

*Texas Department of Transportation  
Environmental Affairs Division*

## **Standards of Uniformity for Projects Without Federal Highway Administration Involvement**

---

A Guide to Projects without FHWA Involvement

**Air Quality**

**Air Quality**

**Introduction**

This Standard of Uniformity (SOU) has been designed to ensure that all non-FHWA involvement proposed projects (NFPPs) using it in development and certification will comply with air quality-related requirements.

Specifically, if a NFPP is developed in accordance with this SOU, the project should conform to all applicable laws, regulations, implementation plans, or other federal and state air quality requirements pursuant to the Federal and Texas Clean Air Acts\*. Any exceptions that affect the use of this SOU should be coordinated through the [Environmental Affairs Division's Air Quality staff](#).

\*Certain federal clean air and transportation laws and regulations apply to all regionally significant projects regardless of funding.

An acronym list is contained in Appendix C.

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
<b>Basic Criteria</b>				
1			<p>If there is a quantitative analysis (i.e. CO TAQA or quantitative MSAT analysis), has an ENV air specialist reviewed the analysis?</p> <p>If no, an ENV air specialist needs to review the air quality section prior to TxDOT making a decision.</p> <p><b>Note</b> ENV highly encourages the project sponsor to coordinate and submit quantitative analyses for approval prior to environmental review document submission. Although these quantitative analyses should be few in number (typically &lt; 25 projects per year); this coordination may reduce risk of project delay.</p>	
2			<p>If the project sponsor identifies the project is not required to be in the MTP/TIP nor STIP, has the appropriate certification from the MPO and District been included?</p> <p><b>Note:</b> Consultation with the District, and MPO as early in the process as possible will help reduce potential for project delays in the event that the project needs to be added to the MTP/TIP or STIP to meet transportation conformity requirements. Questions on transportation conformity may be directed to the MPO and/or ENV Air Specialist. A plan update in a nonattainment area may take in</p>	

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
			excess of a year to complete.	
3			Does the document include a section discussing the project's consistency with transportation plans? (NOTE: This section may be part of the air quality section or it may be part of another section of the document.)	
4			Does the document include a section that discusses air quality?	
5	If the answer to either of the last two questions above is no, the document should not be certified as complete.			
<b>Project Consistency with Transportation Plans and Funding</b>				
6	The NFPP may only be approved if the proposed project is consistent with any applicable transportation plans. ( <a href="#">see Chapter 5 of this local government non-federal SOU</a> ). This is important from an air quality perspective because projects located in a nonattainment and/or maintenance area require Transportation Consistency verifications in order to validate project level conformity with the State Implementation Plan (SIP). The project sponsor (the District may be a project sponsor) is responsible for determining that the project is consistent with the appropriate transportation plans and should follow the steps outlined in the <a href="#">Transportation Consistency Section</a> of this local government non-federal SOU (Chapter 5).			
7			<p><b>National Ambient Air Quality Standard (NAAQS) Attainment or Unclassifiable Area (AA):</b></p> <ul style="list-style-type: none"> <li>Does the document disclose its consistency with the local MPO's MTP and TIP, or the STIP if not within a metropolitan planning area (MPA) or Appendix D of the TIP, if the proposed letting date is not within the TIP timeframe?</li> </ul> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> <li>Does the document disclose the date of the latest MTP and TIP, or STIP?</li> </ul> <p>See <a href="#">AA Consistency and Conformity Template Language</a>.</p> <p><b>Nonattainment Area (NAA) or Maintenance Area (MA):</b></p> <ul style="list-style-type: none"> <li>If the project is within a Metropolitan Planning Area (MPA), does the document disclose its consistency with the local MPO's MTP and TIP (or</li> </ul>	<p><a href="#">23 CFR 450, Appendix B</a> (explains congressional intent that plans should be the foundation for transportation decisions)</p> <p><a href="#">23 CFR 450.220</a> (funding)</p> <p>40 CFR <a href="#">93.101</a>, <a href="#">93.107</a>, <a href="#">93.109</a></p> <p>Title 30, Texas Administrative Code, Section 114.260</p> <p><a href="http://www.tceq.texas.gov/assets/public/legal/rules/rules/pdflib/114g.pdf">http://www.tceq.texas.gov/assets/public/legal/rules/rules/pdflib/114g.pdf</a></p>

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
			<p>Appendix D of the TIP, if the proposed letting date is not within the TIP timeframe)?</p> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> <li>• Does it disclose the dates of the MTP and TIP, as well as the latest conformity dates for both?</li> </ul> <p>See <a href="#">NAA/MA Consistency and Conformity Template Language</a>.</p> <p><b>Rural NAA (RNAA) or Rural MA (RMA):</b></p> <ul style="list-style-type: none"> <li>• Does the document disclose its consistency with the STIP?</li> </ul> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> <li>• Does it disclose the date of the STIP, as well as its latest conformity date?</li> </ul> <p>See <a href="#">RNAA/RMA Consistency and Conformity Template Language</a>.</p>	
<b>Ozone, Carbon Monoxide, Particulate Matter (PM) and/or Nitrogen Dioxide (NO2) National Ambient Air Quality Standards (NAAQS) – Transportation Conformity</b>				
8			<p>If the project is in an attainment or unclassifiable area, does the document disclose:</p> <ul style="list-style-type: none"> <li>• the county the project is in,</li> <li>• that it is in attainment or unclassifiable for all NAAQS, and</li> <li>• that transportation conformity rules do not apply?</li> </ul> <p>See <a href="#">AA Consistency and Conformity Template Language</a>.</p>	<p>40 CFR <a href="#">93.101</a>, <a href="#">93.107</a>, <a href="#">93.109</a></p> <p>Title 30, Texas Administrative Code, Section 114.260</p> <p><a href="http://www.tceq.texas.gov/assets/public/legal/rules/rules/pdflib/114g.pdf">http://www.tceq.texas.gov/assets/public/legal/rules/rules/pdflib/114g.pdf</a></p>
9			<p>For a project in a nonattainment or maintenance area (NAA), does the document disclose:</p> <ul style="list-style-type: none"> <li>• the county the project is in,</li> <li>• that the county is in a nonattainment or attainment maintenance area,</li> <li>• the nonattainment or attainment maintenance area the county is in,</li> <li>• the nonattainment or attainment</li> </ul>	

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
			<p>maintenance classification,</p> <ul style="list-style-type: none"> <li>• the pollutant(s) for which it is nonattainment or attainment maintenance, and</li> <li>• that transportation conformity rules do apply?</li> </ul> <p>See <a href="#">Non-Exempt text under NAA/MA Consistency and Conformity Template Language</a> or <a href="#">RNAA/RMA Consistency and Conformity Template Language</a>.</p> <p>Note: Projects exempt from a conformity determination, according to 40 CFR 93.126, are listed in <a href="#">Appendix A</a>. See <a href="#">Exempt Project Template Language under NAA/MA Consistency and Conformity Template Language</a> or <a href="#">RNAA/RMA Consistency and Conformity Template Language</a>.</p>	
<p><b>Lead and/or Sulfur Dioxide NAAQS - Transportation Conformity <u>Does Not</u> Apply to These NAAQS <b>Skip to 12 if not in Collin or Jefferson County.</b></b></p>				
10			<p>For a project in a Lead nonattainment area (lead NAA), does the document disclose:</p> <ul style="list-style-type: none"> <li>• the county the project is in,</li> <li>• that the county or a portion of it is nonattainment,</li> <li>• that it is nonattainment for lead, and</li> <li>• that transportation conformity rules <u>do not</u> apply?</li> </ul> <p>If yes, see <a href="#">Lead NAAQS NA Template Language</a>.</p>	<p>Currently, the Lead NAAQS, only applies to small portion of Collin County; EPA designated on November 16, 2010.</p> <p><a href="http://www.epa.gov/leadde/signations/">http://www.epa.gov/leadde/signations/</a> or</p> <p><a href="http://www.epa.gov/leadde/signations/2008standards/documents/2010-11-16/FRNoticePart81PbDesignFinal.pdf">http://www.epa.gov/leadde/signations/2008standards/documents/2010-11-16/FRNoticePart81PbDesignFinal.pdf</a> .</p>
11			<p>Placeholder in the event that any part of Texas is designated nonattainment for the 2010 primary sulfur dioxide (SO<sub>2</sub>) NAAQS or the pending secondary SO<sub>2</sub> NAAQS.</p>	<p>The June 22, 2010 FR published EPA's revised SO<sub>2</sub> NAAQS. EPA data indicates Jefferson County was above this standard. EPA should make final designations by June 2012.</p> <p><a href="http://www.epa.gov/air/sulfurdioxide/actions.html">http://www.epa.gov/air/sulfurdioxide/actions.html</a></p>

