



APPENDIX B

Survey Results

State DOT Air Quality Practices
Appendix B
Survey Responses by State DOT
(shown in order of responses received or revised)
Note: Questions skipped by the respondents are generally not shown.

Nebraska Department of Transportation

Q3

No _____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

Yes,

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
 - b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
 - c. Other, please explain in box (then go to Question 40)
-

- a. Guidance on Mobile Source Air Toxic Analysis in NEPA documents
-

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

No

Does your state or any part of your state contain a non-attainment or maintenance area?

Q42

No. Please go to Q48

If no to Q41, do you expect any changes in that status in the next 6 months or so?

State DOT Air Quality Practices

Q48**Some**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Nevada Department of Transportation-Environmental Services Division

Q1

Yes

If you are a relatively new to air quality (say, less than 6 months experience) please check here, but complete the survey to the best of your ability.

Q3

Yes _____, please go to Question 6

Does your State have written project-level air quality analysis procedures?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q6

Are your air quality analysis procedures publicly available?

No, please identify means to obtain them,

Other (please specify):

We are currently in the process of updating the internal procedure. I can send you what we had previously. I have been in my dual role (noise and air) for over 4 years, but have not had to conduct an analysis. So far, what I have done is help to ensure that all projects are listed correctly in local TIPS and STIPS for AQ and ensure in areas with non-attainment/maintenance the projects are put into the regional model. I have completed no modeling myself.

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 10 microns in diameter and smaller (PM10)

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Ozone and ozone precursors (O3(VOCs/NOx)),

Mobile Source Air Toxics (MSATs),

Greenhouse Gasses (GHGs)

State DOT Air Quality Practices

Q8

Are your procedures primarily qualitative? If qualitative only, please proceed to Question 25.

Q25**99% consultant**

Are the project-level analyses primarily performed:

Both _____ If both, please provide an approximate percentage breakdown of in-house and consultant services analyses

_____ % in-house analyses

_____ % consultant services analyses

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.): scale, by level of public interest, etc.):

Intensity of work. If it's a general overview we can reference previous project documents to use as a template.

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Yes, please explain development and circumstances for use:

Intensity of work. In my experience a consultant will always say the work needs to be complete and want to perform unnecessary modeling. We try to streamline it as much as possible. I would like to bring this in-house, but don't yet have experience and the previous person who did is now gone.

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

Consultant services have an internal to them QA/QC in their contract for all services including AQ. My predecessor would get into the weeds and spot check the modeling.

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

State DOT Air Quality Practices

Q34

No

Have any of these analyses resulted in a concentration greater than or equal to the NAAQS?

If any, please explain the outcome of the analysis and the effect on the project:

Q40

Yes. Please explain circumstances and outcome:

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No, but we are still following best practices from an earlier lawsuit from the Sierra Club and are hyper vigilant.

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

Yes____(Please include a link or other means to obtain them):

Does your state air quality agency have a transportation conformity regulation specific to your state?

Unknown. Not sure if you mean the SIP. Our Department of Environmental Protection, Air can be found at <https://ndep.nv.gov/air>

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

No

State DOT Air Quality Practices

Q46

Does your project-level transportation conformity guidance go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

United States

go beyond State Air Quality Agency requirements to meet Department or local requirements?
If yes, please explain:

NV**Q48****Some**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

The checklist for PM is a huge improvement and saves much unnecessary modeling. We also use a "worst 3 intersections" check for CO. If project areas won't be worse than that, then we will be good for CO.

State DOT Air Quality Practices

Oregon DOT Environmental and Hydraulic Engineering Section

Q3

Yes_____, please go to Question 6

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

Yes

Has your Department performed a project-level air quality analysis within the last 5 years?

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

https://www.oregon.gov/ODOT/GeoEnvironmental/Docs_Environmental/Air-Quality-Manual.pdf

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 10 microns in diameter and smaller (PM10)

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Mobile Source Air Toxics (MSATs),

Greenhouse Gasses (GHGs)

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

Quantitative and qualitative for CO based on LOS and project description
Qualitative for PM10/PM2.5 because maintenance areas are low traffic volumes/low number of projects in areas in most recent past
GHGs both MSAT both based on FHWA guidance

State DOT Air Quality Practices

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:

no programmatic agreement CO model inputs are in the manual and coordination occurs during project analysis with MPO and DEQ for MOVES model inputs to ensure latest model inputs There are report outlines available and qa/qc checklist are being finalized.

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey,

Transportation demand model,

Microsimulation model,

VMT projections,

Other (please identify),

Other (please specify):

Depending on the scale of the project and availability of the data a number of methods are utilized from project to project. ODOT has traffic procedures manual that is being revised that addresses how to create traffic data for air quality studies but I am not sure that the existing manual is really followed by analysts that prepare the data. Additionally, air analysts do not always get documentation on how the traffic data was created and are only provided with the numbers for the parameters that were requested.

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Other (please identify)

unsure

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Not considered

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

No

State DOT Air Quality Practices

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Other (please specify):

PM refers to 125,000 K and 8% trucks MSAT uses the numbers in MSAT guidance

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Worst-case intersection,

Emissions levels in a specific year (e.g. Design Year or Estimated Time Completion (ETC))

Facilities with a specified % increase in traffic,

Other (please specify):

page 55- worst case CO intersection page 95-97 of air quality manual traffic input request

Q16

Which of the following models do your procedures include for emissions:

MOVES

Q17

Which of the following models do your procedures include for dispersion:

CAL3QHC,

AERMOD,

Other (please specify):

we have not run AERMOD, so the details in manual are minimal

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

No

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Other (please explain):

We do not do PM10 or PM2.5 hot spot yet, so have not ODOT has not had to seek a background. Although, maybe it is the SIP for those areas. For CO, in the 2018 revision of air manual, we were not able to obtain any monitoring that would represent background conditions so retained the background concentrations established in 2008 manual of 1.5 for Eugene/Springfield and 2ppm everywhere else.

State DOT Air Quality Practices

Q20**Worst case**

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Q21**Only do CO work with CAL3QHC**

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

Q22**No**

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

Q23

Do your procedures include a source of emissions of road dust for PM analyses?

Yes, please include source (e.g. AP-42, etc.): details included in the AQ manual page 63 discuss including re-entrained road dust.

Q24

Do your procedures include analysis of construction emissions?

Yes, please explain the method(s) you use (ICE, NCHRP 25-25 Task58, AP-42, other) and circumstances for the analysis:
Well, Section 6 of the manual discuss construction emissions but not methodology.

Q25

Are the project-level analyses primarily performed:

Both _____ If both, please provide an approximate percentage breakdown of in-house and consultant services analyses

_____ % in-house analyses

_____ % consultant services analyses:

Qualitative- 66.6% in house Quantitative 25-% inhouse varies year to year and with Portland in attainment with CO in 2017, modeling has gone down.

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Region offices do contracting with buy in from Air Quality Program Lead. It varied by pollutant, scale and project.

State DOT Air Quality Practices

Q27

No

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

Yes, please explain:

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

<https://www.oregon.gov/ODOT/GeoEnvironmental/Pages/Air.aspx> under forms/templates on this webpage

Q29

No

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

No

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31

No

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32

Both (please describe the circumstances of both types of documentation in box)

How are the results of a project-level air quality analysis documented?

Explanation:

All NEPA documents have standalone tech reports CE, EA and EIS. In EA and EIS, there are summaries from tech report.

State DOT Air Quality Practices

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO **4-8 per year, 1-2 qualitative others quantitative**PM10 **0 quantitative**PM2.5 **0 quantitative**NO2 **0 none**MSATs **2 quantitative**GHGs **7 total****Q35**

Does your Department perform a quantitative analysis of ozone precursors for any project?

No**Q36**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

No**Q37**

Does your Department perform project level GHG analyses for any projects?

Yes_____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.): size, and environmental classification

Q38

Are the analyses...

Both. Please describe the distinction between qualitative and quantitative analyses:
Qualitative was in earlier years of comparing vmt of project to state vmt and ghg inventories to project ghg. Quantitative with MOVES and ICE

Q39

Does the quantitative analysis include construction and maintenance GHG emissions?

Yes**Q40**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

State DOT Air Quality Practices

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Yes (please explain):

PM2.5 Klamath Falls and Oakridge are awaiting maintenance plans. PM10 Oakridge is awaiting maintenance plans. I do not know how far along the 3 plans are.

Q44

Does your state air quality agency have a transportation conformity regulation specific to your state?

Yes____(Please include a link or other means to obtainthem):

Just the interagency consultation part

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

If yes, are they included in your project level procedures (Y/N)?

yes

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

yes

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

no

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

State DOT Air Quality Practices

Q48**Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49**-GHG guidance**

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

-summary of states' MSAT concentration benchmarks/standards

State DOT Air Quality Practices

Wyoming Department of Transportation

Q3

No_____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

State DOT Air Quality Practices

Q45No, please continue to Q48 (Y/N) **N**

Does your Department have guidance related to project-level transportation conformity requirements?

Q46:

Does your project-level transportation conformity guidance

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

United States

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

Wyoming**Q48****Some**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Ohio DOT

Q3

Yes _____, please go to Question 6

Does your State have written project-level air quality analysis procedures?

Q6

Yes, please include a link or other means to identify them

Are your air quality analysis procedures publicly available?

Other (please specify):

http://www.dot.state.oh.us/Divisions/Planning/Environment/NEPA_policy_issues/AIR_QUALITY/Pages/default.aspx

Q7

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Which of the following pollutants do your procedures address?

Mobile Source Air Toxics (MSATs)

Q8

qualitative? If qualitative only, please proceed to Question 25.

Are your procedures primarily...

Q9

Yes, please list each type and explain circumstances for use

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Explanation:

We have process flowcharts and an AQ manual.

Q10

Traffic survey,

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Transportation demand model

Q12

Not considered

How are indirect and cumulative effects considered in deriving traffic parameters?

State DOT Air Quality Practices

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for large projects?

If Yes, please identify pollutants (such as ozone precursors, greenhouse gasses, other) and circumstances for an analysis.:

PM, OZONE, CO, NO2, VOC

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Type of project (capacity),

% increase in traffic on affected facilities,

Level of trucks

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Facilities with a specified % increase in traffic

Q16

Which of the following models do your procedures include for emissions:

MOVES

Q17

Which of the following models do your procedures include for dispersion:

AERMOD

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

No

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Nearest state air quality agency monitoring site,

Metropolitan Planning Organization

State DOT Air Quality Practices

Q20

Met data sets provided by the state air agency

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Q21

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

AERMET output files were collected from the Ohio Environmental Protection Agency website
(<http://www.epa.state.oh.us/dapc/model/modeling/metfiles.aspx>)

Q22

No

Do your procedures consider any type of “rollback” adjustment to background concentrations to account for future improvements in vehicle emission control technology?

Q23

No

Do your procedures include a source of emissions of road dust for PM analyses?

Q24

No

Do your procedures include analysis of construction emissions?

Q25

Consultant services

Are the project-level analyses primarily performed:

Q26

by project type and scale

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.):

State DOT Air Quality Practices

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Yes, please explain development and circumstances for use:

OUR OFFICE OF CONSULTANT SERVICES MAINTAINS estimates of level of effort for DIFFERENT AQ ANALYSES.

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

ODOT'S MODELING AND FORECASTING SECTION HANDLES THESE DUTIES.

Q29

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

No

Q30

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

If yes, please list and explain:

Stabilize and cover stockpiles and disturbed areas
Prevent/minimize mud tracking onto paved roadways by washing construction equipment in contained areas Cover trucks hauling soil and other materials Pre-wet material in excavated areas to reduce dust Apply water to exposed surfaces particularly those on which construction vehicles travel and other surfaces capable of producing airborne dust Reduce speed on unpaved roads Establish truck staging areas in locations that will have a minor impact on adjacent sensitive areas Shut down truck engines if queued up more than 15 minutes Ensure any burning of materials does not cause excessive air pollution

Q31

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

No

Q32

How are the results of a project-level air quality analysis documented?

A stand-alone project-level air quality analysis report

State DOT Air Quality Practices

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	0
PM10	0
PM2.5	0
NO2	0
MSATs	0
GHGs	0

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

No**Q36**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Yes__ (please explain the triggers and circumstances for the analysis):

ADDING CAPACITY PROJECT AND DYADT>140,000.

