Guidance on Addressing Air Quality, Greenhouse Gas Emissions, and Energy for WSDOT Projects

April 2020
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1. OVERVIEW

This guidance describes the process WSDOT recommends for evaluating air quality (conformity and mobile source air toxics), greenhouse gas emissions, and energy in project documentation to meet NEPA, SEPA, and Clean Air Act requirements. These three analysis types are addressed together because they use the common tools and inputs.

This guidance provides “how-to” meet the policy requirements discussed in the Air Quality, Greenhouse Gas, and Energy chapter of WSDOT’s Environmental Manual. While this information covers most circumstances, it does not cover every possibility. For unusual circumstances or questions, contact the WSDOT HQ air quality staff.

Use the Air Quality, Greenhouse Gas, and Energy Discipline Report Template to document the project analysis.

1.1. Analysis Process

The general process for addressing air quality, greenhouse gas emissions, and energy includes the following steps:

1. Identify the types of analyses needed.
2. Identify tools, inputs and parameters, and collect relevant information.
3. Conduct the analysis.
4. Describe the analysis and results.
5. Document the analysis process for the project record.

The following sections describe how to complete each of these activities.

2. IDENTIFY ANALYSES NEEDED

First, determine which analyses a project requires based on the project’s characteristics. Conformity, mobile source air toxics, greenhouse gas emissions, and energy each have their own triggers, although some triggers are interrelated. The flow chart below, Exhibit 1, is also available as a standalone document on the WSDOT Air quality, greenhouse gas, & energy policies and procedures webpage. The following sections are meant to provide more detail than the flowchart can to aid in determining what type of analyses a project requires.
Exhibit 1 – Air and Energy Analysis Triggers Flowchart

<table>
<thead>
<tr>
<th>CONFORMITY</th>
<th>MSAT EMISSIONS</th>
<th>GHG EMISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the project located in a maintenance or construction area?</td>
<td>Is the project a CE under 23 CFR 773.117, exempt under CAA 40 CFR 63.126</td>
<td>Is the project a CE?</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Is the project exempt from conformity?</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Conformity not required - STOP</td>
<td>No MSAT analysis required - STOP</td>
<td>No</td>
</tr>
<tr>
<td>For which pollutants does the project require conformity?</td>
<td>Does the project have a meaningful impact on traffic (adding capacity or similar)?</td>
<td>Is MOVES being run to meet other requirements?</td>
</tr>
<tr>
<td>PM</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Does the project have &gt; 140,000 AADT?</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>PM</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Is the project one of the five types that may be a POAQC?</td>
<td>Document the negligible impact on traffic in the NEPA document</td>
<td>Complete a qualitative operational GHG analysis. Use standard language in WSDOT GHG Guidance. Use ICE for construction and maintenance emissions.</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Follow FHWA MSAT Guidance App B and C to complete a qualitative analysis.</td>
<td>The project requires a quantitative MSAT analysis. Follow FHWA MSAT Guidance App C and E</td>
<td>Complete a qualitative GHG analysis. Use standard language in WSDOT GHG Guidance. Use ICE for construction and maintenance emissions.</td>
</tr>
<tr>
<td>No</td>
<td>Complete a qualitative hotspot analysis (work with HQ AQ).</td>
<td>Complete a qualitative GHG analysis. Use standard language in WSDOT GHG Guidance. Use ICE for construction and maintenance emissions.</td>
</tr>
<tr>
<td>Complete a conformity statement.</td>
<td></td>
<td>No Energy analysis needed - STOP</td>
</tr>
</tbody>
</table>