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
<b>Carbon Monoxide (CO) Traffic Air Quality Analysis (TAQA)</b>				
12			<p>For a non-added capacity project below 140,000 AADT by MTP design year that is not a project of air quality concern, does the document disclose that a CO TAQA is not required, because it will not increase capacity and current and future CO emissions should not be affected by the project?</p> <p>See <a href="#">TAQA Template Language (no added capacity)</a>.</p>	<p>Section 4 of the <a href="#">Air Quality Guidelines</a> for instructions and Section 7.3 for template language.</p>
13			<p>For an added capacity project, does the document disclose that a CO TAQA is not required for projects with AADT less than 140,000?</p> <p>See <a href="#">TAQA Template Language (AADT &lt;140,000)</a>.</p>	<p>Section 4 of the <a href="#">Air Quality Guidelines</a> for instructions and Section 7.3 for template language.</p>
14			<p>For an added capacity project greater than 140,000 AADT by MTP design year, does the document include a CO TAQA analysis which includes the following:</p> <ol style="list-style-type: none"> <li>1. Traffic Data               <ol style="list-style-type: none"> <li>a. AADT in ETC year</li> <li>b. AADT in design year</li> <li>c. Source of traffic data</li> </ol> </li> <li>2. Background CO levels used and their source</li> <li>3. EPA's current 1-hour and 8-hour NAAQS for CO</li> <li>4. Identification of how the CO emission factors were obtained:               <ol style="list-style-type: none"> <li>a. ENV CO emissions spreadsheet</li> <li>b. MOBILE6.2 model</li> <li>c. MOVES model</li> </ol> </li> <li>5. Identification of the dispersion model used:               <ol style="list-style-type: none"> <li>a. CALINE3</li> <li>b. CAL3QHC</li> </ol> </li> <li>6. Table which identifies the air impact in terms of the percentage of the 1-hour and</li> </ol>	<p>Section 4 of the <a href="#">Air Quality Guidelines</a> for instructions and Section 7.3 for template language.</p>

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
			8-hour NAAQS, respectively, for both the ETC year and design year build scenarios?	
<p><b>Congestion Management Process (CMP)/System (CMS). This section is not mandatory; but may be included for risk management purposes.</b> If the project sponsor has questions regarding this section, please contact ENV air quality specialists.</p>				
15			<p>Does the project meet all of the following?</p> <ul style="list-style-type: none"> <li>• Not adding capacity</li> <li>• Not within a Transportation Management Area (TMA, pop. &gt;200,000)</li> <li>• Located in an attainment or unclassifiable area</li> </ul> <p>If so, include the <a href="#">CMP/CMS Negative Declaration</a> or the project may be silent with no mention of CMP/CMS. (NOTE CMP/CMS may still apply to the MPO; but it does not need to be disclosed in NEPA.</p>	<p>Section 3.4 of the <a href="#">Air Quality Guidelines</a> for instructions.</p>
16			<p>Does the project meet all of the following criteria?</p> <ul style="list-style-type: none"> <li>• Adding capacity</li> <li>• Within a TMA (pop. &gt;200,000)</li> <li>• Located in a nonattainment area</li> </ul> <p>If so, include the <a href="#">CMP/CMS Template Language</a>.</p>	<p>Section 7.3 of the <a href="#">Air Quality Guidelines</a> for template language.</p>
<p><b>Mobile Source Air Toxics (MSAT). This section is not mandatory; but may be included for risk management purposes.</b> If the project sponsor has questions regarding this section, please contact ENV air quality specialists.</p>				
17			<p>If the project is not adding capacity, does the document disclose it has no meaningful potential Mobile Source Air Toxics (MSAT) effects?</p> <p>See <a href="#">MSAT Negative Declaration Template Language</a>.</p>	<p>Only mandatory for projects with FHWA/FTA involvement. <a href="#">72 FR 8427-8476</a> February 26, 2007</p> <p>40 CFR <a href="#">59</a>, <a href="#">80</a>, <a href="#">85</a> &amp; <a href="#">86</a>: Control of Emissions of Hazardous Air Pollutants From Mobile Sources; <a href="#">66 FR 17229</a> –</p>

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
				<a href="#">17272, March 29, 2001</a>
18			<p>If the project:</p> <ol style="list-style-type: none"> <li>1. is adding capacity</li> <li>2. has low potential for meaningful MSAT impacts within existing ROW, and</li> <li>3. has an AADT &lt;140,000,</li> </ol> <p>has a qualitative MSAT analysis been completed for risk management purposes? Are all of the following sections included in the Qualitative MSAT Assessment?</p> <ol style="list-style-type: none"> <li>1. Mobile Source Air Toxics</li> <li>2. Project-Specific MSAT Assessment               <ol style="list-style-type: none"> <li>A. Project Specific Information</li> </ol> </li> <li>3. Incomplete or Unavailable Information</li> <li>4. Conclusion</li> </ol>	<p>Only mandatory for projects with FHWA/FTA involvement. See revised section 6 of Air Quality Guidelines and below for template language.</p>
19			<p>If the project is adding capacity with design year AADT &gt; 140,000; it is recommended that the project sponsor evaluate risk to determine if the project sponsor chooses to complete a qualitative and/or quantitative MSAT analysis.</p> <p>If the project sponsor decides to complete a quantitative MSAT analysis, has a conference call with TxDOT ENV occurred that specified analysis methodologies and a does the quantitative MSAT analysis completed include the following sections:</p> <ol style="list-style-type: none"> <li>1. Mobile Source Air Toxics Background</li> <li>2. Project-Specific MSAT Assessment               <ol style="list-style-type: none"> <li>a. Project specific MSAT Information</li> <li>b. Table with total MSAT emissions for the priority MSAT and traffic volumes in the base year, interim year (if applicable), and design year for both the build and no-build alternatives</li> <li>c. Bar chart showing the emission changes per MSAT for the base year, interim year (if applicable), and design year for the build and no-build alternatives</li> </ol> </li> </ol>	<p>Only mandatory for projects with FHWA/FTA involvement.</p> <p>See revised section 6 of Air Quality Guidelines and below for template language.</p> <p>See Projects with Low Potential MSAT Effects (Qualitative MSAT Assessment Template Language for MSAT Background, Project Specific MSAT Information, and Incomplete and Unavailable Information template language.</p>