SEE FLOWCHART BELOW.

http://www.dot.state.oh.us/Divisions/Planning/Environment/NEPA_policy_issues/AIR_QUALITY/Documents/MSAT_Analysis_Process.pdf

Q37

Does your Department perform project level GHG analyses for any projects?

No. Please go to Q40**No****Q40**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No**Q41**

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43**Q43**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

State DOT Air Quality Practices

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45**If yes, are they included in your project level procedures (Y/N)?**

Does your Department have guidance related to project-level transportation conformity requirements?

Y**Q46**

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Y

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

N

go beyond State Air Quality Agency requirements to meet Department or local requirements?

N

If, yes, please explain:

Q47**The Department is the lead (e.g. Chair, Secretary, etc.) for the Interagency Consultation Process**

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

Q48**Some**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Oklahoma Department of Transportation

Q1

Yes

If you are a relatively new to air quality (say, less than 6 months experience) please check here, but complete the survey to the best of your ability.

Q3

No _____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

No

Does your state or any part of your state contain a non-attainment or maintenance area?

State DOT Air Quality Practices

Q42

If no to Q41, do you expect any changes in that status in the next 6 months or so?

Yes. Please explain, then go to Q48:

According to Oklahoma's DEQ's "Air Data Report 2018", several ozone monitoring sites are close to exceeding the standard of 0.070 ppm (4th highest daily maximum 8-hour average, averaged over three years).

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Some**Q49**

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

Local EPA or DEQ sponsored training

State DOT Air Quality Practices

Vermont Agency of Transportation

Q3

No_____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

No

Does your state or any part of your state contain a non-attainment or maintenance area?

Q42

No. Please go to Q48

If no to Q41, do you expect any changes in that status in the next 6 months or so?

Q48

Some

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Minnesota Department of Transportation**Q3**

Does your State have written project-level air quality analysis procedures?

Yes_____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

http://dotapp7.dot.state.mn.us/eDIGS_guest/DMResultSet/download?docId=647184 and starting for projects which start the env. process after 1/1/2020 we also require a GHG analysis

http://dotapp7.dot.state.mn.us/eDIGS_guest/DMResultSet/download?docId=6480560

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Mobile Source Air Toxics (MSATs),

Greenhouse Gasses (GHGs)

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):
see guidance

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:

This is included within our guidance

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Transportation demand model,

VTM projections,

HPMS data and projections

State DOT Air Quality Practices

Q12**Not considered**

How are indirect and cumulative effects considered in deriving traffic parameters?

Q13**No**

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for “large” projects?

Q14**Type of project (capacity)**

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Q15**Worst-case intersection,**

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Emissions levels in a specific year (e.g. Design Year or Estimated Time Completion (ETC))**Q16****MOVES**

Which of the following models do your procedures include for emissions:

Other (please specify):
MICE for GHG

Q17**CAL3QHC, CAL3QHC/R**

Which of the following models do your procedures include for dispersion:

Q18**No**

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

State DOT Air Quality Practices

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Nearest state air quality agency monitoring site,**On-site project-level monitoring****Q20**

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Worst case,**Raw data processed for the project analysis****Q21**

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

Require the person doing the analysis to work with the Minnesota Pollution Control Agency on values**Q22**

Do your procedures consider any type of “rollback” adjustment to background concentrations to account for future improvements in vehicle emission control technology? Do your procedures include a source of emissions of road dust for PM analyses?

No**Q23**

Do your procedures include a source of emissions of road dust for PM analyses?

No**Q24**

Do your procedures include analysis of construction emissions?

No**Q25**

Are the project-level analyses primarily performed:

Consultant services

State DOT Air Quality Practices

Q27

No

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

No

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29

No

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

No

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31

No

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32

As part of the environmental document (EIS, EA, etc.)

How are the results of a project-level air quality analysis documented?

State DOT Air Quality Practices

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO 0 but use screening**MSATs are included if federal****Q35**

Does your Department perform a quantitative analysis of ozone precursors for any project?

No**Q36**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Yes _____ (please explain the triggers and circumstances for the analysis):
yes if triggered by FHWA MSAT requirements. This is pretty rare

Q37

Does your Department perform project level GHG analyses for any projects?

Q38

Are the analyses...

Both. Please describe the distinction between qualitative and quantitative analyses:
see guidance

Q39

Does the quantitative analysis include construction and maintenance GHG emissions?

Yes**Q40**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No**Q41**

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

State DOT Air Quality Practices

	<p>Yes_____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):</p> <p>For projects which start the env. process after 1/1/2020 the analysis is required</p>
<p>Q43</p> <p>Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?</p>	<p>No</p>
<p>Q44</p> <p>Does your state air quality agency have a transportation conformity regulation specific to your state?</p>	<p>No</p>
<p>Q45</p> <p>Does your Department have guidance related to project-level transportation conformity requirements?</p>	<p>If yes, are they included in your project level procedures (Y/N)?</p> <p>Y</p>
<p>Q46</p> <p>Does your project-level transportation conformity guidance</p> <p>meet Federal requirements (Y/N):</p> <p>go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:</p> <p>go beyond State Air Quality Agency requirements to meet Department or local requirements?</p> <p>If, yes, please explain:</p>	<p>Y</p> <p>Y</p> <p>Have a lower threshold for CO</p>
<p>Q47</p> <p>What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?</p>	<p>The Department is a member and is active in the Interagency Consultation Process</p>

State DOT Air Quality Practices

Q48**Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Arizona Department of Transportation

Q3

Does your State have written project-level air quality analysis procedures?

No ____, please go to Question 4

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

reference(s)/explanation:

We have a state statute that notes we can be no stringent than what the federal rule requires for transportation conformity as such we use EPA hot-spot guidance related to conformity and associated modeling guidance. For project level reports we reference use of AASHTO Pract. Guide 18. We have our Air Quality Guidebook that includes templates for use in regional conformity analysis only and we have templates to document the interagency consultation items prior to hot-spot we just to give step by step instructions on how the hot-spot is done for a project. Guidance - <https://azdot.gov/business/environmental-planning/air-quality/guidance-air-quality> The Air Quality Guidebook describes ADOT processes used for air quality, transportation conformity and CMAQ projects. The "Guidebook" is updated as new information becomes available or when new emissions models or regulations are implemented. Any additional updates or supplements to this guide are provided below. Revised Project level hot-spot consultation in CO, PM10/PM2.5 nonattainment or maintenance areas(link is external) ADOT Air Quality Guidebook for Transportation Conformity(link is external) Appendix C: Congestion Mitigation Air Quality (CMAQ) Guidelines and Procedures(link is external) - updated August 2017

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

Yes,
We used interagency consultation see #4 our state FHWA office brought in the Resource Center to provide feedback.

State DOT Air Quality Practices

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

Screening <https://azdot.gov/business/environmental-planning/air-quality/guidance-air-quality> Project-Level Conformity Determinations Project-Level conformity determinations for Environmental Assessments (EA) or Environmental Impact Statements (EIS) will be posted to Projects and/or be available from ADOT NEPA staff. Project-Level conformity determinations for Categorical Exclusion (CE) classified projects will be provided below for projects approve after January 3, 2018. Any non-Exempt Federal Projects in PM10, PM2.5 or CO maintenance and/or nonattainment areas are required to complete the following documents, as applicable, and submit to ADOT Air Quality Staff for further action and Interagency Consultation. Project Level CO Questionnaire(link is external) - Document to be used in CO Maintenance Areas Project Level PM Project of Air Quality Concern Questionnaire(link is external) - Document to be used in PM10 and/or PM2.5 Nonattainment or Maintenance Areas Modeling - <https://azdot.gov/business/environmental-planning/air-quality/motor-vehicle-emissions-modeling> For Project-Level Conformity Hot-Spot Analysis: Any new PM hot-spots needed after January 1, 2020, will be required to use the latest version of AERMOD, refer to the Training section of the "Project Development" tab. The modeling and planning assumptions used for transportation conformity project level hot-spots require interagency consultation, ADOT utilizes the follow documents for consultation: Project Level CO Hot-Spot Analysis - Consultation Document(link is external) - to be used in CO Maintenance areas Project Level PM Quantitative Hot-Spot Analysis - Consultation Document (link is external) - to be used in PM10 and/orPM2.5 Nonattainment or Maintenance Areas

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO)**Particulate Matter 10 microns in diameter and smaller (PM10)****Particulate Matter 2.5 microns in diameter and smaller (PM2.5)**

State DOT Air Quality Practices

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):
Generally qualitative for CE's and smaller projects in attainment areas. We only assess MSAT/GHG if it a Level 3 MSAT analysis is required. All other projects would be quantitative if required by transportation conformity.

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

No, please explain reason,

Explanation:

We have CE/NEPA assignment which allows streamlining, we have a process using specific forms for projects only in nonattainment areas (see Q4). Generally we utilize the flexibilities in operational right of way to include capacity projects as CEs which limits analysis only to conformity, with NEPA assignment we assume risk and rarely implement EIS's.

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Transportation demand model,

Microsimulation model,

VMT projections,

HPMS data and projections,

Other (please identify),

Other (please specify):

We have an agreement with the MPO's that have travel demand modeling to provide their regional conformity models and their TDM shapefiles that contain the mainline traffic and truck traffic. At the project level we use microsimulation software to obtain LOS (varies from consultant hired to design and deliver a traffic study). For rural areas we often use HPMS data as we have limited TDM available.

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Transportation demand model **TransCAD**

Microsimulation model **Syncro/Vissium**

VMT projections **HCM**

HPMS data and projections **FHWA Guidance**

State DOT Air Quality Practices

Q12**Assume traffic models include these effects**

How are indirect and cumulative effects considered in deriving traffic parameters?

Q13**No**

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

Q14**Other (please specify):**

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Interagency consultation and strict adherence to projects of air quality concern in 40cfr93.123

Q15**Worst-case intersection**

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Q16**MOVES**

Which of the following models do your procedures include for emissions:

Q17**CAL3QHC,
CAL3QHC/R,
AERMOD**

Which of the following models do your procedures include for dispersion:

Q18**No**

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

State DOT Air Quality Practices

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Other (please explain):

We obtain them from the local/air agency running the monitor location generally they are required to develop an annual monitoring report that has 3 years of back data and characteristics of the monitoring sites.

Q20

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Met data sets provided by the state air agency

Q21

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

We obtain the regional conformity inputs directly. Our large MPO's are responsible for developing SIPs.

Q22

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

No

Q23

Do your procedures include a source of emissions of road dust for PM analyses?

Yes, please include source (e.g. AP-42, etc.):
AP-42 as developed by SIP and periodic emissions inventory, this is provided as part of the regional conformity info.

Q24

Do your procedures include analysis of construction emissions?

No

Q25

Are the project-level analyses primarily performed:

70/30 we rely on consultants for microsimulation work only

Both _____ If both, please provide an approximate percentage breakdown of in-house and consultant services analyses _____% in-house analyses _____% consultant services analyses:

State DOT Air Quality Practices

Q26

Design Build firm selects sub consultants

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Q27**No**

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28**No**

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29**No**

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30**No**

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

State DOT Air Quality Practices

Q32

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

Explanation:

All non-EA/EIS evaluations are posted online for public review.

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	20
PM10	10
PM2.5	0
NO2	0
MSATs	10
GHG	10

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

No

Q36

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Yes_____(please explain the triggers and circumstances for the analysis):
FHWA guidance

Q37

Does your Department perform project level GHG analyses for any projects?

Yes_____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):
Only when MSAT required we just add those pollutants to MOVES run.

Q38

Are the analyses...

Both. Please describe the distinction between qualitative and quantitative analyses: _____ :
FHWA MSAT Guidance triggers

Q39

Does the quantitative analysis include construction and maintenance GHG emissions?

Neither

State DOT Air Quality Practices

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q46

Does your project-level transportation conformity guidance

meet Federal requirements (Y/N):

y

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

n

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

n**Q47****The Department is a member and is active in the Interagency Consultation Process**

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

State DOT Air Quality Practices

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Wisconsin Department of Transportation**Q3**

Does your State have written project-level air quality analysis procedures?

No _____, please go to Question 4

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

<https://wisconsindot.gov/rdwy/fdm/fd-22-00toc.pdf>

[https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-](https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/AirQualityGuidance.pdf)

[rsces/environment/AirQualityGuidance.pdf](https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/AirQualityGuidance.pdf)

Q7

Which of the following pollutants do your procedures address?