**Definitions**

- AADT = annual average daily traffic
- CAA = Clean Air Act
- CO = carbon monoxide
- GHG = greenhouse gas
- IAC = interagency consultation
- ICE = FHWA’s Infrastructure Carbon Estimator Tool
- MSAT = mobile source air toxics
- PM = particulate matter
- POAQC = project of air quality concern
- WASIST = WA State Intersection Screening Tool
2.1. Criteria Pollutants
The Clean Air Act identifies six criteria pollutants: carbon monoxide, ozone, particulate matter, nitrogen oxides, lead, and sulfur dioxide. For each of these pollutants, EPA has established national ambient air quality standards (NAAQS). These standards are concentration limits for ambient air – outside air that the public has access to. If an area exceeds the limits, EPA may designate the area as being in nonattainment of the standard. Among other requirements, a nonattainment area must comply with conformity requirements that ensure that federal actions do not cause or contribute to a violation of the standard or impede the timely attainment of the standard. Once a nonattainment area’s air quality has improved, EPA will redesignate the area as being in attainment and the area is required to have a maintenance plan in place for 20 years. During those 20 years, the area must continue to meet conformity requirements.

2.1.1. Operational Emissions – Conformity
A conformity demonstration is required for all non-exempt projects in maintenance or nonattainment areas. The analysis required depends on the pollutant and project features.

Progress through the following questions until you reach direction to stop or complete an analysis:

1. Is the project in a maintenance or nonattainment area?
   - No – no conformity needed. Stop here.
   - Yes – continue to next question.

2. Is the project exempt from conformity per 40 CFR 93.126, 40 CFR 93.128, or WAC 173-420-110?
   - Yes – no conformity needed. Stop here.
   - No – continue to next question.

3. For which pollutant(s) is the area in nonattainment or maintenance? More than one may apply.
   - Ozone – no ozone conformity requirements active in WA. Stop here.
   - Carbon monoxide (CO)
     - Complete a hotspot analysis using WASIST or the FHWA Categorical Hot-Spot Finding Tool, see section 3.
     - Include a conformity statement in project documents. See section 8 for the required language.
   - Particulate matter (PM_{2.5}, PM_{10}) – continue to next question.
4. Is the project one of the five types that may be a “project of air quality concern” (POAQC) (see 40 CFR 93.123(b)(1))? 
- New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles
- Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project
- New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location
- Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- Projects in or affecting locations, areas, or categories of sites which are identified in the PM$_{2.5}$ or PM$_{10}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

☐ No
- Complete a qualitative assessment for the project, see section 6
- Include a conformity statement in project documents. See section 8.

☐ Yes
- Consult with the WSDOT headquarters air quality staff to navigate interagency consultation process to determine if a quantitative hotspot analysis is required.
- If the project requires a quantitative PM hotspot analysis, work with the headquarters air quality staff to work through the modeling procedures with the FHWA Air Resources Center, local FHWA office, and interagency consultation partners. Consultation partners must be engaged during the modeling process to approve modeling choices. WSDOT headquarters staff must be involved if a PM hot-spot analysis is conducted.

2.1.2. Operational Emissions – Emissions Burden
An emissions burden analysis is an estimation of a project’s total operational emissions. No emissions burden analysis is needed for criteria pollutants. In the past, if MOVES was being run for a project, WSDOT completed an emissions burden analysis for criteria pollutants. However, this level of analysis is not required and WSDOT no longer completes these
analyses except in unusual circumstances. Consult with the WSDOT HQ air quality staff to determine if an emissions burden analysis may be needed.

2.1.3. Construction Emissions
An air quality discipline report and the air quality section of an EI or EIS should include a qualitative discussion of the criteria pollutants effects of construction. The discussion should discuss fugitive dust and associated best management practices. See the air quality greenhouse gas, and energy discipline report template on our Air Quality, Greenhouse Gas, and Energy Policies and Procedures web page for standard language.

2.2. Mobile Source Air Toxics (MSAT)

WSDOT follows FHWA’s 2016 Interim Guidance on Mobile Source Air Toxics.