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
			<p>d. A discussion of the modeling results. (If needed a discussion concerning proximity to populated areas may be included)</p> <p>3. Incomplete or Unavailable Information</p> <p>4. Mitigation Strategies (if applicable)</p> <p>5. Conclusion?</p> <p><b>Note:</b> Although only required for projects with FHWA/FTA involvement, ENV highly encourages project sponsors to complete a <b>qualitative</b> MSAT analysis for risk management since a qualitative analysis discloses information that is unavailable and incomplete.</p>	
<p><b>Particulate Matter (PM) and/or Carbon Monoxide (CO) Nonattainment and/or Maintenance Area Only Projects: This currently only applies in portions of the El Paso District. (Skip to 22, if not a project in El Paso County.)</b></p>				
20			<p><b>CURRENTLY THIS SECTION ONLY APPLIES TO EL PASO:</b></p> <p>Is the project located in a carbon monoxide (CO) nonattainment and/or maintenance area? If yes, has the project sponsor disclosed what project-level mitigation and control measures will be undertaken if project mitigation under 40 CFR 93.125 is needed because it is a condition of the planning-level conformity determination?</p>	40 CFR 93.125
21			<p><b>CURRENTLY THIS SECTION ONLY APPLIES TO EL PASO:</b></p> <p>Is the project located in a PM nonattainment and/or maintenance area? If yes, AND if the planning-level conformity determination required project-level mitigation; has the project sponsor disclosed through an EPIC and in the document, what project-level mitigation and control measures will be undertaken to meet the mitigation requirements of 40 CFR 93.125?</p> <p>If project-level mitigation is required, an</p>	40 CFR 93.125

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
			environmental decision cannot be finalized until mitigation commitments are agreed to.	
<b>Indirect and Cumulative Impacts (ICI) Analysis</b>				
22			Is an Indirect and Cumulative Impacts (ICI) Analysis included in the document, according to the criteria in the <a href="#">ICI SOU</a> ?	Non-Federal <a href="#">CE SOU for Indirect and Cumulative Impacts</a>
23			<p>If an ICI analysis is included, are any of the following impact-causing actions anticipated?</p> <ol style="list-style-type: none"> <li>1. Is project in a nonattainment area?</li> <li>2. Does the project cause changes in land use designations?</li> <li>3. Does Need and Purpose support economic development?</li> <li>4. Does the project include roadway enhancements for industrial parks?</li> <li>5. Does the project cause changes in intermodal traffic?</li> <li>6. Does the project substantially increase mobility in or access to an area?</li> </ol> <p>If not, was the <a href="#">ICI Negative Declaration included</a>?</p>	See Appendix C of <a href="#">Guidance on Preparing Indirect and Cumulative Impact Analyses</a>
24			<p>If an ICI analysis is included in the document any of the above impact-causing actions are anticipated, were air quality impacts addressed in the ICI?</p> <p>Are all conclusions supported by facts, logic, and appropriate analyses?</p> <p>Were all actions causing air quality impacts addressed in Step 4 of the Indirect, and Step 1 of the Cumulative?</p> <p>(See <a href="#">Appendix B</a> for a list of nonattainment areas in Texas.)</p>	<p>See pages 13-42 of <a href="#">Guidance on Preparing Indirect and Cumulative Impact Analyses for Indirect Impacts</a></p> <p>See pages 52-76 of <a href="#">Guidance on Preparing Indirect and Cumulative Impact Analyses for Cumulative Impacts</a></p>
<b>Construction and Post-Construction Emissions Reduction Strategies</b> <b>This section is not mandatory; but may be included for risk management purposes.</b> If the project sponsor has questions regarding this section, please contact ENV air quality specialists.				
25			If the document disclose measures to minimize either construction or post-construction emissions (MSAT and/or dust), does it include these measures in the project EPIC or equivalent project sponsor process	

**Air Quality**

Yes	No	N/A	Description of Item Sufficiency	References/Guidance
			<p>that ensures the commitments are carried through PS&amp;E?</p> <p>If no, the project sponsor needs to verify that the commitments will be carried through to PS&amp;E before an environmental decision can be made.</p> <p><b>Note:</b> If the project may generate dust emissions or MSATs, consider including a discussion on measures to minimize construction emissions, if such measures are taken. See Construction and Post Construction Emission Template Language.</p> <ul style="list-style-type: none"> <li>• Consider the presence and duration of stay for non-road equipment and the potential for nuisance dust conditions (e.g., dirt being moved, rock/concrete being crushed).</li> <li>• Also consider including whether construction will be close to neighborhoods or population centers where the public may congregate (e.g., parks).</li> </ul>	

*When using any of the template (example) language below; if the acronym has not previously been spelled out in the NEPA document and/or technical report; it should be spelled out with the acronym added in parenthesis the first it is used in the document. If the template language spells out an acronym that has already been spelled out in the document; then the text below can be revised to just use the acronym.*

**1. AA Consistency and Conformity Template Language:**

**Within an MPA**

The proposed action is consistent with the (insert local MPO's name) (insert MTP/RTP title and date identifier) MTP, as revised and the (insert TIP date identifier) TIP, as revised. The project is located in (insert county) County, which is in an area in attainment or unclassifiable for all national ambient air quality standards (NAAQS); therefore, the transportation conformity rules do not apply.

**Not within an MPA**

---

## **Air Quality**

---

The proposed action is consistent with the (insert STIP with date identifier) STIP, as revised. The project is located in (insert county) County, which is in an area in attainment or unclassifiable for all national ambient air quality standards (NAAQS); therefore, the transportation conformity rules do not apply.

### **Bridging Language if project is not consistent with MTP or TIP but is otherwise SFP**

The project is located in (insert county) County, which is in an area in attainment or unclassifiable for all NAAQS; therefore, the transportation conformity rules do not apply. The proposed project is included in the (insert MPO's name) financially constrained (insert year or MTP name) Metropolitan Transportation Plan (MTP), as revised and (insert TIP years) Transportation Improvement Program (TIP), as revised, adopted by (insert MPO's name) in (insert month, year). However the proposed project is not consistent with the current MTP or TIP. (Note: an optional clause or sentence can be inserted here describing why the project is not consistent with the applicable MTP/TIP, if appropriate). TxDOT will not take final action on this environmental document until the proposed project is consistent with the (insert date or MTP name) MTP, as revised and the (insert TIP years) TIP, as revised.

### **Bridging Language if project is not consistent with STIP but is otherwise SFP**

The project is located in (insert county) County, which is in an area in attainment or unclassifiable for all NAAQS; therefore, the transportation conformity rules do not apply. The proposed project is included in the (insert District's name) financially constrained (insert STIP years) Statewide Transportation Improvement Program (STIP), as revised. However the proposed project is not consistent with the current STIP. (Note: an optional clause or sentence can be inserted here describing why the project is not consistent with the applicable STIP, if appropriate). TxDOT will not take final action on this environmental document until the proposed project is consistent with the (insert STIP years) STIP, as revised.

### **Projects That Are Not Required To Be In MTP/TIP/STIP**

On (insert date of MPO confirmation) the (insert local MPO's name) verified that the proposed project is not regionally significant and is not otherwise required to be in the (insert "MTP and TIP", Or "STIP" as appropriate) per applicable planning requirements for the following reasons: (insert reasons the project is exempt from being included in the MTP/TIP or STIP). The proposed project has no federal funding and requires no United States Department of Transportation decision. On (insert date of TxDOT District confirmation), the (insert TxDOT District's name) verified that the proposed action is not otherwise required to be in the (insert "STIP" date) prior to TxDOT taking action for the following reasons: (insert reasons the project is exempt from being included STIP). The project is located in (insert county) County, which is in an area in attainment or unclassifiable for all national ambient air quality standards (NAAQS) except (Insert applicable nonattainment or maintenance area designation); therefore, the transportation conformity rules do not or do apply.

### **Projects Outside an MPO Area That Are Not Required To Be In STIP**

---

## Air Quality

---

On (insert date of TxDOT District confirmation), the (insert TxDOT District's name) verified that the proposed project is not regionally significant and is not otherwise required to be in the (insert "STIP" date) STIP prior to TxDOT taking action for the following reasons: (insert reasons the project is exempt from being included STIP). The proposed project has no federal funding and requires no United States Department of Transportation decision. The project is located in (insert county) County, which is in an area in attainment or unclassifiable for all national ambient air quality standards (NAAQS); therefore, the transportation conformity rules do not apply.