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Ozone and ozone precursors (O3(VOCs/NOx))

Mobile Source Air Toxics (MSATs)

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

If ozone or PM2.5 is the pollutant of concern and the project is a nonexempt project, a quantitative analysis would be conducted, taking into account modeling results and the application of the appropriate transportation conformity testing procedures. In the case of MSAT, a quantitative or a qualitative analysis may be conducted depending on the AADT value for the given project.

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation: See links at Question 6

State DOT Air Quality Practices

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey

Transportation demand model

Microsimulation model

VMT projections

HPMS data and projections

Other (please specify):

It depends on project type, analysis type (regional conformity, project-level ozone conformity analysis in isolated rural areas, or hot-spot analysis) and who is performing the analysis (regional conformity by the MPO/RPC; project-level conformity, hot-spot analysis by WisDOT. WisDOT runs the Northeast Travel Demand Model, the outputs (vehicle-miles of travel, vehicle-hours of travel, and average speed) are used by the Department of Natural Resources (DNR) as inputs to the MOVES model

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Transportation demand model

VMT/VHT/average speed, vehicle types, functional class, speed bins

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Not considered

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

If Yes, please identify pollutants (such as ozone precursors, greenhouse gasses, other) and circumstances for an analysis.:

Regional ozone conformity determinations are completed by the MPO/RPC in non-attainment and maintenance areas. WisDOT performs a project-level ozone conformity determination in isolated rural non-attainment areas. Regional PM2.5 conformity analysis is performed by the MPO/RPC in Wisconsin's PM2.5 maintenance areas.

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Type of project (capacity),

% increase in traffic on affected facilities,

Level of trucks

State DOT Air Quality Practices

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Emissions levels in a specific year (e.g. Design Year or Estimated Time Completion (ETC))

Facilities with a specified % increase in traffic

Q16

Which of the following models do your procedures include for emissions:

MOVES**Q17**

Which of the following models do your procedures include for dispersion:

AERMOD**Q18**

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Yes, by pollutant? Please explain:

The Air Quality Factor Sheet (see link provided in Question 6) can also technically be viewed as a screening document.

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Nearest state air quality agency monitoring site**Q21**

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

Decisions are made through the interagency consultation process in which the DNR, FHWA/FTA, EPA, the Southeastern Wisconsin Regional Planning Commission (SEWRPC, the Bay-Lake Regional Planning Commission (B-L RPC) and WisDOT participate.

Q22

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

No

State DOT Air Quality Practices

Q23**No**

Do your procedures include a source of emissions of roaddust for PM analyses?

Q24**No**

Do your procedures include analysis of construction emissions?

Q25

Are the project-level analyses primarily performed:

Both_____ If both, please provide an approximate percentage breakdown of in-house and consultant services analyses

_____ % in-house analyses

_____ % consultant services analyses:

WisDOT performed the last in-house project-level transportation conformity determination in 2005 for ozone for a project in an isolated rural area.

Q27**No**

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

The DNR and WisDOT modeling staff are the QA/QC agents in evaluating the Travel Demand Model inputs. When a hot-spot quantitative analysis is needed, the Wisconsin Transportation Conformity Interagency Consultation Workgroup meets to discuss and agree on projects analysis inputs and processes. The group consists of the DNR, EPA, FHWA/FTA, SEWRPC, B-L RPC, and WisDOT.

Q29

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Yes, please explain:

Every potential environmental impact and resulting analysis is considered as part of the project budget and schedule.

State DOT Air Quality Practices

Q30

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

If yes, please list and explain:

See links provided at Question 6.

Q31

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

No**Q32**

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

Explanation:

The results are always documented in the environmental document. A stand-alone report may be prepared for a finding that the project is not a project of local air quality concern for PM2.5. For the in-house analysis conducted in 2005 (see Question 25) for ozone, the analysis and conclusions were documented in a stand-alone report.

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	0
PM10	0
PM2.5	0
NO2	0
MSATs	0
GHG	0

Q34:

Have any of these analyses resulted in a concentration greater than or equal to the NAAQS?

If any, please explain the outcome of the analysis and the effect on the project:

N/A

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

No**Q36**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Yes_____(please explain the triggers and circumstances for the analysis):

We have performed quantitative MSAT analyses, but not within the last five years. See links provided at Question 6. WisDOT has not yet performed a health risk assessment.

State DOT Air Quality Practices

Q37

Does your Department perform project level GHG analyses for any projects?

Yes____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):
Projects for which an EIS has been prepared have had a broad qualitative discussion of GHG.

Q38

Are the analyses...

Qualitative. Please go to Q40

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Yes (please explain):

The DNR is gearing up to submit three redesignation SIPs to the EPA "with the next few weeks" for approval. Changes in the status of the affected areas will depend upon how quickly the EPA will respond. The DNR still awaits a response for another redesignation request and maintenance plan submitted in October 2019.

Q44

Does your state air quality agency have a transportation conformity regulation specific to your state?

Yes____(Please include a link or other means to obtain them):

See Chapter NR 489 Conformity of General Federal Actions to State Implementation Plans:
http://docs.legis.wisconsin.gov/code/admin_code/nr/400/48_9.pdf

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

No, please continue to Q48 (Y/N) **Y**

If yes, are they included in your project level procedures (Y/N)?

See links provided at Question 6.

State DOT Air Quality Practices

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Y, see links provided at Question 6.

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

Other (please specify):

<https://wiscondot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrcs/environment/air-moa-conformity.pdf>

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

No.

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

Washington State DOT

Q3

Does your State have written project-level air quality analysis procedures?

No _____, please go to Question 4

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Other, please explain (in box),

reference(s)/explanation:

We have policy requirements in our environmental manual and in the process of developing written guidance for air quality analysis. Our website references federal guidance.

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

Federal guidance, especially for PM hot spot considerations and MSAT. Rely on staff and consultant knowledge.

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

Will be when complete

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO)

Particulate Matter 10 microns in diameter and smaller (PM10)

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Mobile Source Air Toxics (MSATs),

Greenhouse Gasses (GHGs)

State DOT Air Quality Practices

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

Our in-development guidance will identify where and how qualitative and quantitative are needed and how to perform those.

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:
The WASIST (WA intersection screening tool) allows us to screen intersections for CO hot spots. The tool is approved and based on emission factors from MOVES 2014.

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Other (please identify),

Other (please specify):
Depends on the project and analysis. For MSATs and GHGs on large projects, typically from the regional travel demand model runs for the project. For CO hot spot, microsimulation outputs. I am not aware of us using VMT projections or HPMS data in air quality analyses.

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Not considered,

Explanation for special considerations:
We do not evaluate indirect or cumulative air quality effects quantitatively.

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

If Yes, please identify pollutants (such as ozone precursors, greenhouse gasses, other) and circumstances for an analysis.:

We do GHG analysis for our larger projects. These typically use the same traffic as MSAT analysis.

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Other (please specify):

We follow FHWA and regulatory guidance, e.g., 140,000 AADT for MSAT.

State DOT Air Quality Practices

Q16**MOVES**

Which of the following models do your procedures include for emissions:

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Yes, by pollutant? Please explain:

We have a screening tool for CO and have not done a detailed analysis, although if an intersection did fail the screening analysis, that is what we would have to do.

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Other (please explain):

Normally don't need background concentrations. For CO, we assume a very high value.

Q24

Do your procedures include analysis of construction emissions?

Yes, please explain the method(s) you use (ICE, NCHRP25-25 Task58, AP-42, other) and circumstances for the analysis: We quantitatively consider construction emissions for criteria and MSAT pollutants. For GHGs, we use ICE.

Q25

Are the project-level analyses primarily performed:

Both__If both, please provide an approximate percentage breakdown of in-house and consultant services analyses
 _____% in-house analyses
 _____% consultant services analyses:
 20% in house and the rest consultant. We typically outsource the analysis that require modeling (MOVES) and do the screening in house.

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Agency staff are (mostly) not trained to do MOVES analyses and we don't do enough to get proficient in them. Projects needing quantitative modeling typically are done by consultants and the AQ modeling is a sub. I am not aware of how they determine appropriate budget.

State DOT Air Quality Practices

Q27**No**

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

Yes, please explain:
But we need one.

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29**No**

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

If yes, please list and explain:
In the last 10+ years we have never had to consider mitigation measures to meet air quality standards. We do include commitment to best practices to mitigation construction emissions, especially dust.

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32

Both (please describe the circumstances of both types of documentation in box)

How are the results of a project-level air quality analysis documented?

Explanation:
Details in the report, summary in the NEPA document.

State DOT Air Quality Practices

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	5
PM10	1
PM2.5	3
NO2	0
MSATs	5
GHGs	5

Q34

Respondent skipped this question

Have any of these analyses resulted in a concentration greater than or equal to the NAAQS?

Q35**No**

Does your Department perform a quantitative analysis of ozone precursors for any project?

Q36**No**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37

Does your Department perform project level GHG analyses for any projects?

Yes____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):
Typically EA and EIS level documents where traffic data is available - generally combined with MSAT analysis.
Guidance available on our website.

Q38

Are the analyses...

Both. Please describe the distinction between qualitative and quantitative analyses: :
Depends on the project and traffic data available. One project was EIS because of controversy over it, didn't have traffic data for a typical quantitative analysis.

Q39**Yes**

Does the quantitative analysis include construction and maintenance GHG emissions?

State DOT Air Quality Practices

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

Yes____(Please include a link or other means to obtain them):

Does your state air quality agency have a transportation conformity regulation specific to your state?

<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-420-050>

Q45

If yes, are they included in your project level procedures (Y/N)?

Does your Department have guidance related to project-level transportation conformity requirements?

Policy level direction only**Q46**

Does your project-level transportation conformity guidance

meet Federal requirements (Y/N):

Y

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

N

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

N

State DOT Air Quality Practices

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Most/All

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

Generic guidance that state DOTs could customize. Something that laid out the backbone of what all needs to do, but a format where states could put in state specific info, such as where to get MOVES inputs.

State DOT Air Quality Practices

Rhode Island Department of Environmental Management**Q3****No_____**, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4**Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5**No**, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**No**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q42**No. Please go to Q48**

If no to Q41, do you expect any changes in that status in the next 6 months or so?

Q46

Does your project-level transportation conformity guidance go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

Rhode Island

State DOT Air Quality Practices

Q48

Some

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

no comment

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

Michigan Department of Transportation**Q3**

Does your State have written project-level air quality analysis procedures?

No _____, please go to Question 4**Q4**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

reference(s)/explanation:

Clean Air Act as amended in 1990 - Section 176(c)(1) 40 CFR 51 and 93 "Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas" "Updated Interim Guidance on Mobile Source Air Toxics Analysis in NEPA Documents" "Federal Highway Administration (FHWA) Carbon Monoxide (CO) Categorical Hot-Spot Finding" MOVES users guides

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

- a. - Same as in question 4

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No**Q41**

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43**Q43**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

State DOT Air Quality Practices

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

N**Q48****Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

In general all the Guidance is well written and the examples they provide are useful.

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

Indiana Department of Transportation, Environmental Services Division

Q3**No _____, please go to Question 4**

Does your State have written project-level air quality analysis procedures?

Q4**Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5**Yes,**

Has your Department performed a project-level air quality analysis within the last 5 years?

a.

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
 - b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
 - c. Other, please explain in box (then go to Question 40):
-

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

State DOT Air Quality Practices

Q44

Does your state air quality agency have a transportation conformity regulation specific to your state?

Yes____(Please include a link or other means to obtain them):

<https://www.in.gov/idem/airquality/2334.htm>

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

No, please continue to Q48 (Y/N)

N

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Most/All

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

N/A

State DOT Air Quality Practices

Texas DOT - Environmental Affairs Division**Q3**

Does your State have written project-level air quality analysis procedures?

Yes _____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

Environmental Handbook for Air Quality -

<http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/210-01-gui.pdf> Environmental Guide, Volume 2, Activity

Instructions - [http://ftp.dot.state.tx.us/pub/txdot-](http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/060-06-gui.pdf)

info/env/toolkit/060-06-gui.pdf - (1. "Obtain Hot Spot Project

of Air Quality Concern (POAQC) Determination" Activity, 2.

"Obtain Project Level Conformity Determination" Activity, 3.