Mobile source air toxics (MSATs) are a subgroup of hazardous air pollutants identified by EPA as having significant contributions from mobile sources. These pollutants are

- 1,3-butadiene, acetaldehyde
- acrolein
- benzene
- diesel particulate matter (diesel PM)
- ethylbenzene
- formaldehyde
- naphthalene
- polycyclic organic matter (POM)

From time to time, this list is modified based on new information. Consult FHWA’s 2016 Interim Guidance on Mobile Source Air Toxics for the most current list of pollutants.

2.2.1. Operational Emissions
Answer the following questions to determine the type analysis needed:

1. Is the project a CE under 23 CFR 771.117 or exempt under 40 CFR 93.126?
   - Yes – no consideration needed. Stop here.
   - No – continue to next question.

2. Does the project have a meaningful impact on traffic (does it add capacity or have similar effects)?
   - Yes – continue to next question.
3. Does the project have average daily traffic volumes over 140,000?
   - No – follow FHWA MSAT Guidance App B and C to complete a qualitative analysis. See section 6.
   - Yes – the project requires a quantitative MSAT analysis. Follow FHWA MSAT Guidance App C and E. See section 5 for more information.

2.2.2. Construction Emissions
For projects requiring an MSAT analysis, MSAT emissions should be briefly mentioned in the qualitative construction emissions description of an air quality discipline report and environmental documentation. See the air quality greenhouse gas, and energy discipline report template for suggested language.

2.3. Greenhouse Gas Emissions (GHG)
WSDOT addresses the greenhouse gas emissions from our projects to support sound decision making and inform the public of the effects of our projects. WSDOT follows our guidance: Project-Level Greenhouse Gas Evaluations under NEPA and SEPA.

2.3.1. Operational Emissions
The following questions outline the recommendations in WSDOT’s guidance.

1. Is the project a CE?
   - Yes – use the appropriate standard language in the WSDOT guidance. Stop here.
   - No – continue to the next question.

2. Is the project being documented with an EA or EIS?
   - No – if the project has documentation, qualitatively describe the project’s effects on operational and construction emissions. Refer to the WSDOT’s guidance for standard language. Stop here.
   - Yes – continue to the next question.

3. Is MOVES being used to meet other requirements (e.g., MSATs or Energy)?
   - Yes – Complete a quantitative operational GHG analysis. Incorporate the standard language in the WSDOT GHG Guidance into the project environmental documentation.
No – Complete a qualitative operational GHG analysis. Incorporate the standard language in the WSDOT GHG Guidance into the project environmental documentation.

2.3.2. Construction Emissions
Include GHGs in the qualitative discussion of construction effects.

For projects being evaluated with an environmental assessment (EA) or environmental impact statement (EIS), use FHWA’s Infrastructure Carbon Estimator (ICE) tool to estimate construction and maintenance greenhouse gas emissions. A new version of ICE is available, but not yet published online. Request a copy of the ICE tool from the WSDOT HQ air quality staff.

2.4. Energy
An energy analysis addresses the project’s energy use and effects on energy supply. These analyses are only completed for projects being documented with an EIS. Occasionally, projects are documented with an EIS for specific concerns; these projects may have different needs for addressing energy. Consult with the WSDOT HQ air quality staff in these cases.

2.4.1. Operational Energy Use
For projects at the EIS level, complete an operational energy analysis using MOVES. See section 5 for more information on MOVES analyses.

2.4.2. Construction Energy Use
For projects at the EIS level, use FHWA’s ICE tool to estimate construction energy requirements. See above to request from WSDOT.

3. CO HOTSPOT ANALYSIS
A CO hotspot analysis estimates the CO concentration in a localized area. For the purposes of transportation conformity, we calculate the concentration at intersections affected by the project. Intersections that pass screening with the Washington State Intersection Screening Tool (WASIST) or the FHWA Categorical Hotspot Finding tool require no additional analysis.
3.1. Approved Modeling Tools
The Washington State Intersection Screening Tool (WASIST) is approved for hot-spot analysis throughout the state and addresses a wider variety of intersection types. WASIST is available for free from WSDOT. Contact Jim.laughlin@wsdot.wa.gov to receive a copy of the tool. WASIST includes built-in help information.