**NOTE (not part of template language; instruction only):** For example, no TxDOT action is needed (e.g. not within our right-of-way, no state funds, and no Texas Administrative Code [TAC] specified access management). TxDOT cannot take action on specified access management issues without the project being in the STIP.

## 2. NAA and MA Consistency and Conformity Template Language:

### Non-exempt Projects

This project is located within (insert county name) County, which is part of the (insert area name/identifier) 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 national ambient air quality standards (NAAQS); ozone, CO, or PM10); therefore, transportation conformity rules apply.

The proposed action is consistent with the area's financially constrained Metropolitan Transportation Plan (insert local MPO's name) (insert MTP title and date identifier), as revised and the (insert TIP date identifier) TIP, as revised. Both the MTP and the TIP were found to conform to the TCEQ State Implementation Plan (SIP) by FHWA on (insert date conformity was determined). 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, as revised 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. Energy, environment, air quality, cost, and mobility considerations are addressed in the programming of the TIP.

**Bridging Language if the project is not consistent with the MTP or TIP but is otherwise SFP**

---

## Air Quality

---

This project is located within (insert county name) County which part of the (insert area name/identifier) area that has been designated by EPA as a (insert area's classification level) nonattainment area for (insert the applicable national ambient air quality standards (NAAQS), ozone in Texas for all areas except parts of El Paso); therefore, the transportation conformity rule applies. The proposed project is included in the area's financially constrained (insert date or identifier) Metropolitan Transportation Plan (MTP), as revised and (insert date or identifier) Transportation Improvement Program (TIP), as revised, adopted by (insert MPO name) in (insert date) and found to conform to the TCEQ State Implementation Plan (SIP) by FHWA on (insert date or dates of conformity finding). 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.

### Transportation Conformity Exempt Projects

This project is located within (insert county name) County, which is part of the (insert area name/identifier) 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 national ambient air quality standards (NAAQS); ozone, CO, or PM10). The conformity rules do apply. However, in accordance with federal guidelines in Section 93.126, of Title 40 CFR, the proposed project, (identify the type of exempt project as listed in Appendix A), is exempt from a conformity determination.

The proposed action is consistent with the area's financially constrained Metropolitan Transportation Plan (insert local MPO's name) (insert MTP title and date identifier), as revised and the (insert TIP date identifier) TIP, as revised. 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, as revised 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. Energy, environment, air quality, cost, and mobility considerations are addressed in the programming of the TIP.

## Air Quality

### **Projects That Are Not Required To Be In MTP/TIP in a Nonattainment or Maintenance Area**

This project is located within (insert county name) County, which is part of the (insert area name/identifier) 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 national ambient air quality standards (NAAQS); ozone, CO, or PM10); therefore, transportation conformity rules do apply. However, in accordance with federal guidelines in Section 93.126, of Title 40 Code of Federal Regulations (CFR), the proposed project, (identify the type of exempt project as listed in Appendix A), is exempt from a conformity determination.

On (insert date of MPO confirmation) the (insert local MPO's name) verified that the proposed action is not regionally significant and is not otherwise required to be in the (insert "MTP and TIP", Or "STIP" as appropriate) per applicable planning requirements for the following reasons: (insert reasons the project is exempt from being included in the MTP/TIP or STIP). The proposed action has no federal funding and requires no United States Department of Transportation decision. On (insert date of TxDOT District confirmation), the (insert TxDOT District's name) verified that the proposed action is not otherwise required to be in the (insert "STIP" date) prior to TxDOT taking action for the following reasons: (insert reasons the project is exempt from being included STIP).

**NOTE (not part of template language; instruction only):** For example, no TxDOT action is needed (e.g. not within our right-of-way, no state funds, and no Texas Administrative Code [TAC] specified access management). TxDOT cannot take action on specified TAC access management issues without the project being in the STIP.

It is anticipated that any added capacity project in a nonattainment area is required to be in the TIP and MTP.

### **3. RNAA/RMA Consistency and Conformity Template Language:**

#### **Transportation Conformity Non-exempt Projects**

This project is located within (insert county name) County, which is part of the (insert area name/identifier) area that has been designated by EPA as a (insert area's classification level) nonattainment area for (insert the applicable NAAQS; ozone, CO, or PM10). The (insert TxDOT District's name) (insert STIP date identifier) STIP, as revised was found to conform to the TCEQ's State Implementation Plan by FHWA on (insert date of conformity determination). Copies of the STIP page(s) are included in Appendix (insert Appendix number or identifier).

The proposed action is consistent with the financially constrained Statewide Transportation Improvement Program (insert date of the STIP). The STIP, as revised was found to conform to the TCEQ State Implementation Plan (SIP) by FHWA on (insert date of STIP conformity determination). Copies of the STIP pages are included in Appendix (insert Appendix number or identifier). All projects in the STIP that are

---

## Air Quality

---

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. Energy, environment, air quality, cost, and mobility considerations are addressed in the programming of the STIP.

### **Transportation Conformity Exempt Projects**

This project is located within (insert county name) County, which part of the (insert area name/identifier) area that has been designated by EPA as a (insert area's classification level) nonattainment area for (insert the applicable NAAQS; ozone, CO, or PM10). The conformity rules do apply. However, in accordance with federal guidelines in Section 93.126, of Title 40 CFR, the proposed project, (identify the type of exempt project as listed in Appendix A), is exempt from conformity determination.

The proposed action is consistent with the financially constrained Statewide Transportation Improvement Program (insert date of the STIP). Copies of the STIP pages are included in Appendix (insert Appendix number or identifier). All projects in the STIP, as revised 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. Energy, environment, air quality, cost, and mobility considerations are addressed in the programming of the STIP.

### **Projects That Are Not Required To Be In STIP**

This project is located within (insert county name) County, which part of the (insert area name/identifier) area that has been designated by EPA as a (insert area's classification level) nonattainment area for (insert the applicable NAAQS; ozone, CO, or PM10). The conformity rules do apply. However, in accordance with federal guidelines in Section 93.126, of Title 40 CFR, the proposed project, (identify the type of exempt project as listed in Appendix A), is exempt from conformity determination.

On (insert date of TxDOT District confirmation), the (insert TxDOT District's name) verified that the proposed action is not regionally significant and is not otherwise required to be in the (insert "STIP" date) STIP prior to TxDOT taking action for the following reasons: (insert reasons the project is exempt from being included STIP). The proposed project has no federal funding and requires no United States Department of Transportation decision.

**NOTES (not part of template language; instruction only):** For example, no TxDOT action is needed (e.g. not within our right-of-way, no state funds, and no Texas Administrative Code [TAC] access management). TxDOT cannot take action on TAC specified access management issues without the project being in the STIP.

It is anticipated that any added capacity project in a nonattainment area is required to be in the TIP and MTP.

#### **4. Lead NAAQS NA Template Language (Currently only applies in small portion of**

---

**Air Quality**

---

**Collin County):**

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)*. Insert here the language for ozone nonattainment along with TIP and MTP consistency and conformity here.

**5. Placeholder for SO2 Nonattainment Template Language**

**6. CO TAQA Template Language (no added capacity):**

Generally, (identify the type of exempt project such as intersection improvements) 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.

**7. CO TAQA Template Language (AADT <140,000):**

Traffic data for the design year (insert year) is (insert estimated AADT) vehicles per day. A prior TxDOT modeling study and previous analyses of similar projects demonstrated that it is unlikely that a 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.

**8. CO TAQA Template Language (AADT >140,000):**

See section 7.3 of the Air Quality guidelines for example template language. Examples can be provided upon request during consultation with ENV.