"Perform Carbon Monoxide Traffic Air Quality Analysis (CO

TAQA)" Activity, 4. "Perform Mobile Source Air Toxics

(MSAT) Analysis" Activity, 5. "Perform Hot Spot Analysis"

Activity)

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 10 microns in diameter and smaller (PM10)

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Ozone and ozone precursors (O3(VOCs/NOx)),

Mobile Source Air Toxics (MSATs)

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

MSAT can be either qualitative or quantitative.

State DOT Air Quality Practices

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:

For both MSAT and CO TAQA (i.e., NEPA analyses), we have emission rate lookup tables developed so a project level run of MOVES is not required. These tables cannot be used for hot-spot analyses (i.e., CAA analysis). For the CO TAQA, we have identified various worst-case inputs, specifically for meteorology. For project level conformity, we have template forms available for the POAQC and consistency determinations. We have pre-approved language for use in environmental documents to summarize the various air quality activities when they apply.

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Transportation demand model,

Microsimulation model,

Other (please identify),

Other (please specify):

TxDOT's Transportation Planning and Programming (TPP) division provides traffic data for use in our projects. Alternatively, Districts can have consultants prepare microsimulation modeling (requires approval). MSAT analyses have also used travel demand model data.

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Transportation demand model

speeds

Microsimulation model

VMT, speeds, % trucks

Other (please identify)

TPP traffic data, VMT, % trucks, K factor

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Assume traffic models include these effects

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

No

State DOT Air Quality Practices

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Type of project (capacity),

% increase in traffic on affected facilities,

Level of trucks,

Other (please specify):

Project level conformity determination: triggered by non-conformity exempt project within nonattainment or maintenance area boundaries. Hot-Spot requirements: POAQC determination triggered by non-conformity exempt project within nonattainment or maintenance areas for PM or CO (i.e., only applies to ELP). Hot spot analysis triggered by project being determined to be a POAQC by Consultation Partners. CO TAQA applies to any added capacity project with AADT > 140,000 vpd. Quantitative MSAT applies to FHWA project, adding capacity with > AADT > 140,000vpd. A quantitative MSAT might also be triggered, after consultation with ENV, if project affects intermodal facility or public concern regarding MSAT has been raised. Qualitative MSAT would apply to any added capacity project not requiring quantitative MSAT.

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Worst-case intersection,

Emissions levels in a specific year (e.g. Design Year or Estimated Time Completion (ETC))

Other (please specify):

Our guidance does not specify worst-case intersection or specific analysis years specifically for hot-spot, but it references EPA's hot spot and intersection guidance. We typically use ETC and either ETC + 20 or outyear of plan for the CO TAQA. For MSAT, we typically use base year (prior to project) and out year of the plan (ETC build/no-build). We may also include an interim year for MSAT representing the ETC year.

Q16

Which of the following models do your procedures include for emissions:

MOVES

State DOT Air Quality Practices

Q17

Which of the following models do your procedures include for dispersion:

CAL3QHC,AERMOD, Other (please specify):

For the CO TAQA (a NEPA screening analysis) we would use CAL3QHC. For hot spots we would use AERMOD.

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

No

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Other (please explain):

For the CO TAQA, we use background concentrations identified in the guidance, which are based on worst-case state air quality monitors highest concentrations averaged over three years for specific areas. We have not yet performed a CO or PM hot-spot analysis in Texas and would discuss and get approval from the Consultation Partners before identifying the background concentrations for such an analysis.

Q20

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Worst case,

Met data sets provided by the state air agency

Q21

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

For the CO TAQA we use worst case meteorological data as identified in the CO TAQA guidance.

For a hot-spot analysis, we likely would use TCEQ met data sets if we had to perform such an analysis.

Q22

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

No

State DOT Air Quality Practices

Q23

Do your procedures include a source of emissions of road dust for PM analyses?

Yes, please include source (e.g. AP-42, etc.):
AP-42 is what we would use for road dust

Q24

Do your procedures include analysis of construction emissions?

No**Q25**

Are the project-level analyses primarily performed:

Consultant services**Q26**

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Mostly, each District uses their own environmental contractors, and the work would be for all air quality activities (CO TAQA, MSAT,project level conformity, hot-spots). ENV does have contracts available to perform work when necessary.

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

No**Q28**

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

All quantitative analyses are supposed to be reviewed by the ENV air specialist. Any hot-spot analysis has to have both the methodology approved by the Consultation Partners and the report approved by FHWA. Project level conformity determinations have to be made by FHWA.

Q29

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

No

State DOT Air Quality Practices

Q30**No**

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32**A stand-alone project-level air quality analysis report**

How are the results of a project-level air quality analysis documented?

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	>25
PM10	0
PM2.5	0
NO2	0
MSATs	>25
GHGs	~ 5

Q34**Respondent skipped this question**

Have any of these analyses resulted in a concentration greater than or equal to the NAAQS?

Q35**No**

Does your Department perform a quantitative analysis of ozone precursors for any project?

Q36**No**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

State DOT Air Quality Practices

Q37

Does your Department perform project level GHG analyses for any projects?

Yes____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):
Mostly big EIS projects. It is basically just summarizing and referencing in the cumulative impacts section of the document a Statewide On-Road Greenhouse Gas Emissions Analysis and Climate Change Assessment Technical Report (<http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/725-01-rpt.pdf>)

Q38

Are the analyses...

Qualitative. Please go to Q40

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

Q44

Does your state air quality agency have a transportation conformity regulation specific to your state?

Yes____(Please include a link or other means to obtain them):

30 Texas Administrative Code (TAC) §114.260

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

If yes, are they included in your project level procedures (Y/N)?

Y

State DOT Air Quality Practices

Q46

Does your project-level transportation conformity guidance

meet Federal requirements (Y/N):	Y
go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:	N/A
go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:	N/A

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

FHWA and U.S.EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Most/All

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

N/A

State DOT Air Quality Practices

Virginia Department of Transportation
Environmental Division
Air & Noise Section

Q3**Yes_____**, please go to Question 6

Does your State have written project-level air quality analysis procedures?

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

http://www.virginiadot.org/projects/environmental_air_section.asp The Virginia Department of Transportation (VDOT) provides the following resources that together were designed to help streamline the preparation of project-level air quality analyses and ensure that they will meet all applicable regulations and guidance and the needs of the department: Documents Scoping Guidelines for Project-Level Air Quality Analyses VDOT Project-Level Air Quality Resource Document Template Report For Project-Level Air Quality Analyses Programmatic Agreements (which are referenced in the above documents): 2016 FHWA-VDOT Programmatic Agreement for Project Level Air Quality Studies for Carbon Monoxide Cover Letter implementing the Agreement between FHWA and VDOT (May 11, 2016) Text of Agreement (Attachment 2 to the Cover Letter) 2009 FHWA-VDOT Project Level Carbon Monoxide Air Quality Studies Agreement (as referenced in the 2016 Agreement) 2009 FHWA-VDOT No-Build Analysis Agreement for Air and Noise Studies 2004 FHWA-VDOT procedures for updating air studies when new planning assumptions become available Modeling Data Instructions for accessing modeling data repository Modeling data repository Page last modified: Nov. 1, 2019

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 2.5 microns in diameter and smaller(PM2.5)

Mobile Source Air Toxics

MSATs),

Greenhouse Gasses (GHGs)

State DOT Air Quality Practices

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

1. We have a programmatic agreement for CO that is used to screen projects. If they cannot be screened using the agreement, project-specific modeling may be required. A copy of the programmatic agreement for CO is available at the link provided previously. 2. Our Resource Document available at the link provided previously provides modelers general guidance (in the form of policy or "protocols") as well as guidance on quantitative analyses and data sources. An associated online data repository provides modelers with data specified for use in the Resource Document.

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:

Programmatic agreements (PAs), from the same link as provided above:

http://www.virginiadot.org/projects/environmental_air_section.asp The VDOT Programmatic Agreement for CO is based on the NCHRP 25-25 Task 78 templates, which itself was modeled after the prior VDOT agreement. EXCERPT FROM THE VDOT AIR QUALITY PAGE: Programmatic Agreements (which are referenced in the above documents): 1. 2016 FHWA-VDOT Programmatic Agreement for Project Level Air Quality Studies for Carbon Monoxide Cover Letter implementing the Agreement between FHWA and VDOT (May 11, 2016) Text of Agreement (Attachment 2 to the Cover Letter) 2009 FHWA-VDOT Project Level Carbon Monoxide Air Quality Studies Agreement (as referenced in the 2016 Agreement) This agreement as noted above is used to screen projects for CO modeling. 2. 2009 FHWA-VDOT No-Build Analysis Agreement for Air and Noise Studies This agreement limits when NB analyses are required. 3. 2004 FHWA-VDOT procedures for updating air studies when new planning assumptions become available This agreement is largely moot as the same policy was embedded in the VDOT Resource Document that was subsequently created.

State DOT Air Quality Practices

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey,

Transportation demand model,

Microsimulation model,

HPMS data and projections,

Other (please identify),

Other (please specify):

Potential future use of data from the new DANA tool announced at the 2020 TRB Annual Meeting by FHWA. Worst-case modeling is routinely done for CO, which includes the assumption of worst-case traffic volumes as documented in the VDOT Resource Document.

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Traffic survey

Used to validate models

Transportation demand model

Used for MSATs

Microsimulation model

May be used but not solely for air quality;

only if being done for project level design purposes

VMT projections

May be used for CO analyses

HPMS data and projections

May use the FHWA DANA tool in the future for base year data

Other (please identify)

Synchro - May be used for intersections

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Explanation for special considerations:

Effects included in the regional network models.

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

No

State DOT Air Quality Practices

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Other (please specify):

1. For MSAT analyses, we follow FHWA guidance which specifies four criteria. 2. For CO analyses, the programmatic agreement specifies criteria. 3. For PM2.5 analyses, which we no longer are required to do, we previously established threshold criteria for analyses based on EPA examples, and included them in an appendix to the VDOT Resource Document referenced above. The Resource Document was subjected to inter-agency consultation with FHWA, EPA, state air agency, and local agencies before being finalized. It is available on the web page noted above. See: http://www.virginiadot.org/projects/environmental_air_section.asp Note the 1997 annual primary PM2.5 NAAQS for which we had a maintenance area was revoked by EPA subsequent to the development of our original Resource Document in 2016. It therefore includes guidance for PM2.5 modeling that is no longer required.

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Other (please specify):

Studies are to follow FHWA and EPA guidance as applicable. Typically, we model the base, opening and design years for CO and MSATs.

Q16

Which of the following models do your procedures include for emissions:

MOVES

Q17

Which of the following models do your procedures include for dispersion:

CAL3QHC,
CAL3QHC/R,
AERMOD

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Yes, by pollutant? Please explain:

If the project is not exempt or cannot be screened using the programmatic agreement for CO, then modeling is required.

State DOT Air Quality Practices

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Other (please explain):

Values that have been subjected to inter-agency consultation are specified in the VDOT Resource Document, which were determined following EPA procedures using data from nearby monitoring sites. Values can be updated if needed following EPA procedures, but this has not been needed to date.

Q20

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Worst case,**CAL3QHC/CAL3QHCR compatible data****Q21**

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

Worst-case defaults for CO screening are specified in the VDOT Resource Document, consistent with EPA guidance. We have access to met data for AERMOD, but no longer need to apply the model with the revocation by EPA of the applicable NAAQS for PM2.5.

Q22

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

No**Q23**

Do your procedures include a source of emissions of road dust for PM analyses?

No**Q24**

Do your procedures include analysis of construction emissions?

Yes, please explain the method(s) you use (ICE, NCHRP 25-25 Task 58, AP-42, other) and circumstances for the analysis:

The subject is addressed but construction emissions are not typically necessary.

Q25

Are the project-level analyses primarily performed:

Both _____ If both, please provide an approximate percentage breakdown of in-house and consultant services analyses

_____ % in-house analyses

_____ % consultant services analyses:

Percentages not available. Previously done in-house; now mainly or entirely by consultants.

State DOT Air Quality Practices

Q27

No

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

Three Dept guidance documents that were created and implemented in the last five or so years have significantly helped to streamline analyses, minimize costs, and establish and maintain high standards for quality assurance and control. These guidance documents are posted on our web page (link provided above) and include: 1) Scoping Guidelines, 2) Resource Document (and associated online data repository, and 3) Template Report. The use of pre-vetted modeling input data (provided on the data repository) is particularly important.