FHWA has released a Carbon Monoxide Categorical Hotspot Finding tool that satisfies project-level conformity requirements for eligible projects.

Intersections that pass screening with one of these two tools require no additional analysis.

3.2. Identify inputs and parameters, collect relevant information
Transportation conformity regulations require analysis of all intersections affected by the project within nonattainment or maintenance areas that are Level of Service (LOS) D, E, or F in the Existing or Design Year. “Affected intersections” have at least a 10 percent increase in volumes or a degradation of LOS to D or worse with the project. (Choosing the top three intersections by volume and LOS is no longer an option.)

Obtain intersection data from the project office to identify those intersections requiring a hot-spot analysis. Use FHWA’s Categorical Hotspot Tool or WASIST to analyze the affected intersections. When the total predicted one-hour CO concentrations (standard is 35 ppm) are less than the eight-hour CO standard (9 ppm), no separate eight-hour analysis is necessary.

If an intersection does not pass the screening analysis, contact the WSDOT headquarters air quality staff for further assistance.

4. PM HOTSPOT ANALYSIS
Because of the complexity of PM hotspot analysis, if this analysis is required, coordination with the local FHWA office and the FHWA Air Resources Center will be required, as will ongoing approvals from the interagency consultation partners. For these reasons, all PM hotspot work must be closely coordinated with the WSDOT headquarters air quality staff.

Detailed information on conducting a PM hotspot analysis is available in EPA’s Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM$_{2.5}$ and PM$_{10}$ Nonattainment and Maintenance Areas.
In documentation for projects determined not to need a quantitative PM hotspot analysis, include a description of the consultation process, materials prepared to support the determination, and a conformity statement.

5. MOVES ANALYSIS (MSAT, GHG, AND ENERGY)

EPA’s Motor Vehicle Emissions Simulator (MOVES) estimates emissions for criteria pollutants, MSAT emissions, greenhouse gases, as well as energy use. These analysis can be conducted simultaneously by ensuring the appropriate pollutants and processes are simultaneously checked. Thus, adding a pollutant or category of pollutant to a MOVES analysis requires selecting additional pollutants and summarizing the additional pollutant results.

5.1. Identify inputs and parameters, collect relevant information

MOVES consists of two parts, the graphical user interface where model parameters are selected and the database where project specific inputs are uploaded.

Exhibit 2 identifies the user selections for a typical project run spec. For other purposes, other choices may be appropriate. Run spec choices should be be documented in the discipline report.

Exhibit 3 lists the input files required to run MOVES and identifies recommended sources for each file. Identify document sources in the discipline report.

Additional information on using the MOVES model is available on EPA’s MOVES website. The FHWA Air Resources Center can answer questions. As part of the project documentation review process, headquarters air quality staff will review model inputs and outputs.
## Exhibit 2 – MOVES Runspec Selections