**9. CMP/CMS Negative Declaration Template Language (Optional):**

**Not Adding Capacity**

This project is not adding single occupancy vehicle (SOV) capacity to an existing facility; therefore a CMP/CMS analysis is not required.

**Not in a TMA**

This project is not in a Transportation Management Area (TMA); therefore a CMP/CMS

**Air Quality**

analysis is not required.

**Project is an Attainment or Unclassifiable Area**

This project is located in an area that is in attainment or unclassifiable for all NAAQS; therefore a **CMP/CMS** analysis is not required.

**Note:** Dallas-Fort Worth has an approved CMP. Austin, Corpus Christi, El Paso, Houston-Galveston, Lubbock, McAllen-Edinburg-Pharr, and San Antonio each have an approved CMS.

**10. CMP/CMS Template Language (Optional):**

The congestion management process/system (**CMP/CMS**) 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 (insert MPO's name)'s operational **CMP/CMS**, which meets all requirements of 23 CFR 500.109. The **CMP/CMS** 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/CMS**, 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/CMS** 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 signalization and intersection improvements. Individual projects are listed in Table **AA**.

**Table AA - Congestion Management Process Strategies**

Operational Improvements in the Travel Corridor		
Location	Type	Implementation Date

---

## Air Quality

---

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 CMAQ program, the CMP/CMS, 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/CMS analysis for added SOV capacity projects in the TMA is on file and available for review at (insert MPO's name).

**Note (do not include in template language):** Dallas-Fort Worth has an approved CMP. Austin, Corpus Christi, El Paso, Houston-Galveston, Lubbock, McAllen-Edinburg-Pharr, and San Antonio each have an approved CMS.

### 11. MSAT Negative Declaration Template Language (Optional)::

**The paragraph in this text box is guidance, do not insert into environmental document.**

**NOTE:** Exempt projects typically refer to those under 23 CFR 771.117(c) or 40 CFR 93.126. The types of projects categorically excluded under these citations do not warrant an automatic exemption from an MSAT analysis, but they usually will have no meaningful impact. If you have questions, please contact the TxDOT ENV Air Quality Expert. Using this section when there is a potential for MSAT effects, may result in project delay.

The purpose of this project is to (insert project description). This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special Mobile Source Air Toxics (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 an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, 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 MOBILE6.2 model forecasts a combined reduction of 72 percent in the total annual emission rate for the priority MSAT from 1999 to 2050 while vehicle-miles of travel are projected to increase by 145 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

## Air Quality

### 12. MSAT Qualitative Analysis Language - Template Language for Projects with Low Potential MSAT Effects (Qualitative MSAT Assessment) (Optional):

**This section is not mandatory; but may be included for risk management purposes. The paragraph in this text box is guidance, do not insert into environmental document.**  
**NOTES:**

1) Project sponsors may wish to include a qualitative analysis for projects below 140,000 AADT. For risk management purposes, project sponsors may wish to conduct a qualitative or quantitative MSAT analysis for projects equal to or above 140,000 AADT or less than 140,000 AADT but are projects with higher potential MSAT effects. See item 12 below for further details.

2) If an MSAT analysis is completed, the document should be tailored to reflect the unique circumstances of the project being considered, particularly those areas that are shaded. If this section is used, text in gray needs to be customized for the particular project.

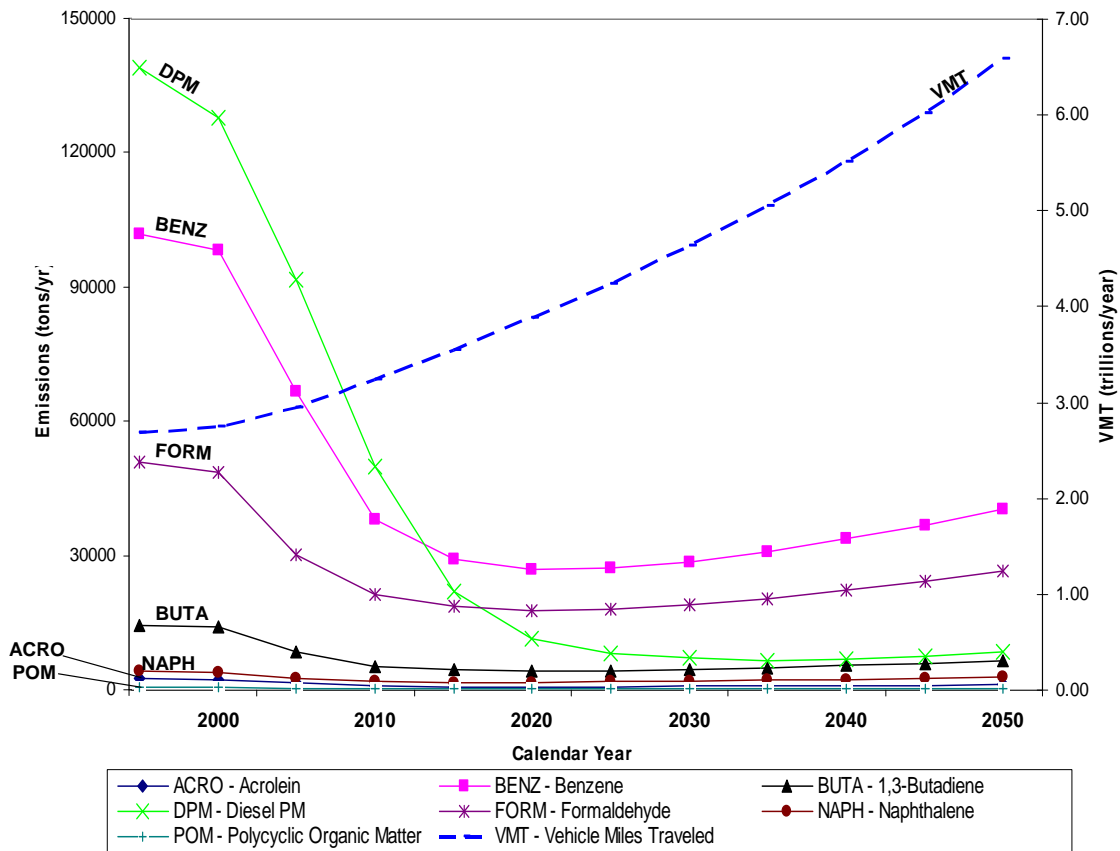
### **Background**

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/ncea/iris/index.html>). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (<http://www.epa.gov/ttn/atw/nata1999/>). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), 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.

The 2007 EPA Mobile Source Air Toxics (MSAT) rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 1 and Table 1.

Figure 1 - National MSAT Emission Trends 1999-2050 for Vehicles Operating on Roadways Using EPA's MOBILE6.2 Model

**Air Quality**



Source: Table 1  
Notes:

- (1) Annual emissions of polycyclic organic matter are projected to be 561 tons/yr for 1999, decreasing to 373 tons/yr for 2050.
- (2) Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors

Table 1 - National MSAT Emissions and Percent Reduction for 1999-2050 for Vehicles Operating on Roadways Using EPA's MOBILE6.2 Model

Pollutant/VMT	Pollutant Emissions (tons) and Vehicle-Miles Traveled (VMT) by Calendar Year							Reduction 1999 to 2050
	1999	2000	2010	2020	2030	2040	2050	
Acrolein	2570	2430	1000	775	824	970	1160	-55%
Benzene	102000	98400	38000	27000	28700	33900	40500	-60%
1,3-Butadiene	14400	14100	5410	4360	4630	5460	6520	-55%
Diesel PM	139000	128000	50000	11400	7080	7070	8440	-94%
Formaldehyde	50900	48800	21400	17800	19000	22400	26800	-47%
Naphthalene	4150	4030	1990	1780	2030	2400	2870	-31%
Polycyclic Organic Matter	561	541	259	233	265	313	373	-33%

**Air Quality**

Trillions VMT	2.69	2.75	3.24	3.88	4.63	5.51	6.58	145%
---------------	------	------	------	------	------	------	------	------

Source: U.S. Environmental Protection Agency. MOBILE6.2 Model run 20 August 2009

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 the potential health risks posed by MSAT exposure should be factored into project-level decision-making within the context of the National Environmental Policy Act (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 emerging 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 the FHWA entitled A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives, found at:

[www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm](http://www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm)

**The paragraph in this text box is guidance, do not insert into environmental document.**  
**NOTE:** The following are examples of qualitative MSAT scenarios for various project types. Each project is different, and some projects may contain elements covered in more than one of the examples below. These scenarios should be used as a starting point only. The document should be tailored to reflect the unique circumstances of the project being considered, particularly those areas that are shaded.