Q29

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Yes, please explain:

MSAT analyses follow FHWA guidance, which qualitatively addresses risk associated with air toxics.

Q30

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

If yes, please list and explain:

Mitigation measures are included in the VDOT Resource Document. See Appendix K2 for examples for both CO and PM2.5.

Q31

No

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

Explanation:

For projects that require modeling, a standalone detailed air study is conducted. Its results are summarized and included as part of the environmental document (EIS, EA etc.)

State DOT Air Quality Practices

Q34

Have any of these analyses resulted in a concentration greater than or equal to the NAAQS?

If any, please explain the outcome of the analysis and the effect on the project:

No exceedances of the NAAQS have been modeled.

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

Yes_____ (please explain the triggers and the circumstances for the analysis and estimate the number of analyses performed in the last 5 years):

Only for CMAQ analyses. We plan to use the recently developed CMAQ Simplified Toolkit from NCHRP 25-25 Task 108 for this purpose.

Q36

Has your Department performed a project- level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

No

Q37

Does your Department perform project level GHG analyses for any projects?

Yes_____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):

Following the protocol established in our Resource Document, we currently conduct qualitative analyses for CO. We recently reviewed options for enhancing these analyses, but have not yet reached a decision on an approach going forward.

Q38

Are the analyses...

qualitative. Please go to Q40

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

State DOT Air Quality Practices

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Yes (please explain):

Not for project level pollutants (CO and PM)

Q44

Does your state air quality agency have a transportation

Yes_____(Please include a link or other means to obtain them):

Conformity regulation specific to your state?

<https://law.lis.virginia.gov/admincode/title9/agency5/chapter151/>

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

If yes, are they included in your project level procedures (Y/N)?

Yes

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Yes

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

Other (please specify):

For the DC-MD-VA ozone area, the MPO leads the process. Otherwise, Virginia does not have nonattainment or maintenance areas. However, Virginia has three areas that were formerly in maintenance for the 1997 ozone NAAQS for which a recent national level court decision has resulted in conformity requirements being reinstated (through without modeling requirements) for so-called orphan areas. In the past and currently we lead in close coordination and cooperation the inter-agency consultation with the local (smaller) MPOs. This may change in the future to some extent, given increasing MPO capabilities and the very limited nature of conformity assessments (no modeling) for the orphan areas.

State DOT Air Quality Practices

Q48**Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

They provide significant flexibility, which is good. They however lack guidance on best practices for completing analyses for various situations. For example, different approaches may be taken (and different best practices guidance is needed) to streamline analyses for projects that are smaller and not controversial, to conduct detailed and rigorous analyses for large and high profile projects that may be controversial, and special situations (e.g., tunnels).

State DOT Air Quality Practices

New York State Department of Transportation

Q3

Yes_____ , please go to Question 6

Does your State have written project-level air quality analysis procedures?

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Other, please explain (in box),

reference(s)/explanation:

Follow the NYSDOT procedures for CO hot-spot screening, mesoscale emissions analysis, and energy/greenhouse gas analyses. Follow the FHWA MSAT Guidance and U.S. EPA PM hot spot guidance incorporated into State guidance by reference. The technical aspects of the U.S. EPA PM hot spot guidance are followed Statewide regardless of attainment status.

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
 - b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
 - c. Other, please explain in box (then go to Question 40):
-

Yes,

The NYSDOT followed its State procedures for CO hot-spot screening, mesoscale emissions analysis, and energy/greenhouse gas analyses. The FHWA MSAT Guidance was followed for MSATs and the U.S. EPA PM hot spot guidance was used for the PM microscale/hot-spot analysis.

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

Link

<https://www.dot.ny.gov/divisions/engineering/environmental-analysis/manuals-and-guidance/epm>

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO)

Particulate Matter 10 microns in diameter and smaller (PM10)

Particulate Matter 2.5 microns in diameter and smaller(PM2.5)

Ozone and ozone precursors (O3(VOCs/NOx)),

Mobile Source Air Toxics (MSATs),

Greenhouse Gasses (GHGs)

State DOT Air Quality Practices

Q8**quantitative**

Are your procedures primarily...

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:

Traffic volume threshold screening procedure to consider CO impacts and meet CO hot spot requirements without performing dispersion modeling for each project. Use of pre-approved MOVES inputs from State air agency, simplified CMAQ project emission benefits calculator, and sample air quality report language.

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey,**Transportation demand model,****Microsimulation model,****VMT projections,****HPMS data and projections****Q11**

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Traffic survey

Existing conditions/model validations

Transportation demand model

Growth, mode choice, assignment

Microsimulation model

Existing and future year link volume, delay, speeds

VMT projections

Growth rates based on socio-economic factors and trends

HPMS data and projections

Vehicle classification counts, VMT by source type, growth rates based on trends**Q12****Assume traffic models include these effects**

How are indirect and cumulative effects considered in deriving traffic parameters?

State DOT Air Quality Practices

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for “large” projects?

If Yes, please identify pollutants (such as ozone precursors, greenhouse gasses, other) and circumstances for an analysis.:

Mesoscale emissions analysis for criteria pollutants including ozone precursors and greenhouse gas emissions for the following project types: - HOV lanes vs general use lanes - New or substantial modifications to interchanges on access controlled facilities - Large scale signal coordination projects - Widening to provide additional travel lanes more than one mile in length - 10% change in emissions - Regional emissions analysis for projects not from a conforming TIP and Plan in nonattainment and maintenance areas - Substantial controversy regarding air quality issues associated with the project

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Type of project (capacity),

% increase in traffic on affected facilities,

Significant change in speeds,

Level of trucks,

Other (please specify):

Substantial controversy regarding air quality issues associated with the project

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Worst-case intersection,

Emissions levels in a specific year (e.g. Design Year or Estimated Time Completion (ETC))

Facilities with a specified % increase in traffic

Q16

Which of the following models do your procedures include for emissions:

MOVES

Q17

Which of the following models do your procedures include for dispersion:

CAL3QHC,

AERMOD

State DOT Air Quality Practices

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Yes, by pollutant? Please explain:

CO - If volume threshold screening criteria is exceeded, then a dispersion analysis with CAL3QHC is performed. If the CAL3QHC analysis predicts a CO violation, refined modeling with AERMOD would be performed.

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Nearest state air quality agency monitoring site

Q20

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Worst case,

CAL3QHC/CAL3QHCR compatible data,

AERMOD compatible data processed by AERMET

Q21

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

Worst case meteorology for CO screening analyses. AERMET/AERMOD for refined dispersion modeling.

Q22

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

No

Q23

Do your procedures include a source of emissions of road dust for PM analyses?

Yes, please include source (e.g. AP-42, etc.):

AP-42 for PM10 road dust (as per the U.S. EPA PM Hot Spot Guidance which is incorporated by reference in the NYSDOT procedures).

Q24

Do your procedures include analysis of construction emissions?

Yes, please explain the method(s) you use (ICE, NCHRP 25-25 Task58, AP-42, other) and circumstances for the analysis:

ICE for EIS projects or in cases where there is substantial controversy regarding construction emissions.

State DOT Air Quality Practices

Q25

Consultant services

Are the project-level analyses primarily performed:

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Task by pollutant, analysis type, and environmental classification. Budget is commensurate with anticipated effort.

Q27

No

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

- Inputs vetted by State air agency - U.S. EPA provides feedback and recommendations on county-level MOVES inputs used in SIPs and regional conformity - Inputs routinely compared to previously accepted corresponding inputs and checked for reasonableness - Department staff review all materials prior to agency or public release

Q29

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Yes, please explain:

As appropriate, conservative assumptions are used to avoid perception of underestimating emissions.

Q30

No

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31

No

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

State DOT Air Quality Practices

Q32**As part of the environmental document (EIS, EA, etc.)**

How are the results of a project-level air quality analysis documented?

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	2
PM10	5
PM2.5	5
NO2	0
MSATs	5
GHGs	5

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

Yes_____(please explain the triggers and the circumstances for the analysis and estimate the number of analyses performed in the last 5 years):
 Approximately 5 analyses in the last 5 years.
 Circumstances: - HOV lanes vs general use lanes - New or substantial modifications to interchanges on access controlled facilities - Widening to provide additional travel lanes more than one mile in length - Regional emissions analysis for projects not from a conforming TIP and Plan in nonattainment and maintenance areas - Substantial controversy regarding air quality issues associated with the Project

Q36**No**

Has your Department performed a project- level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37

Does your Department perform project level GHG analyses for any projects?

Yes_____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):
 Size and Scale - Potential for controversy on air quality and GHG grounds

Q38**quantitative**

Are the analyses...

State DOT Air Quality Practices

Q39

Yes

Does the quantitative analysis include construction and maintenance GHG emissions?

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

Yes____(Please include a link or other means to obtain them):

Does your state air quality agency have a transportation

Conformity regulation specific to your state?

6 NYCRR Part 240 is the NYS Conformity SIP

<https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=lbef25410b5a011dda0a4e17826ebc834&originationContext=documenttoc&transitionType=Default&contextData=sc.Default>

Q45

If yes, are they included in your project level procedures (Y/N)?

Yes

Does your Department have guidance related to project-level transportation conformity requirements?

State DOT Air Quality Practices

Q46

Does your project-level transportation conformity guidance

meet Federal requirements (Y/N):

Yes

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

No

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

No

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is the lead (e.g. Chair, Secretary, etc.) for the Interagency Consultation Process

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Most/All

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

My SQL scripts for MOVES.

State DOT Air Quality Practices

South Dakota DOT

Q3

No _____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

No

Does your state or any part of your state contain a non-attainment or maintenance area?

Q42

No. Please go to Q48

If no to Q41, do you expect any changes in that status in the next 6 months or so?

Q46

if yes, please explain:

Does your project-level transportation conformity guidance go beyond State Air Quality Agency requirements to meet Department or local requirements?

SD

State DOT Air Quality Practices

Q48**Some**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

South Carolina DOT, NEPA

Q3

No _____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q6

Are your air quality analysis procedures publicly available?

Other (please specify):

<http://www.rfats.org/2045-long-range-transportation-plan-update-elements/>

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

State DOT Air Quality Practices

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

No

Does your Department have guidance related to project-level transportation conformity requirements?

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Yes**Q47**

The Department is a member and is active in the Interagency Consultation Process

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

Q48**Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49**No**

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

New Mexico Department of Transportation

Q3

No _____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

State DOT Air Quality Practices

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

No, please continue to Q48 (Y/N)

N

Q48

Some

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

No comments

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

Illinois Department of Transportation

Q3

Does your State have written project-level air quality analysis procedures?

Yes_____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

<https://idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Split/Design-And-Environment/BDE-Manual/Chapter%2026%20Special%20Environmental%20Analyses.pdf>

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 10 microns in diameter and smaller (PM10)

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Nitrogen Dioxide (NO2),

Ozone and ozone precursors (O3(VOCs/NOx)),

Mobile Source Air Toxics (MSATs),

Greenhouse Gasses (GHGs)

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

No analysis for projects with no potential for meaningful

MSAT effects Qualitative analysis for projects with low potential MSAT effects (140,000-150,000 AADT)

Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects (>150,000 AADT)

State DOT Air Quality Practices

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:

IDOT-IEPA "Agreement on Microscale Air Quality Assessments for IDOT Sponsored Transportation Projects" Under terms of this agreement some projects are exempt from CO analysis if they meet certain conditions: Does not increase capacity such as through the addition of lanes or auxiliary turning, have no sensitive receptors and the highest design-year approach-volume on the busiest leg of the intersection is less than 5,000 vph or 62,500 ADT, or 2. As outlined in 40 CFR Part 93.126. Illinois Carbon Monoxide Screen for Intersection Modeling Air Quality Manual (COSIM) 4.0 is a Windows-based screening model used for determining worst-case CO concentrations at signalized intersections throughout IL. It was originally developed by researchers at the UIUC. The model is the product of research sponsored by the Illinois Transportation Research Center and UIUC. COSIM Pre-Screen feature may be used by the districts to provide documentation that a project is exempt from a project-level CO air quality analysis.