<table>
<thead>
<tr>
<th>Navigation Panel</th>
<th>Parameters – sample selections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>• Document the purpose of each run</td>
</tr>
<tr>
<td><strong>Scale</strong></td>
<td>• Model – Onroad/Offroad</td>
</tr>
<tr>
<td></td>
<td>• Domain/Scale – County/Project</td>
</tr>
<tr>
<td></td>
<td>• Calculation Type – Inventory/Emission Rates</td>
</tr>
<tr>
<td><strong>Time Spans</strong></td>
<td>• Time Aggregation Level – Hour</td>
</tr>
<tr>
<td></td>
<td>• Year – Existing/Opening/Design</td>
</tr>
<tr>
<td></td>
<td>• Months – typically all months</td>
</tr>
<tr>
<td></td>
<td>• Days – Weekdays/Weekends</td>
</tr>
<tr>
<td></td>
<td>• Hours – typically all hours</td>
</tr>
<tr>
<td><strong>Geographic Bounds</strong></td>
<td>• Region – County</td>
</tr>
<tr>
<td></td>
<td>• State – Washington</td>
</tr>
<tr>
<td></td>
<td>• Counties – one county at time, may need multiple counties, depending on project location.</td>
</tr>
<tr>
<td><strong>On Road Vehicle Equipment</strong></td>
<td>• All applicable vehicle and fuel combinations</td>
</tr>
<tr>
<td><strong>Road Type</strong></td>
<td>• Road Type – Urban Restricted/Urban Unrestricted/Rural Restricted/Rural Unrestricted</td>
</tr>
<tr>
<td><strong>Pollutants and Processes</strong></td>
<td>• Pollutants – depend on analysis</td>
</tr>
<tr>
<td></td>
<td>• Processes – depend on analysis</td>
</tr>
<tr>
<td><strong>Manage Input Data Sets</strong></td>
<td>• Specify input database</td>
</tr>
<tr>
<td><strong>Strategies</strong></td>
<td>• No selections needed</td>
</tr>
<tr>
<td><strong>General Output</strong></td>
<td>• Units of Mass – grams, Energy - joules, and Distance – miles</td>
</tr>
<tr>
<td></td>
<td>• Activity – Distance traveled</td>
</tr>
<tr>
<td><strong>Output Emissions Detail</strong></td>
<td>• No selections needed</td>
</tr>
<tr>
<td><strong>Advanced Performance Measures</strong></td>
<td>• No selections needed</td>
</tr>
<tr>
<td>Input File</td>
<td>Data Source</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Age Distribution</td>
<td>Ecology – Number of vehicles at different ages</td>
</tr>
<tr>
<td>Average Speed Distribution</td>
<td>Project traffic data – Calculated for each vehicle class and speed combination for each hour and road type</td>
</tr>
<tr>
<td>Day VMT</td>
<td>Ecology – Fraction of VMT on weekdays and weekends</td>
</tr>
<tr>
<td>Fuel</td>
<td>Ecology or defaults – fuel characteristics and supply</td>
</tr>
<tr>
<td>Hour VMT</td>
<td>Project traffic data – VMT by hour and</td>
</tr>
<tr>
<td>I/M</td>
<td>Ecology – Inspection and Maintenance program attributes</td>
</tr>
<tr>
<td>Meteorological Data</td>
<td>Default</td>
</tr>
<tr>
<td>Month VMT</td>
<td>Ecology – VMT fraction for each month of the year</td>
</tr>
<tr>
<td>Ramp Fraction</td>
<td>Default or Project traffic data</td>
</tr>
<tr>
<td>Road Type Distribution</td>
<td>Project traffic data – Fraction of each vehicle class’ VMT distributed on each roadway type</td>
</tr>
<tr>
<td>Source Type Population</td>
<td>Project traffic data – Vehicle population by source type, can be based on highest daily volume in the project area and distributed to source types.</td>
</tr>
<tr>
<td>Vehicle Type VMT</td>
<td>Project traffic data – VMT by vehicle types, HMPS or MOVES</td>
</tr>
</tbody>
</table>
6. QUALITATIVE OPERATIONAL ANALYSIS

All projects at the EA or EIS level require an air quality analysis. Projects that do not require a quantitative analysis can be evaluated with a qualitative analysis.

Depending on project features, a qualitative analysis could discuss criteria pollutants, MSATs, and GHGs. Different project features trigger qualitative analyses for each pollutant type. Refer to Section 2: Identify Analyses Needed to determine the level of analysis your project requires.

6.1. Criteria Pollutants

If the project area is in attainment for all criteria pollutants, conformity analysis is not required and this category of pollutants can be addressed qualitatively.

If the project is being documented in an EA or EIS, include the following information in a criteria pollutant qualitative discussion:

- History of attainment for the project area
  - Was it previously a nonattainment and maintenance area?
  - If so, when did the maintenance requirements expire?

