year are expected to be associated with higher levels of MSAT emissions in the study area, relative to the No Build Alternative, along with some benefit from improvements in speeds and reductions in region-wide truck traffic. There also could be slightly higher differences in MSAT levels among Alternatives in a few localized areas where freight activity occurs closer to homes, schools, and businesses. Under all alternatives, MSAT levels are likely to decrease over time due to nationally mandated cleaner vehicles and fuels.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/iris/). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents (http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/index.cfm). Among the adverse health effects linked to MSAT compounds at high exposures are; cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings

or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that with respect to diesel engine exhaust, "[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (EPA IRIS database, Diesel Engine Exhaust, Section II.C. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0642.htm#quainhal)."

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable (https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf).

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

20. This project is <select one of the following: "within an attainment or unclassifiable area for ozone and CO", "not an FHWA/FTA project", "not adding capacity", or "not in a TMA">; therefore a project level CMP analysis is not required.

21. The congestion management process is a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. The project was developed from the <insert MPO's name>'s CMP, which meets all requirements of 23 CFR 450.320 and 500.109, as applicable. The CMP was adopted by <insert MPO's name> on <insert date of adoption and latest amendment date>.

    The region commits to operational improvements and travel demand reduction strategies at two levels of implementation: program level and project level. Program level commitments are inventoried in the regional CMP, which was adopted by <insert MPO's name>; they are included in the financially constrained MTP, and future resources are reserved for their implementation.

    The CMP element of the plan carries an inventory of all project commitments (including those resulting from major investment studies) that details type of strategy, implementing responsibilities, schedules, and expected costs. At the project's programming stage, travel demand reduction strategies and commitments will be added to the regional TIP or included in the construction plans. The regional TIP provides for programming of these projects at the appropriate time with respect to the single occupancy vehicle (SOV) facility implementation and project-specific elements.

    Committed congestion reduction strategies and operational improvements within the study boundary will consist of <insert committed congestion reduction strategies for this project (e.g. signal timing, intersection improvements, pedestrian facilities, etc...)>. Individual projects are listed in Table <Insert Table ID>.

Table <insert Table ID> - Congestion Management Process Strategies

Operational Improvements in Travel Corridor		
Location	**Type**	**Implementation Date**
<>	<>	<>
<>	<>	<>

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    In an effort to reduce congestion and the need for SOV lanes in the region, TxDOT and <insert MPO's name> will continue to promote appropriate congestion reduction strategies through the Congestion Mitigation and Air Quality Improvement (CMAQ) program, the CMP, and the MTP. The congestion reduction strategies considered for this project would help alleviate congestion in the SOV study boundary, but would not eliminate it.

    Therefore, the proposed project is justified. The CMP analysis for added SOV capacity projects in the TMA is on file and available for review at <insert MPO's name>.

22. In July 2013, the RTC also adopted a policy that requires the review and application of congestion mitigation strategies to correct corridor deficiencies identified in the CMP when performing corridor and environmental studies and report findings back to NCTCOG. Therefore, NCTCOG has developed a project level CMP analysis. The analysis requires completion of the Project Implementation Form, and,

if warranted, the Roadway Corridor Deficiency Form and Corridor Analysis Fact Sheet. The results of this analysis are attached in Appendix <insert Appendix ID>.

23. During the construction phase of this project, temporary increases in PM and MSAT emissions may occur from construction activities. The primary construction-related emissions of PM are fugitive dust from site preparation, and the primary construction-related emissions of MSAT are diesel particulate matter from diesel powered construction equipment and vehicles.

    The potential impacts of particulate matter emissions will be minimized by using fugitive dust control measures contained in standard specifications, as appropriate. The Texas Emissions Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction contractors to use this and other local and federal incentive programs to the fullest extent possible to minimize diesel emissions. Information about the TERP program can be found at: http://www.tceq.state.tx.us/implementation/air/terp/.

    However, considering the temporary and transient nature of construction-related emissions, the use of fugitive dust control measures, the encouragement of the use of TERP, and compliance with applicable regulatory requirements; it is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area.