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey

Transportation demand model

Microsimulation model

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Traffic survey	40
Transportation demand model	30
Microsimulation model	30

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Assume traffic models include these effects

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

No

State DOT Air Quality Practices

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Type of project (capacity),**% increase in traffic on affected facilities****Q15**

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Worst-case intersection**Q16**

Which of the following models do your procedures include for emissions:

MOVES**Q17**

Which of the following models do your procedures include for dispersion:

CAL3QHC**Q18**

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Yes, by pollutant? Please explain:

COSIM (Carbon Monoxide Screen for Intersection Modeling)

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Nearest state air quality agency monitoring site,**Metropolitan Planning Organization****Q20**

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

CAL3QHC/CAL3QHCR compatible data,**Met data sets provided by the state air agency**

State DOT Air Quality Practices

Q22**No**

Do your procedures consider any type of “rollback” adjustment to background concentrations to account for future improvements in vehicle emission control technology?

Q23**No**

Do your procedures include a source of emissions of road dust for PM analyses?

Q24**No**

Do your procedures include analysis of construction emissions?

Q25

Are the project-level analyses primarily performed:

Both__If both, please provide an approximate percentage breakdown of in-house and consultant services analyses
 _____% in-house analyses
 _____% consultant services analyses:

40/60

Q26

project type and scale

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Q27**No**

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

Yes, please explain:

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Incorporated into consultant contracts

State DOT Air Quality Practices

Q29**No**

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

If yes, please list and explain:

<https://idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Split/Design-And-Environment/BDE-Manual/Chapter%2026%20Special%20Environmental%20Analyses.pdf>

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32**As part of the environmental document (EIS, EA, etc.)**

How are the results of a project-level air quality analysis documented?

Q35**No**

Does your Department perform a quantitative analysis of ozone precursors for any project?

Q36**No**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37**No. Please go to Q40**

Does your Department perform project level GHG analyses for any projects?

State DOT Air Quality Practices

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

If yes, are they included in your project level procedures (Y/N)?

Y

Does your Department have guidance related to project-level transportation conformity requirements?

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Y**Q47****The Department is a member and is active in the Interagency Consultation Process**

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

State DOT Air Quality Practices

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc .Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Missouri Department of Transportation

Yes_____, please go to Question 6

Q3

Does your State have written project-level air quality analysis procedures?

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Other, please explain (in box),
reference(s)/explanation:

We have one non attainment area in the State in St. Louis, which, by the way, was just re-designated unclassifiable / attainment for CO and PM 2.5. Prior to this, East-West Gateway Council of Governments, the TMA in St. Louis, developed the project-level air quality policy for the region. That policy is part of their conformity users guide, developed by subcommittees of the Interagency Consultation Group.

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

No, please go to Question 40

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

State DOT Air Quality Practices

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

N

Q48

None

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Delaware Department of Transportation**Q3**

Does your State have written project-level air quality analysis procedures?

No _____, please go to Question 4**Q4**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known**Q5**

Has your Department performed a project-level air quality analysis within the last 5 years?

No, please go to Question 40**Q10**

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Transportation demand model,**Microsimulation model****Q11**

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Traffic survey

Trip rates for all modes, trip length frequencies, routes.

Transportation demand model

link estimated volumes and speeds.

Microsimulation model

Peak Hour volumes and turning movements.

Other (please identify)

classification counts (% trucks)**Q12**

How are indirect and cumulative effects considered in deriving traffic parameters?

Not considered

State DOT Air Quality Practices

Q13**No**

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

Q14**Level of trucks**

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Q15**Emissions levels in a specific year (e.g. Design Year or Estimated Time Completion (ETC))**

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Q16**MOVES**

Which of the following models do your procedures include for emissions:

Q17**CAL3QHC**

Which of the following models do your procedures include for dispersion:

Q18**No**

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Q19**Nearest state air quality agency monitoring site**

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

State DOT Air Quality Practices

Q20**Met data sets provided by the state air agency**

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Q22**No**

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

Q23**No**

Do your procedures include a source of emissions of roaddust for PM analyses?

Q24**No**

Do your procedures include analysis of construction emissions?

Q25**Consultant services**

Are the project-level analyses primarily performed:

Q26

on-call technical services contract for NEPA analysis and support

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Q27**No**

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

State DOT Air Quality Practices

Q28

No

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29

No

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

No

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31

No

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32

As part of the environmental document (EIS, EA, etc.)

How are the results of a project-level air quality analysis documented?

Q35

Yes_____ (please explain the triggers and the circumstances for the analysis and estimate the number of analyses performed in the last 5 years):
conformity only.

Does your Department perform a quantitative analysis of ozone precursors for any project?

State DOT Air Quality Practices

Q36**No**

Has your Department performed a project- level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37**No. Please go to Q40**

Does your Department perform project level GHG analyses for any projects?

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Yes (please explain):

The state has three counties; two are nonattainment for Ozone and one is in attainment for Ozone. The attainment county was one of the 80+ counties for which conformity was reinstated due to the South Coast AQD court decision of early 2018. We have had to complete a conformity determination for the "attainment county" (against the 2009 latest-available budgets for VOC and NOx). However, we are hopeful that additional guidance will indicate a quantitative analysis is not needed.

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q46

if yes, please explain:

Does your project-level transportation conformity guidance go beyond State Air Quality Agency requirements to meet Department or local requirements?

DE - Delaware

State DOT Air Quality Practices

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis.

Some

Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Connecticut Department of Transportation**Q3****No _____, please go to Question 4**

Does your State have written project-level air quality analysis procedures?

Q4**Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

Yes,
Project-Level Conformity and Hot-Spot analysis
"Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas"

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

State DOT Air Quality Practices

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

N

Does your Department have guidance related to project-level transportation conformity requirements?

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Y

Q47

The Department is the lead (e.g. Chair, Secretary, etc.) for the Interagency Consultation Process

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Pennsylvania DOT**Q3**

Does your State have written project-level air quality analysis procedures?

Yes_____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):
Google Pennsylvania Department of Transportation Project Level Air Quality Handbook, Publication 321, Or go to PennDOT home page and look for the link of PennDOT Publications

Q7

Which of the following pollutants do your procedures address?

**Carbon Monoxide (CO),
Particulate Matter 2.5 microns in diameter and smaller (PM2.5)
Mobile Source Air Toxics (MSATs),
Greenhouse Gasses (GHGs)**

Q8

Are your procedures primarily...

qualitative? If qualitative only, please proceed to Question 25.

Q25

Are the project-level analyses primarily performed:

Consultant services

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

By Project type, there is a screening process based on thresholds, if it does not pass the Eng District will retain a firm which is usually the Design Consultant or one of their subs.

State DOT Air Quality Practices

Q27

No

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28

No

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29

No

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

No

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31

No

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

Explanation:

Most of our environmental documents are CE's, for EA and EIS the results are in a technical basis report with the results summarized in either the EA or EIS

State DOT Air Quality Practices

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO

5

PM2.5

5**Q35**

Does your Department perform a quantitative analysis of ozone precursors for any project?

No**Q36**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Yes_____ (please explain the triggers and circumstances for the analysis):

I'm pretty sure facilities that have over 125k ADT

Q37

Does your Department perform project level GHG analyses for any projects?

No. Please go to Q40**Q40**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No**Q41**

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43**Q43**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

State DOT Air Quality Practices

Q44

Yes___(Please include a link or other means to obtain them):

Does your state air quality agency have a transportation conformity regulation specific to your state?

PA Department of Environmental Protection

Q45

If yes, are they included in your project level procedures (Y/N)?

Does your Department have guidance related to project-level transportation conformity requirements?

Yes

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Yes

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Georgia Department of Transportation**Q3**

Does your State have written project-level air quality analysis procedures?

No _____, please go to Question 4

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Other, please explain (in box),

reference(s)/explanation:

CO - EPA Guidance Ozone - no detailed project-level analyses MSAT - FHWA Guidance PM 2.5 - currently in attainment GDOT does have Guidebooks and Flowcharts pertaining to project-level Air analyses:
<http://www.dot.ga.gov/PS/EnvironmentalProcedures/AirandNoise>

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance— include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance— include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

A

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

In reference Air Guidebooks & Flowcharts

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Ozone and ozone precursors (O3(VOCs/NOx)),

Mobile Source Air Toxics (MSATs)

State DOT Air Quality Practices

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):
Typically warrants quantitative analyses, dependent on project type, traffic volumes, traffic flow (LOS), signalization, truck % Qualitative if thresholds are not exceeded, or project type is not of air quality concern CO - quantitative if exceeding traffic & LOS thresholds, dependent on project types (GDOT may also utilize screening/streamlining tools in cases where quantitative analyses may be required - due to programmatic agreements w/ FHWA GA Division) MSAT - typically qualitative, unless exceeding/meeting FHWA thresholds for quantitative analyses

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:
Programmatic agreements for CO Hotspot analyses: -CO Screening Tool (pre-loaded intersection/interchange layouts/ conservative emission rate assumptions), only requires year/traffic volumes/region inputs -FHWA CO Categorical Finding - for applicable projects that meet finding's thresholds -CO Emission rate look-up tables (Excel/Access/Spreadsheets, pre-run MOVES data, specific to GA regions, only requires filtering based on specific projects' characteristics and information - provided to GDOT by GA EPD/DNR, Air Protection Branch) -Air Assessment templates

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey,
Transportation demand model,
VTM projections,

Other (please specify):

Traffic inputs are provided by either the GDOT Office of Planning, or a qualified traffic consultant LOS projections are generated using the collected traffic data & projections - usually completed by the project design team, or GDOT Office of Roadway Design (typically using the SYNCHRO program) For quantitative MSAT analyses, the regional Travel Demand Model is utilized to established the projects projected effects to the transportation network, which ultimately establishes the "project area" to be included in the MSAT analysis

State DOT Air Quality Practices

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Traffic survey

ADT/DHV/Truck % (typically includes LOS projections)

Transportation demand model

MSAT Network

VMT projections

Qualitative MSAT analyses

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Assume traffic models include these effects

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis)

For "large" projects?

If Yes, please identify pollutants (such as ozone precursors, greenhouse gasses, other) and circumstances for an analysis.:

Only for MSAT (quantitative analyses)

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Type of project (capacity),

% increase in traffic on affected facilities,

Level of trucks,

Other (please specify):

LOS/flow changes Addition of new signalized intersection
 GDOT typically does not have projects that specifically change the travel/operational speed of a roadway/corridor without meeting the other listed criteria.

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Worst-case intersection,

Emissions levels in a specific year (e.g. Design Year or Estimated Time Completion (ETC))

Facilities with a specified % increase in traffic,

Other (please specify):

Emission rates and traffic volumes are projected for the Existing traffic year, and then the Design Year (20+ years from the project's Open Year, or ETC) MSAT Quantitative analyses do consider % increases in traffic volumes when establishing the MSAT network

State DOT Air Quality Practices

Q16

MOVES

Which of the following models do your procedures include for emissions:

Q17

**AL3QHC,
CAL3QHC/R**

Which of the following models do your procedures include for dispersion:

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Yes, by pollutant? Please explain:
CO Hotspot considerations: ADT/LOS for worst-case intersections in the Design Year (20+ from Open/ETC)

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Nearest state air quality agency monitoring site,

Other (please explain):
Used the monitoring data from GA EPD/DNR to establish an accepted range of background concentrations for project-analysis use, per FHWA

Q20

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Worst case,

CAL3QHC/CAL3QHCR compatible data,

Met data sets provided by the state air agency

Q21

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

Utilize worst-case assumptions, per direction/recommendations from GA EPD/DNR

Q22

No

Do your procedures consider any type of “rollback” adjustment to background concentrations to account for future improvements in vehicle emission control technology?

State DOT Air Quality Practices

Q24

Do your procedures include analysis of construction emissions?

No**Q25**

Are the project-level analyses primarily performed:

Both _____ If both, please provide an approximate percentage breakdown of in-house and consultant services analyses

_____ % in-house analyses

_____ % consultant services analyses:

30% inhouse; 70% consultant

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

By project type and scale, could be some considerations for level of public interest/assumed interest

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Yes, please explain development and circumstances for use:

Estimates for level of effort were based off prior project time/scoping requirements, and have been vetted/routed through the local consultant community; however, we do use these as a general baseline when developing project-specific estimates

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

Consultant QA/QC is required for all consultant-submitted documentation In-house analyses are reviewed by corresponding senior/management personnel within the Air Quality Section of GDOT OES

Q29

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Yes, please explain:

We typically will scope for worst-case level of effort (typically means that we provide scope for more detailed analyses in order to avoid having to re-scope the project efforts, requiring additional procurement time). This does not directly mean that this level of analysis is required, but the scope is covered in the case that it is.