**Widening Projects**

For each alternative in this document, the amount of MSATs emitted would be proportional to the vehicle miles traveled (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. Refer to Table \_\_\_\_ (insert table #) or provide VMT for alternatives. 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 MOBILE6.2 emissions model, emissions of all of the priority MSAT except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases would offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models. Because the estimated VMT under each of the Alternatives are nearly the same, varying by less than (insert percentage), it is expected

## Air Quality

there would be no appreciable difference in overall MSAT emissions among the various alternatives. 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 72 percent between 1999 and 2050. 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 paragraph in this text box is guidance, do not insert into environmental document.**

The following paragraph may apply if the project includes plans to construct travel lanes closer to populated areas.

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 location), under Alternatives (indicate alternatives), and along (insert description of route) under Alternatives (indicate alternatives). 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 lower in the future.

### New Interchange Connecting an Existing Roadway with a New Roadway

**The paragraph in this text box is guidance, do not insert into environmental document.**

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.

The areas in gray should be verified for each alternative and tailored to the project.

For each alternative in this document, the amount of MSATs emitted would be proportional to the vehicle miles traveled (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. Refer to Table \_\_\_ (insert table #) or insert VMT for alternatives. In addition, because the estimated VMT under each of the Build Alternatives are nearly the same, varying by less than \_\_\_ (specify) percent, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the

---

## Air Quality

---

design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent from 1999 to 2050. 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 location), under Alternatives (indicate alternatives), and along (insert description of route) under Alternatives (indicate alternatives). 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.

## New Interchange Connecting New Roadways

**The paragraph in this text box is guidance, do not insert into environmental document.**

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. Projects from the previous example may also have economic development associated with them, so some of this language may also apply.

For each alternative in this document, the amount of MSATs emitted would be proportional to the vehicle miles traveled (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 were not previously occurring in this area. Refer to Table \_\_\_ (insert table #) or insert VMT for alternatives. 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 MSATs from indirect effects of the project such as associated access traffic, emissions of evaporative MSATs (e.g., benzene) from parked cars, and emissions of diesel particulate matter from delivery trucks, (modify depending on the type and extent of the associated development). Travel to other destinations would be reduced with subsequent decreases in emissions at those locations.

Because the estimated VMT under each of the Build Alternatives are nearly the same, varying by less than (insert percentage), it is expected there would be no appreciable difference in overall MSAT emissions among the various Build Alternatives. 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 72 percent from 1999 to 2050. Local conditions may differ from these national projections in terms of fleet

---

## Air Quality

---

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 paragraph in this text box is guidance, do not insert into environmental document.**

The following discussion would apply to new interchanges in areas already developed to some degree. For new construction in anticipation of economic development in rural or largely undeveloped areas, this discussion would be applicable only to populated areas, such as residences, schools and businesses.

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 location), under Alternatives (indicate alternatives), and along (insert description of route) under Alternatives (indicate alternatives). 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 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.

### Minor Improvements or Expansions to Intermodal Centers or Other Projects that Affect Truck Traffic

**The paragraph in this text box is guidance, do not insert into environmental document.**

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.

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. Refer to Table \_\_\_\_ (insert table #) or provide changes to truck VMT or rail activity for each alternative. This increase in truck VMT and rail activity associated with the Build

---

## Air Quality

---

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.

Because the estimated truck VMT and rail activity under each of the Build Alternatives are nearly the same, varying by less than (insert percentage), it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. Also, regardless of the alternative chosen, emissions will likely be lower in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent from 1999 to 2050. 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 paragraph in this text box is guidance, do not insert into environmental document.**

The language in the following paragraph and corresponding language in the next paragraph may apply if the intermodal center is close to other development

The additional freight activity contemplated as part of the project alternatives would 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 Alternatives (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 coupled with fleet turnover will cause substantial reductions of MSAT levels in the future in almost all cases.

[Insert a description of any emissions-reduction activities that are associated with the project, such as truck and 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, which may be important particularly to any members of sensitive populations. Under all alternatives, MSAT levels are likely to decrease over time due to nationally mandated cleaner vehicles and fuels.

## **Air Quality**

---

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

In FHWA's and TxDOT'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/ncea/iris/index.html>). 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). Two HEI studies are summarized in [Appendix D](#) of FHWA's 2009 Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents, which can be found at the following address: (<http://www.fhwa.dot.gov/environment/airtoxic/100109guidapd.htm>). This Appendix also discusses a variety of FHWA research initiatives related to air toxics. 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, <http://pubs.healtheffects.org/view.php?id=282>) or in the future as vehicle emissions substantially decrease (HEI, <http://pubs.healtheffects.org/view.php?id=306>).

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. The results produced by the EPA's MOBILE6.2 model, the California EPA's Emfac2007 model, and the EPA's MOVES model in forecasting MSAT emissions are highly inconsistent. Indications from the development of the MOVES model are that MOBILE6.2 significantly underestimates diesel particulate matter (PM) emissions and significantly overestimates benzene emissions.

---

## Air Quality

---

Regarding air dispersion modeling, an extensive evaluation of EPA's guideline CAL3QHC model was conducted in an NCHRP study ([http://www.epa.gov/scram001/dispersion\\_alt.htm#hyroad](http://www.epa.gov/scram001/dispersion_alt.htm#hyroad)), which documents poor model performance at ten sites across the country - three where intensive monitoring was conducted plus an additional seven with less intensive monitoring. The study indicates a bias of the CAL3QHC model to overestimate concentrations near highly congested intersections and underestimate concentrations near uncongested intersections. The consequence of this is a tendency to overstate the air quality benefits of mitigating congestion at intersections. Such poor model performance is less difficult to manage for demonstrating compliance with National Ambient Air Quality Standards for relatively short time frames than it is for forecasting individual exposure over an entire lifetime, especially given that some information needed for estimating 70-year lifetime exposure is unavailable. It is particularly difficult to reliably forecast MSAT exposure near roadways, and to determine the portion of time that people are actually exposed at a specific location.

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 (<http://pubs.healtheffects.org/view.php?id=282>). 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 (<http://www.epa.gov/risk/basicinformation.htm#g>) and the HEI (<http://pubs.healtheffects.org/getfile.php?u=395>) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

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 a "safe" or "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 safe or acceptable.

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.

## Air Quality

In this document, a qualitative MSAT assessment has been provided relative to the various alternatives of MSAT emissions and has acknowledged that (some, all, or identify by alternative) of the project alternatives may result in increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.