- Current air quality monitoring design values from the nearest monitor
  - Contact the operator of the monitoring station (usually local clean air agency) to get the design values (not just the highest values). The design values may not include all monitored values due to exceptional events (usually wildfire fires).

- Briefly discuss how the project is likely to affect air quality.
  - Will the project reduce congestion and thus lower emission rates?
  - Will the project move the roadway closer to or farther away from sensitive receivers in the area (medical facilities, schools, etc.)?

- Briefly discuss the expected future trends of criteria pollutant emissions due to improving vehicle technology.

6.2. Mobile Source Air Toxics

Per FHWA guidance, Projects with Low Potential MSAT Effects require a qualitative assessment. Include the following information in your discussion:
Compare, in narrative form, the expected effect of the project on traffic volumes, vehicle mix, or routing of traffic and the associated changes in MSAT for the project alternatives, including no-build, based on VMT, vehicle mix, and speed. Refer to FHWA MSAT Guidance, Appendix B for example language.

Include FHWA’s text on national trend data projecting overall reductions in emissions due to stricter engine and fuel regulations issued by EPA.

Include FHWA’s standard discussion of information that is incomplete or unavailable for a project specific assessment of MSAT impacts, in compliance with the Council on Environmental Quality (CEQ) regulations (40 CFR 1502.22(b)). This information should be copied directly from the FHWA MSAT Guidance website.

6.3. GHG Emissions
Refer to WSDOT’s Project-Level Greenhouse Gas Evaluations under NEPA and SEPA for recommended background language and sample project description language.

7. CONSTRUCTION ANALYSIS
All projects require an analysis of construction effects. See template for standard language.

7.1. Criteria pollutants and MSATs
Criteria pollutants should be considered qualitatively, including a description of fugitive dust. As needed, MSAT emissions should be included in this qualitative analysis.

Compare, in narrative form, the expected effect of the project on construction traffic volumes, or routing of traffic and the associated changes in emissions and energy consumption for the project alternatives, based on available data.

Include a list of possible mitigation measures. See the Air Quality Discipline Report Template for standard measures.

7.2. Greenhouse Gases and Energy
For EIS-level project, energy and GHGs should be quantitatively analyzed using the FHWA ICE tool, version 2.0. The updated version is not yet available online, but can be requested from the WSDOT HQ for Air Quality and Climate. This guidance will be updated with a link to the tool when it is online.
8. DESCRIBE THE ANALYSIS AND RESULTS

An air quality or energy discipline report should adequately describe the project, background, analysis process, and results while remaining as clear and concise as possible. The purpose of NEPA is to disclose project effects, document compliance with other environmental regulations, and support good decision making.

WSDOT recommends using our Air Quality Discipline Report Template as the backbone for all air and energy discipline reports. This template includes the required sections (although not all reports will require all sections), standard language, and instructions. Refer also to Section 6 on Qualitative Assessments for a description of background language to include.

8.1. Discipline Report sections

The points below summarize what should be covered in each section of an air quality, greenhouse gas, and energy discipline report. ‘Right-size’ sections to the project.

- **Summary** – Summarize key elements of the report’s purpose, study approach, existing condition, and operational and construction effects of all alternatives (existing, no build, and build alternative(s)) for each of the areas of study. If a common pollutant is not addressed, briefly explain why (i.e., the area is no longer under a maintenance plan and conformity is no longer required for the pollutant).

- **Project Description** – Describe the project, including the location, scope, alternatives, anticipated construction time frame, year of opening, and design year. Provide an overview of traffic projections with and without the project.
  - If MSATs need to be addressed, identify sensitive receivers within about 500 feet of the project.

- **Study Approach** – Include an overview of regulations the project must meet, including what analysis are required, or not, and why. Identify study approach and models used, including analysis years, study area and how it was determined, data sources, information collected, and model run spec selections.
  - If interagency consultation was required for PM emissions, include any determinations made and attach any final documents provided to the consultation partners as an appendix.
  - For quantitative analysis, providing model details in an appendix is acceptable.