State DOT Air Quality Practices

Q30

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

No**Q31**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

No**Q32**

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

Explanation:

A summary of findings is included in the environmental document, while a detailed air quality analysis report is always generated.

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	100 (hotspot analyses)
PM10	0
PM2.5	45 (no hotspot analyses)
NO2	0
MSATs	150 (mostly qualitative, approx. 5 quantitative)
GHGs	0

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

No**Q36**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Yes_____ (please explain the triggers and circumstances for the analysis):
In accordance with FHWA's Interim MSAT Guidance - based on Travel Demand Model projections to determine affected network for MSAT analysis

State DOT Air Quality Practices

Q37

Does your Department perform project level GHG analyses for any projects?

Yes____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):

Very minimal, based on size & scale/environmental document level (EIS)

Q38

Are the analyses...

qualitative. Please go to Q40

Q39

Does the quantitative analysis include construction and maintenance GHG emissions?

Neither

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

Q44

Does your state air quality agency have a transportation conformity regulation specific to your state?

No

State DOT Air Quality Practices

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

No, please continue to Q48 (Y/N)

N

If yes, are they included in your project level procedures (Y/N)?

N

Q46

Does your project-level transportation conformity guidance

meet Federal requirements (Y/N):

Y

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

N

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

N

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Most/All

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

Not at this time; however, GDOT has been part of a pilot project for the development of a CO PA that essentially expands on the FHWA CMCF, which uses GA-specific data inputs. We'd be happy to share this w/ the community if any wish to look into a similar agreement w/ their FHWA division

State DOT Air Quality Practices

Montana Department of Transportation**Q3**

Does your State have written project-level air quality analysis procedures?

Yes_____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

<https://www.mdt.mt.gov/publications/docs/manuals/env/Chapter%2042%20AIR%20QUAL-TRANS%20CONFORMITY.pdf>

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 10 microns in diameter and smaller (PM10)

Mobile Source Air Toxics (MSATs)

Q8

Are your procedures primarily...

qualitative?

If qualitative only, please proceed to Question 25.

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.):

By project type through our Consultant Design Bureau.

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

No

State DOT Air Quality Practices

Q28**No**

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29**No**

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30**No**

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32**As part of the environmental document (EIS, EA, etc.)**

How are the results of a project-level air quality analysis documented?

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	0
PM10	0
PM2.5	0
NO2	0
MSATs	0
GHGs	0

State DOT Air Quality Practices

Q35**No**

Does your Department perform a quantitative analysis of ozone precursors for any project?

Q36**No**

Has your Department performed a project- level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37**No. Please go to Q40**

Does your Department perform project level GHG analyses for any projects?

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

<https://www.mdt.mt.gov/publications/docs/manuals/env/Chapter%2042%20AIR%20QUAL-TRANS%20CONFORMITY.pdf>

Does your Department have guidance related to project-level transportation conformity requirements?

If not included, please include a link or other means to obtain them

State DOT Air Quality Practices

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

N

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Some

State DOT Air Quality Practices

Louisiana DOTD**Q3****No _____, please go to Question 4**

Does your State have written project-level air quality analysis procedures?

Q4**Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5**No, please go to Question 40**

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

State DOT Air Quality Practices

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

No

Q48

Some

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

No comments

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

Arkansas Department of Transportation**Q3**

Does your State have written project-level air quality analysis procedures?

No _____, please go to Question 4**Q4**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

reference(s)/explanation:

We have used the Highway Capacity Software and MOVES to obtain travel times, and speeds related to project areas to determine total emissions before and after project implementation.

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

- a. We have used the Highway Capacity Software and MOVES to obtain travel times, and speeds related to project areas to determine total emissions before and after project implementation.

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No**Q41**

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43**Q43**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

State DOT Air Quality Practices

Q44

Does your state air quality agency have a transportation

Yes_____(Please include a link or other means to obtain them):

Conformity regulation specific to your state?

<http://www.adeq.state.ar.us/> State Implementation Plan

Q45

N

Does your Department have guidance related to project-level transportation conformity requirements?

No, please continue to Q48 (Y/N)

Q46

if yes, please explain:

Does your project-level transportation conformity guidance go beyond State Air Quality Agency requirements to meet Department or local requirements?

Arkansas

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

Some

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Idaho DOT - ITD Environmental**Q3**

Does your State have written project-level air quality analysis procedures?

Yes_____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),
Particulate Matter 2.5 microns in diameter and smaller (PM2.5)
Ozone and ozone precursors (O3(VOCs/NOx))

Q8

Are your procedures primarily...

qualitative? If qualitative only, please proceed to Question 25.

Q25

Are the project-level analyses primarily performed:

Consultant services

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

By project.

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

No

State DOT Air Quality Practices

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:

The Community Planning Association of Southwest (COMPASS) Idaho approves the parameters to use for modeling inputs and report reviews.

Q29

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Yes, please explain:

Done by COMPASS

Q30

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

No

Q31

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

No

Q32

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

Explanation:

Project level AQ analysis must be reviewed and approved by FHWA with input by COMPASS. The result of the AQ analysis is summarized in the NEPA document.

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO

1

State DOT Air Quality Practices

Q34

Have any of these analyses resulted in a concentration greater than or equal to the NAAQS?

If any, please explain the outcome of the analysis and the effect on the project:

No concentrations were greater than or equal to the NAAQS.

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

No**Q36**

Has your Department performed a project- level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37

Does your Department perform project level GHG analyses for any projects?

No. Please go to Q40**Q40**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No**Q41**

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43**Q43**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No**Q44**

Does your state air quality agency have a transportation conformity regulation specific to your state?

No

State DOT Air Quality Practices

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

If yes, are they included in your project level procedures (Y/N)?

Yes

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Y

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Some

State DOT Air Quality Practices

Maine Department of Transportation

Q1**Yes**

If you are a relatively new to air quality (say, less than 6 months experience) please check here, but complete the survey to the best of your ability.

Q3**No_____, please go to Question 4**

Does your State have written project-level air quality analysis procedures?

Q4**Use your state air quality agency guidance – include reference(s) in box, if known**

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5**No, please go to Question 40**

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

State DOT Air Quality Practices

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

N

Q47

The Department is the lead (e.g. Chair, Secretary, etc.) for the Interagency Consultation Process

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

**Maryland Department of Transportation State Highway Administration
Environmental Planning Division****Q3****No _____, please go to Question 4**

Does your State have written project-level air quality analysis procedures?

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

reference(s)/explanation:

Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents October 18, 2016 FHWA and EPA MOVES guidance MOVES2014a User Guide, November 2015 Federal Highway Administration. 2017. Frequently Asked Questions Conducting Quantitative MSAT Analysis for FHWA NEPA Documents.

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

- a. Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents October 18, 2016 FHWA and EPA MOVES guidance MOVES2014a User Guide, November 2015 Federal Highway Administration. 2017. Frequently Asked Questions Conducting Quantitative MSAT Analysis for FHWA NEPA Documents.

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

State DOT Air Quality Practices

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

Yes

If yes, are they included in your project level procedures (Y/N)?

N/A

If not included, please include a link or other means to obtain them

Guidance in our Environmental Planning Manual

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Y

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

Other (please specify):

MDOT is a member of the Interagency Consultation Group but MDOT SHA would only participate if one of our projects needs a conformity determination/hot-spot analysis and is being presented/discussed

State DOT Air Quality Practices

Q48**Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49**No**

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

**District Department of Transportation; Planning and Sustainability Division
Environmental Program Branch**

Q3

Does your State have written project-level air quality analysis procedures?

Yes_____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

No, please identify means to obtain them,
Other (please specify):
The document can be provided electronically upon request.

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),
Particulate Matter 10 microns in diameter and smaller (PM10)
Particulate Matter 2.5 microns in diameter and smaller (PM2.5)
Mobile Source Air Toxics (MSATs),
Greenhouse Gasses (GHGs)

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):
It is quantitative for CO and qualitative for the other pollutants.

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

No, please explain reason,
Explanation:
We had worked with our MPO to assist in the tools and data we needed. DDOT is no longer subject to the requirement for project-level analysis because the region has maintained the standard for over 20 yrs and/or the standard was no longer applicable to the region.

State DOT Air Quality Practices

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey,
Transportation demand model,
Microsimulation model,
VMT projections,
HPMS data and projections

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Traffic survey
traffic volumes, traffic and operating characteristics
 Transportation demand model
Future year projections
 Microsimulation model
changes in the traffic patterns
 VMT projections
volume, growth
 HPMS data and projections
individual routes/corridor data

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Assume traffic models include these effects

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

No

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Type of project (capacity)

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Other (please specify):
 Use the same methodology as the MPO.

State DOT Air Quality Practices

Q16**MOVES**

Which of the following models do your procedures include for emissions:

Q17

**CAL3QHC,
CAL3QHC/R,
AERMOD**

Which of the following models do your procedures include for dispersion:

Q18**No**

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Q19

**Nearest state air quality agency monitoring site,
On-site project-level monitoring,
Metropolitan Planning Organization**

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Q20

**CAL3QHC/CAL3QHCR compatible data,
AERMOD compatible data processed by AERMET,
Met data sets provided by the state air agency**

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Q21**We work with the MPO.**

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

State DOT Air Quality Practices

Q22**No**

Do your procedures consider any type of “rollback” adjustment to background concentrations to account for future improvements in vehicle emission control technology?

Q23**No**

Do your procedures include a source of emissions of roaddust for PM analyses?

Q24**No**

Do your procedures include analysis of construction emissions?

Q25**Consultant services**

Are the project-level analyses primarily performed:

Q26

It is contracted as part of the NEPA analysis and documentation phase of the project.

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Q27**No**

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

State DOT Air Quality Practices

Q28**No**

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29**No**

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

If yes, please list and explain:

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

Mitigation measures are included in the environmental commitments of the NEPA Decision Document.

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32**As part of the environmental document (EIS, EA, etc.)**

How are the results of a project-level air quality analysis documented?

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	4
PM10	0
PM2.5	0
NO2	0
MSATs	0
GHGs	0

State DOT Air Quality Practices

Q35**No**

Does your Department perform a quantitative analysis of ozone precursors for any project?

Q36**No**

Has your Department performed a project- level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37

Does your Department perform project level GHG analyses for any projects?

Yes____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):
This is a qualitative discussion in the NEPA document.

Q38**qualitative. Please go to Q40**

Are the analyses...

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**Yes. Please go to Q43**

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43**No**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

State DOT Air Quality Practices

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

No

Does your Department have guidance related to project-level transportation conformity requirements?

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

North Dakota Department of Natural Resources Environmental and Transportation Services Division**Q1****Yes**

If you are a relatively new to air quality (say, less than 6 months experience) please check here, but complete the survey to the best of your ability.

Q3**No _____, please go to Question 4**

Does your State have written project-level air quality analysis procedures?

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

reference(s)/explanation:

Guideline for modeling carbon monoxide from roadway intersections and User's Guide to CAL3QHC Version 2.0: A modeling methodology for predicting pollutant concentrations near roadway intersections where the two documents that were used in 2002 on a project in ND. This is the most recent air quality analysis done for a project.

Q5**No, please go to Question 40**

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40**No**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41**No**

Does your state or any part of your state contain a non-attainment or maintenance area?

State DOT Air Quality Practices

Q42

No. Please go to Q48

If no to Q41, do you expect any changes in that status in the next 6 months or so?

Q46

Does your project-level transportation conformity guidance

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

United States

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

ND

Q48

None

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

no

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

North Carolina DOT**Q3**

Does your State have written project-level air quality analysis procedures?

Yes _____, please go to Question 6

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

<https://connect.ncdot.gov/resources/Environmental/PDEA%20Procedures%20Manual%20Documents/2016%20NCDOT%20Air%20Quality%20Manual.pdf>

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),

Particulate Matter 10 microns in diameter and smaller (PM10)

Particulate Matter 2.5 microns in diameter and smaller (PM2.5)

Mobile Source Air Toxics (MSATs)

Q8

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

Quantitative procedures when a CO or PM hotspot analysis is required (these are very rare in NC). For MSAT, both quantitative and qualitative procedures. The majority of NCDOT projects require only qualitative analysis, if any.

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Yes, please list each type and explain circumstances for use

Explanation:

for qualitative analysis, we have a report template.