24. This project is located within an area that has been designated by EPA as a nonattainment area for the 2010 SO_2 NAAQS, effective January 12, 2017. Transportation conformity is required under CAA Section 176(c) (42 U.S.C. 7506(c)) to ensure that federally supported highway and transit project activities are consistent with the purpose of the SIP for transportation-related criteria pollutants. However, in accordance with the conformity rule in 40 CFR 93.102(b)(1) transportation conformity does not apply to areas solely in nonattainment for the SO_2 NAAQS.

Appendix B: Acronyms and Definitions

Acronyms

Acronym	Full Name
AADT	Annual Average Daily Traffic
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMP	Congestion Management Process
CO	Carbon Monoxide
ENV	TxDOT Environmental Affairs Division
EPA	Environmental Protection Agency
ETC	Estimated Time of Completion
FHWA	Federal Highway Administration
FR	Federal Register
FTA	Federal Transit Administration
HEI	Health Effects Institute
IRIS	Integrated Risk Information System
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NA/MA	Nonattainment or Maintenance Area
NATA	National Air Toxics Assessment
NEPA	National Environmental Policy Act of 1969
NO_2	Nitrogen Dioxide
PM	Particulate Matter
SOP	Standard Operating Procedure
SOV	Single Occupancy Vehicle
TAC	Texas Administrative Code

Acronym	Full Name
TAQA	Traffic Air Quality Analysis
TCEQ	Texas Commission on Environmental Quality
TERP	Texas Emissions Reduction Plan
TIP	Transportation Improvement Program
TCM	Transportation Control Measure
TMA	Transportation Management Area
TPP	TxDOT Transportation Planning and Programming Division
TxDOT	Texas Department Of Transportation
USC	United States Code
VMT	Vehicle-Miles Traveled

Definitions

Term	Definition
Design Year	Typically, the design year for roadways is either twenty years after the ETC year, or the horizon year of the MTP.
FHWA/FTA Project	These projects have FHWA/FTA funding, need a FHWA/FTA decision, or have been delegated.
Non- Regionally Significant Project	These projects are not regionally significant and are often specifically identified by the Metropolitan Planning Organization (MPO) as being non-regionally significant.

Term	Definition
Regionally Significant Project	Federal definition (40 CFR 93.101): These transportation projects (other than an exempt project) are on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel. State definition (30 TAC 114.260(2)(A)(iv)): Regionally significant projects include, at a minimum, all facilities classified as principal arterial or higher, or fixed guideway systems or extensions that offer an alternative to regional highway travel. Also, these projects include minor arterials included in the travel demand modeling process that serve significant interregional and intraregional travel connect rural population centers not already served by a principal arterial, and/or connect with intermodal transportation terminals not already served by a principal arterial. A significant change in design concept and scope is defined as a revision of a project in the MTP or TIP that would significantly affect model speeds, vehicle miles traveled, or network connections. In addition to new facilities, examples include changes in the number of through lanes or length of project (more than one mile), access control, addition of major intermodal terminal facilities (such as new international bridges, park-and-ride lots, and transfer terminals), addition/deletion of interchanges, or changing between free and toll facilities.
TMA	These areas are urbanized with a population greater than 200,000 as determined by the 2010 Census. Refer to Appendix A.

Appendix C: Transportation Management Areas in Texas

Source: 42358 Federal Register / Vol. 77, No. 138 / Wednesday, July 18, 2012 / Notices

- Dallas-Fort Worth-Arlington[16]
- Houston[17]
- San Antonio
- Austin
- El Paso[18]
- McAllen
- Denton—Lewisville
- Corpus Christi
- Conroe – The Woodlands
- Lubbock
- Laredo
- Killeen
- Brownsville
- Midland-Odessa[19]

[16] This is an ozone non-attainment TMA.

[17] This is an ozone non-attainment TMA.

[18] This is a PM_{10} non-attainment and CO maintenance TMA

[19] The Midland and Odessa urbanized areas are each under 200,000 in population; however, the area requested and was granted designation as a TMA in July 2012.

Appendix D: Revision History

Revision History	
Effective Date	**Reason for and Description of Change**
January 2017	Version 2 was released. Revised qualitative MSAT language based on the FHWA releasing Updated Interim MSAT Guidance in October 2016
July 2015	Version 1 was released. The source material for this SOP was the Air Quality Standards of Uniformity (200.01.SOU), and the content was updated for FHWA assignment and repackaged as an SOP.