### 13. MSAT Quantitative MSAT Analysis (Optional):

Although there is no template language for a quantitative MSAT analysis, if one is conducted, it should be completed in accordance with the methodology and parameters established in the conference call. In addition, at a minimum, it should contain the following sections:

1. Mobile Source Air Toxics Background
2. Project-Specific MSAT Assessment
  - a. Project specific MSAT Information
  - b. Table with total MSAT emissions for the priority MSAT and traffic volumes in the base year, interim year (if applicable), and design year for both the build and no-build alternatives
  - c. Bar chart showing the emission changes per MSAT for the base year, interim year (if applicable), and design year for the build and no-build alternatives
  - d. A discussion of the modeling results. (If needed a discussion concerning proximity to populated areas may be included)
3. Incomplete or Unavailable Information
4. Mitigation Strategies (if applicable)
5. Conclusion.

**Do not include in template language; this is guidance only.**

#### **Resources for Quantitative MSAT Analysis:**

- A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives, FHWA, May 2006, [http://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/research\\_and\\_analysis/mobile\\_source\\_air\\_toxics/msatemissions.pdf](http://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.pdf), [http://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/methodology\\_eval.pdf](http://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/methodology_eval.pdf)
- Mobile Source Air Toxics (MSAT) Analysis Quick-Start Guide, FHWA Resource Center <http://crossroads.org/env/Guidance/Docs/MSATQuickStartGuide.pdf>, [http://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/msat\\_quick\\_start.pdf](http://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/msat_quick_start.pdf)

## Air Quality

**Do not include in template language; this is guidance only.**

### **Conference Call:**

If the project sponsor decides to conduct a quantitative MSAT analysis, then a conference call should be scheduled to determine what will be analyzed. The participants of the conference call should include personnel from: the project sponsor, TxDOT district in which the project will be located, ENV, project sponsor air quality contractor, and responsible MPO. MPO personnel are included in order to obtain region specific data necessary to conduct the MSAT assessment. Minutes should be prepared by the contractor following the conference call and distributed to all participants. The project file should be maintained by the party responsible for developing the quantitative MSAT analysis. The information addressed during the conference call should include, but not be limited to, the following:

1. Years to be analyzed (base, interim, design year)
2. Affected network (typically the links that change in volume +/- 5%)
3. Required model and modeling parameters
4. Demographical information
5. Projected traffic volumes (AADT)
6. Project termini
7. Determination that the project is consistent with the appropriate transportation plans (e.g. MTP, RTP, TIP, STIP)
8. Traffic data and source of data
9. Available and applicable monitoring data
10. Any other pertinent MSAT or project-related information.

### **14. Construction and Post-Construction Emission Template Language:**

#### **Air Quality Construction Emissions Reduction Strategies**

**The paragraph in this text box is guidance, do not insert into environmental document.**

**Although there is no obligation to identify and consider MSAT reduction strategies as part of a qualitative analysis, such strategies may be part of a project's design. Lessening the effects of MSAT should be considered for projects with substantial construction-related MSAT emissions that are likely to occur over an extended building period. Such reduction efforts should be evaluated based on the circumstances associated with individual projects, and they may not be appropriate in all cases. Refer to the following examples and template language and include in this section when appropriate. For EPA approved diesel retrofit technologies, go to: <http://epa.gov/cleandiesel/verification/> . Information on EPA diesel collaborative efforts around the country can be found at:**

**<http://www.epa.gov/otaq/diesel/> or  
<http://epa.gov/cleandiesel/ncdc-cmt.htm#wherevoulive>.**

---

## Air Quality

---

During the construction phase of this project, temporary increases in air pollutant emissions may occur from construction activities. The primary construction-related emissions are particulate matter (fugitive dust) from site preparation. These emissions are temporary in nature (only occurring during actual construction); it is not possible to reasonably estimate impacts from these emissions due to limitations of the existing models. However, the potential impacts of particulate matter emissions will be minimized by using fugitive dust control measures such as covering or treating disturbed areas with dust suppression techniques, sprinkling, covering loaded trucks, and other dust abatement controls, as appropriate.

The construction activity phase of this project may generate a temporary increase in MSAT emissions from construction activities, equipment and related vehicles. The primary MSAT construction related emissions are particulate matter from site preparation and diesel particulate matter from diesel powered construction equipment and vehicles. (Include the following 3 sentences if we are encouraging contractors to use the TERP program). The Texas Emissions Reduction Plan (TERP) includes incentive programs to encourage the development of multi-pollutant approaches to ensure that the air in Texas is both safe to breathe and meets minimum federal standards. TxDOT encourages construction contractors to utilize this program 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/>.

Include any of the following strategies that are being utilized for the project

Construction emission reduction includes strategies that reduce engine activity, reduce emissions per unit of operating time, such as reducing the numbers of trips and extended idling, or have construction occur during non-normal business hours. For this proposed project the following strategy (or strategies) will be utilized:

- An agreement that stresses work activity outside normal hours of \_\_\_\_\_ (insert school name, licensed daycare facility name, or eldercare facility name).
- Identify any verified emissions control technology retrofits or fleet modernization of engines for construction equipment.
- Identify any maintenance programs and operation protocols per manufacturers' specifications to ensure engines perform at EPA certification levels, as well as operate in accordance with area specific regulations in existing nonattainment areas.
- Identify any use of clean fuels, such as ultra-low sulfur diesel, biodiesel, or natural gas.
- Identify any idle reduction policies.
- Identify any trip reduction policies.
- Identify any night-time construction policies.

However, considering the temporary and transient nature of construction-related emissions, as well as the mitigation actions to be utilized, it is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area.

## Air Quality

### Air Quality Post-Construction Emission Reduction Strategies for Projects with Potentially Significant MSAT Levels

**The paragraph in this text box is guidance, do not insert into environmental document.**

**Although there is no obligation to identify and consider MSAT reduction strategies as part of a quantitative analysis, such strategies may be part of a congestion management process, travel demand management or travel system management strategies. Refer to the following examples and template language and include in this section when appropriate.**

**The initial decision to pursue MSAT emission reductions should be the result of interagency consultation at the earliest juncture.**

**Information on EPA diesel collaborative around the country can be found at <http://epa.gov/cleandiesel/ncdc-cmt.htm#whereyoulive>**

The following post-construction MSAT emission reduction activities and programs are associated with this project: (list any reduction strategies that are applicable)

- Travel demand management strategies and techniques that reduce overall vehicle-mile of travel; reduce a particular type of travel, such as long-haul freight or commuter travel; or improve the transportation system's efficiency, such as:
  - congestion pricing,
  - commuter incentive programs, and
  - increases in truck weight or length limits.
  - Operational strategies that focus on speed limit enforcement or traffic management policies may help reduce MSAT emissions even beyond the benefits of fleet turnover.
  - Well-traveled highways with high proportions of heavy-duty diesel truck activity may benefit from active Intelligent Transportation System programs, such as traffic management centers or incident management systems. Similarly, anti-idling strategies, such as truck-stop electrification can complement projects that focus on new or increased freight activity.
- If local entities choose or zoning requirements require buffer zones between new or expanded highway alignments and populated areas, disclose that. (Note this is a local jurisdiction issue in Texas, not a TxDOT or DOT area of jurisdiction.)
- Diesel reduction options that have been implemented for on-road equipment that commute within the region may be included.
- Other reduction strategy not listed above.

#### **15. ICI Negative Declaration Template Language:**

The project will not result in any meaningful changes in traffic volumes, vehicle mix, location of existing roadways, or any other factor that would cause an increase in

## Air Quality

emissions impacts relative to the no-build alternative. Therefore, the project will not result in actions that could possibly impact air quality. As such, TxDOT has determined that this project would generate minimal indirect and cumulative impacts on air quality. Consequently, an Indirect and Cumulative Impacts analysis for air quality was not required for this project.

NOTE: Template language is not available if air quality is analyzed under indirect and cumulative impacts as this would be project specific and context sensitive.