- **Affected Environment** – Provide a concise description of the existing setting for the area affected by all alternatives. Identify any sensitive receptors in the study area.
The information included should have a bearing on possible impacts, mitigation measures, and on the selection of an alternative and be pertinent to the air quality analysis.

- For project documents that address GHGs, include background GHG language from Project-Level Greenhouse Gas Evaluations under NEPA and SEPA.
- If the project is required to address MSATs, include FHWA language (Incomplete data text can go in an appendix).

- **Existing Conditions** – Identify existing pollutant levels and energy use, including recent design values for criteria pollutants.

- **Project Effects** – Operational, construction, and indirect effects for each pollutant type. Discuss pertinent project features that affect emissions, such as changes in VMT and travel distances.
  - Tables showing emissions for existing, year of opening (if analyzed), and design year
  - MSATs – include required language from FHWA’s MSAT Guidance
  - GHGs – include WSDOT template language

- **Conformity Statement** – If the project is required to demonstrate conformity for CO or particulate matter, include a conformity statement. See section 8.2 below for language.

- **Measures to Avoid or Minimize Effects** – If the project meets conformity requirements, or does not have to demonstrate conformity, a statement that mitigation is not required because no adverse significant impacts from the project. Identify fugitive dust best management practices that WSDOT will use.

- **Conclusion** – The conclusion should summarize the results of the analysis and discuss any environmental considerations as a result of the analysis.

- **References** – List all references. Include any references not commonly available with electronic files submitted.

- **Appendix** – Use the appendix to provide detailed technical documentation for the project as needed. Include the following as relevant:
  - WASIST screen shots
  - FHWA CO tool screen shots
  - Descriptions of MOVES inputs and processing
o Documentation of modeling decisions or consultations – emails or meeting notes showing who was involved in any decisions
o List of electronically provided files

8.2. Conformity Statement Language
A conformity statement outlines the specific conformity requirements and succinctly addresses how the project meets each requirement. Exhibit 4 includes sample introductory text and lists the requirements. Address each of the bullets below in the project documentation to show that the project meets conformity requirements. Provide citations as necessary.
Exhibit 4 – Conformity Statement Language

Because the [name of] project lies within a [identify pollutant] maintenance area, the project must comply with the project-level conformity criteria of the EPA Conformity Rule and with WAC Chapter 173-420.

The [MPO name] must include regionally significant projects the maintenance areas in their approved MTP and federally approved TIP. The regional conformity analysis was reviewed by the consultation partners and FHWA, as documented in [document name].

As stated in 40 CFR Part 93, the following criteria must be met when determining project conformity. A brief summary of the project's conformity to the State Implementation Plan is discussed with each criterion:

- The conformity determination must be based on the latest planning assumptions (40 CFR Part 93.110). [Project info]
- The conformity determination must be based on the latest emission estimation model available (40 CFR Part 93.111). [Project info]
- The project must come from a conforming transportation plan and program (40 CFR Part 93.114). [Project info]
- There must be a current conforming plan and a current conforming TIP at the time of project approval (40 CFR Part 93.115). [Project info]
- The project must not cause or contribute to any new localized CO or violation in CO and PM$_{10}$ nonattainment or maintenance areas (40 CFR Part 93.116). [Project info]
- The FHWA project must comply with control measures in the applicable implementation plan (40 CFR Part 93.117). [Project info]
9. DOCUMENT THE ANALYSIS

In addition to describing the analysis process and results in an air quality discipline report and project environmental document, the analysis documents should be saved together. This is particularly important for more complicated modeling processes. Each alternative will have a unique set of documents. The documentation could include any of the following as relevant:

- Traffic data files showing what was received from the project office and how the modeling inputs were derived
- MOVES modeling files
  - Input spreadsheets
  - Output summaries
  - Input and output databases
  - MOVES run specs
- WASIST modeling files
- ICE Spreadsheet tool
- Any additional data sources, spreadsheets, and source documents