### **16. CO and/or PM10 Analysis - Project-level mitigation or control measures that are part of MTP/RTP/TIP commitments (Currently only applies in portions of El Paso City that are under the PM nonattainment area and/or CO maintenance area):**

Template language does not exist. If applicable, it is project specific and requires input from consultation partners, including but not limited to the MPO with jurisdiction.

### **References:**

The TxDOT air quality resources (including the 2006 Air Quality Guidelines and FHWA MSAT guidance) are located at: [ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/aq\\_guidelines\\_0606.pdf](ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/aq_guidelines_0606.pdf)

Planning information and the STIP are located at:  
<http://www.txdot.gov/business/governments/stips.htm>

Basic information on the NAAQS: <http://www.epa.gov/air/criteria.html>

A table listing Counties that are nonattainment and/or maintenance for a NAAQS and conformity dates, MTP dates and TIP/STIP dates is located at: [ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/trans\\_plans\\_conformity.pdf](ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/env/air/trans_plans_conformity.pdf)

An official listing of NAAQS nonattainment and/or maintenance counties can also be found at: <http://www.tceq.state.tx.us/implementation/air/sip/siptexas.html#naaqs>

### **Laws and Regulations**

#### Federal Clean Air Act

SAFETEA-LU (23 USC), Sections 6001 and 6011

[23 CFR 450](#)

[23 CFR 500.109](#)

[23 CFR 771](#), U.S. Department of Transportation's regulations on implementing NEPA

[40 CFR 50](#)

[40 CFR 51](#)

[40 CFR 58](#)

40 CFR [59](#), [80](#), [85](#) & [86](#) (MSAT)

[40 CFR 93](#)

[49 CFR 613](#)

[30 TAC 114](#)

[43 TAC 2.1 – 2.20 \(TxDOT's Environmental Regulations\)](#)

[Texas Clean Air Act](#) (2 THSC 382)

---

## Air Quality

---

### **Agreements that define requirements (MOUs, MOAs, PAs)**

[Memoranda of Understanding between the U.S. Department of Transportation and Environmental Protection Agency on Transportation Conformity, April 25, 2000](#)  
[Memoranda of Understanding between TxDOT and Texas Natural Resource Conservation Commission/Texas Commission on Environmental Quality, 43 TAC 2.23](#)

### **Letters and Memos Spelling Out Requirements**

Internal TxDOT Memo to District Engineers from Dianna Noble and James Randall dated November 2, 2004, RE: Importance of Consistent Project Information in Planning, Programming and Environmental Documents to Avoid Delays in Project Approval  
[Internal TxDOT Memo to Administration, District Engineers, Division Directors, and Office Directors from John Barton dated September 23, 2008 RE: FHWA Transportation Planning and NEPA Approval Guidance](#)

### **Contracts, Work Authorizations, guidance and other documents that lay out expectations by resource agencies and FHWA based on practice and experience**

[TxDOT's Environmental Manual](#)  
[TxDOT's Guidance on Tolling](#)  
[TxDOT's Air Quality Guidelines](#)  
[TxDOT's Planning and Air Quality Guidelines for Toll Projects](#)  
TxDOT's Consistency between NEPA and Planning Documents  
Federal Highway Administration's [Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas, dated March, 2006](#)  
Federal Highway Administration's [Transportation Conformity Reference Guide, revised March, 2006](#)  
[Federal Highway Administration's Interim Guidance on Air Toxic Analysis in NEPA Documents, dated February 2006](#)  
[Federal Highway Administration's Interim Guidance on Air Toxic Analysis in NEPA Documents, dated September 2009](#)  
Federal Highway Administration's Transportation Planning Requirements and Their Relationship to NEPA Process Completion, dated January 2008  
EPA Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas, December 2010  
<http://www.epa.gov/otaq/stateresources/transconf/policy/420b10040.pdf> (main document)  
<http://www.epa.gov/otaq/stateresources/transconf/policy/420b10040-appx.pdf> (appendices)  
EPA Using MOVES in Project-Level Carbon Monoxide Analyses, Dec 2010,  
<http://www.epa.gov/otaq/stateresources/transconf/policy/420b10041.pdf>

---

**Air Quality**

---

***Appendix A – Projects Exempt from Conformity under 40 CFR 93.126***

*Safety*

1. Railroad/highway crossing.
2. Hazard elimination program.
3. Safer non-Federal-aid system roads.
4. Shoulder improvements.
5. Increasing sight distance.
6. Safety improvement program.
7. Traffic control devices and operating assistance other than signalization projects.
8. Railroad/highway crossing warning devices.
9. Guardrails, median barriers, crash cushions.
10. Pavement resurfacing and/or rehabilitation.
11. Pavement marking demonstration.
12. Emergency relief (23 U.S.C. 125).
13. Fencing.
14. Skid treatments.
15. Safety roadside rest areas.
16. Adding medians.
17. Truck climbing lanes outside the urbanized area.
18. Lighting improvements.
19. Widening narrow pavements or reconstructing bridges (no additional travel lanes).
20. Emergency truck pullovers.

*Mass Transit*

1. Operating assistance to transit agencies.
2. Purchase of support vehicles.
3. Rehabilitation of transit vehicles 1.
4. Purchase of office, shop, and operating equipment for existing facilities.
5. Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.).
6. Construction or renovation of power, signal, and communications systems.
7. Construction of small passenger shelters and information kiosks.
8. Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures).
9. Rehabilitation or reconstruction of track structures, track, and track bed in existing rights-of-way.
10. Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet 1.
11. Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771.

*Air Quality*

1. Continuation of ride-sharing and van-pooling promotion activities at current levels.
2. Bicycle and pedestrian facilities.

## **Air Quality**

---

### *Other*

1. Specific activities which do not involve or lead directly to construction, such as:
2. Planning and technical studies.
3. Grants for training and research programs.
4. Planning activities conducted pursuant to titles 23 and 49 U.S.C.
5. Federal-aid systems revisions.
6. Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.
7. Noise attenuation.

**Air Quality**

---

***Appendix B – Nonattainment Areas in Texas***

This document is now located at: <http://crossroads.org/env/Guidance/AQ/default.htm>  
and on the external website at:  
[http://www.txdot.gov/txdot\\_library/consultants\\_contractors/publications/environmental\\_resources.htm](http://www.txdot.gov/txdot_library/consultants_contractors/publications/environmental_resources.htm) under the links titled Transportation Plan Conformity, MTP and TIP/STIP  
Conformity Dates.

---

**Air Quality**

---

***Appendix C – Acronyms***

AA – Attainment Area  
AADT – Average Annual Daily Traffic  
AQ – Air Quality  
CFR – Code of Federal Regulations  
CMP – Congestion Management Process  
CMS – Congestion Management System  
CO – Carbon Monoxide  
ENV – TxDOT’s Environmental Affairs Division  
EPA – Environmental Protection Agency  
EPIC – Environmental Commitments, Issues and Permits  
ETC – Estimated Time to Completion  
FHWA – Federal Highway Administration  
MA – Maintenance Area  
MPA – Metropolitan Planning Area  
MPO – Metropolitan Planning Organization  
MSAT – Mobile Source Air Toxics  
MTP – Metropolitan Transportation Plan  
NAA – Nonattainment Area  
NAAQS – National Ambient Air Quality Standards  
PM – Particulate Matter  
PS&E – Plans, Specifications and Estimates  
RMA – Rural Maintenance Area  
RNAA – Rural Nonattainment Area  
SFP – Satisfactory for Further Progress  
SIP – State Implementation Plan  
SOP – Standard Operating Procedures  
SOU – Standards of Uniformity  
STIP – Statewide Transportation Improvement Program  
TAC – Texas Administrative Code  
TAQA – Traffic Air Quality Analysis  
TCEQ – Texas Commission on Environmental Quality  
TIP – Transportation Improvement Program  
TMA – Transportation Management Area  
TxDOT – Texas Department of Transportation