Otherwise, we have no streamlining tools to assist with quantitative, because they are very rare in NC.

State DOT Air Quality Practices

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Transportation demand model,

Microsimulation model,

Other (please identify),

Other (please specify):
project-level traffic forecast

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Transportation demand model

speeds and VMTs

Microsimulation model

peak hour volumes, speeds?

Other (please identify)

ADT and peak hour volumes from forecast

Q12

How are indirect and cumulative effects considered in deriving traffic parameters?

Not considered

Q13

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

No

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Other (please specify):

based on environmental doc type. Environmental Assessments and EISs require qualitative air quality analysis (unless ADT is over 140,000, in which case a quantitative MSAT is required). CEs or the NC Environmental Policy Act equivalent do not require analysis.

Q16

Which of the following models do your procedures include for emissions:

MOVES

State DOT Air Quality Practices

Q17**CAL3QHC, CAL3QHC/R**

Which of the following models do your procedures include for dispersion:

Q18**No**

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Q19**Nearest state air quality agency monitoring site**

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Q20**Worst case**

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Q22**No**

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

Q23**No**

Do your procedures include a source of emissions of roaddust for PM analyses?

Q24**No**

Do your procedures include analysis of construction emissions?

State DOT Air Quality Practices

Q25

Consultant services

Are the project-level analyses primarily performed:

Q26

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations (e.g. by pollutant, by project type and scale, by level of public interest, etc.):

fixed lump sum budget for qualitative project-level air quality analysis. for quantitative, it would be based on scope, complexity, and number of pollutants. Again, we virtually never do these in NC

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Yes, please explain development and circumstances for use:
for qualitative, we allow 4 days. For quantitative, it depends.

Q28

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Yes, please explain:
NCDOT reviews and approves all consultant work products.

Q29

No

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

No

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

State DOT Air Quality Practices

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32**Both (please describe the circumstances of both types of documentation in box)**

How are the results of a project-level air quality analysis documented?

Explanation:
always both

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO	0
PM10	0
PM2.5	0
NO2	0
MSATs	20
GHGs	0

Q35**No**

Does your Department perform a quantitative analysis of ozone precursors for any project?

Q36**No**

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

Q37**No. Please go to Q40**

Does your Department perform project level GHG analyses for any projects?

Q40

Yes. Please explain circumstances and outcome:

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

GHGs were mentioned as one item among many in a NEPA lawsuit.

State DOT Air Quality Practices

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

y

If yes, are they included in your project level procedures (Y/N)?

y

Q46

Does your project-level transportation conformity guidance

meet Federal requirements (Y/N):

y

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain:

n

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain:

n

Q47

The Department is not an active member in the Interagency Consultation Process

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

State DOT Air Quality Practices

Q48**Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc.

Regarding guidance documents in general, are you familiar with

Q49

no

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

New Hampshire Department of Transportation

Q3

No _____, please go to Question 4

Does your State have written project-level air quality analysis procedures?

Q4

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

If your State was required to perform an air quality analysis for a project, how would you proceed?

Q5

No, please go to Question 40

Has your Department performed a project-level air quality analysis within the last 5 years?

Q40

No

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

No

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Q44

No

Does your state air quality agency have a transportation conformity regulation specific to your state?

State DOT Air Quality Practices

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

N**Q46**

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Y**Q48****Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

No.

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

State DOT Air Quality Practices

New Jersey Department of Transportation

Q3

Does your State have written project-level air quality analysis procedures?

No _____, please go to Question 4

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Use Federal (FHWA, U.S. EPA) guidance – include reference(s) in box, if known

reference(s)/explanation:

Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM2.5 and PM10 nonattainment and Maintenance Areas Federal Highway Administration Carbon Monoxide Categorical Hot-Spot Finding with MOVES2014a

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM2.5 and PM10 nonattainment and Maintenance Areas Federal Highway Administration Carbon Monoxide Categorical Hot-Spot Finding with MOVES2014a

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Yes (please explain):

State was recently redesignated into serious nonattainment area for ozone.

State DOT Air Quality Practices

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

No, please continue to Q48 (Y/N)

Does your Department have guidance related to project-level transportation conformity requirements?

No**Q48****Some**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

Move from CO to NO_x in modeling guidance. We should no longer worry about CO, but now start performing microscale analyses for NO_x since its an ozone precursor. We need further guidance from EPA on changing over to perform these types of analyses.

State DOT Air Quality Practices

Florida DOT

Q1**Yes**

If you are a relatively new to air quality (say, less than 6 months experience) please check here, but complete the survey to the best of your ability.

Q3**Yes _____, please go to Question 6**

Does your State have written project-level air quality analysis procedures?

Q6**Yes, please include a link or other means to identify them**

Are your air quality analysis procedures publicly available?

Other (please specify):

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/environment/pubs/pdeman/2019/links/pt2ch19_011419-current.pdf?sfvrsn=84d712da_2

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),**Particulate Matter 10 microns in diameter and smaller (PM10)****Particulate Matter 2.5 microns in diameter and smaller (PM2.5)****Mobile Source Air Toxics (MSATs)****Q8**

Are your procedures primarily...

qualitative? If qualitative only, please proceed to Question 25.**Q25****Consultant services**

Are the project-level analyses primarily performed:

State DOT Air Quality Practices

Q26

by project type and scale

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Q27

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Yes, please explain development and circumstances for use:
We have staff hour estimation guidelines to estimate the level of effort.

Q28**No**

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29**No**

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

If yes, please list and explain:
Listed in our policy are examples of Mitigation Strategies for MSAT Emissions

Q32

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

Explanation:

If a screening analysis is performed an Air Quality Tech Memo is prepared and the results will be summarized in the environmental document.

State DOT Air Quality Practices

Q35

No

Does your Department perform a quantitative analysis of ozone precursors for any project?

Q41

Yes. Please go to Q43

Does your state or any part of your state contain a non-attainment or maintenance area?

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Yes (please explain):

Recently the Florida Department of Environmental Protection announced that Florida meets all of the National Ambient Air Quality Standards (NAAQS) statewide.

Q48

Most/All

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

California Department of Transportation (Caltrans)**Q3****Yes _____, please go to Question 6**

Does your State have written project-level air quality analysis procedures?

Q4

If your State was required to perform an air quality analysis for a project, how would you proceed?

Other, please explain (in box),

reference(s)/explanation:

California Department of Transportation (Caltrans) developed a guidance package summarizes case study material based on real-world experience for modeling quantitative PM hot-spot impacts. Key components of the package include an overview of the PM hot-spot analysis procedure, guidance for estimating the level of effort required for an analysis, guidance on how to review and quality assure AERMOD modeling results, a discussion of potential project features that may help reduce PM impacts, and guidance on best practices to streamline the development of PM hot-spot analysis documents. The package also includes a checklist to facilitate AERMOD modeling reviews and summarizes recently completed documents about hot-spot analysis.

<https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/f0006994-pm-hot-spot-best-practices-guidebooka11y.pdf> Caltrans staff will also refer to EPA's PM Hot-spot Analyses: Guidance "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas." <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100NMXM.pdf>

Caltrans also developed a tool called "CO Protocol provides procedures and guidelines to conduct a project-level CO analysis." Once it's placed on our website again, we'll send you the link.

State DOT Air Quality Practices

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance— include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance— include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

Caltrans requires our district staff coordinate with HQ first, and review the following the documents: EPA's PM Hot-spot Analyses: Guidance "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas."

<https://nepis.epa.gov/Exe/ZyPDF.cgi?>

Dockey=P100NMXM.pdf "Quantitative Particulate Matter Hot-Spot Analysis Best Practices Guidebook."

<https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/f0006994-pm-hot-spot-best-practices-guidebook-a11y.pdf> "Streamlining Air Quality Dispersion Modeling to Support Quantitative Particulate Matter Hot-Spot Analysis." <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/dispersion-modeling-support-pm-hot-spot-analysis-a11y.pdf>

A project team is assembled with air quality technical expertise. After the team is identified, an air quality modeling protocol must be developed and approved by US EPA and FHWA before Caltrans can proceed to the quantitative modeling.

Q40

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No

Q41

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43

Q43

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

No

State DOT Air Quality Practices

Q44**No**

Does your state air quality agency have a transportation conformity regulation specific to your state?

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

If not included, please include a link or other means to obtain them

<https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/f0006994-pm-hot-spot-best-practices-guidebook-a11y.pdf>

Q46

Does your project-level transportation conformity guidance meet Federal requirements (Y/N):

Yes**Q47**

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48**Most/All**

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

State DOT Air Quality Practices

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

Project sponsors and analysts are still in the process of gaining practical experience in hot-spot analyses and exploring new ideas for mitigation measures. In general, mitigating PM hot-spot impacts requires modifying project features to reduce PM emissions (exhaust, tire wear, brake wear, and road dust) and thus to reduce PM concentrations at the project site. Vehicle fleet characteristics and travel activities directly influence PM emissions, and project infrastructure characteristics may also have an influence. Even with the above mitigation measures to reduce transportation project impacts the project could fail to pass the conformity test in a quantitative PM hot-spot analysis if the background concentrations are higher than NAAQS. This is the case in California for the annual PM 2.5 standard in the South Coast air district along with the San Joaquin Valley. Furthermore, real-world examples of PM mitigation measures implemented at the project level have not been available and need to be explored, researched, and approved by U.S. EPA.

State DOT Air Quality Practices

Colorado DOT**Q3****Yes_____**, please go to Question 6

Does your State have written project-level air quality analysis procedures?

Q5

Has your Department performed a project-level air quality analysis within the last 5 years?

If Yes , how did you proceed with the analysis?

- a. Used Federal (FHWA, U.S. EPA) guidance– include reference(s) in box (then go to Question 40)
- b. Used your state air quality agency guidance– include reference(s) in box (then go to Question 40)
- c. Other, please explain in box (then go to Question 40):

Yes,

both; CDOT Air Quality Project-Level Analysis Guidance, available online at <https://www.codot.gov/programs/environmental/air-quality/cdot-aq-plag>

Q6

Are your air quality analysis procedures publicly available?

Yes, please include a link or other means to identify them

Other (please specify):

<https://www.codot.gov/programs/environmental/air-quality/cdot-aq-plag>

Q7

Which of the following pollutants do your procedures address?

Carbon Monoxide (CO),**Particulate Matter 10 microns in diameter and smaller (PM10)****Ozone and ozone precursors (O3(VOCs/NOx)),****Mobile Source Air Toxics (MSATs),****Greenhouse Gasses (GHGs)****Q8**

Are your procedures primarily...

If both, please explain the circumstances that determine when qualitative or quantitative aspects of the procedures are used (e.g. quantitative for some pollutant(s) and qualitative for other pollutant(s)):

CO and PM10 - depends if hotspot is triggered ozone - qualitative MSAT - Use FHWA guidance to determine GHG - EAs have qualitative analyses; EIS's have quantitative analyses

State DOT Air Quality Practices

Q9

Does your Department have any streamlining tools available to assist in project-level analyses (e.g. programmatic agreements, pre-vetted model inputs, template tools, pre-approved documentation, etc.)?

Q10

In general, how are traffic inputs (volumes, speeds, etc.) for the analysis obtained (check all that apply)?

Traffic survey,

Transportation demand model, Microsimulation model,

HPMS data and projections

Q11

Use of data obtained from Q10: If combination of the above, please identify the traffic parameters obtained from each applicable methodology (e.g. VMT projections for volumes, microsimulation model for speeds) and any relevant techniques or approaches of note used by your Department:

Traffic survey
volumes, vehicle mix

Transportation demand model

volumes, vehicle mix

Microsimulation model

signal timing, congested speed

HPMS data and projections

volumes, vehicle mix, possibly speed

No, please explain reason,

Explanation:

Have not developed any

Q12

Not considered

How are indirect and cumulative effects considered in deriving traffic parameters?

Q13

No

Do your procedures include any additional considerations (such as mesoscale or regional scale emissions analysis) for "large" projects?

State DOT Air Quality Practices

Q14

Do your procedures explicitly identify triggers for a project-level air quality analysis?

Other (please specify):

Our triggers are identified by applicable regulation or federal guidance, except for GHGs. For GHG, EAs use qualitative boilerplate text and EIS's include that and add a quantitative analysis

Q15

Do your procedures explicitly identify the scope, scale, and years of analysis for an air quality analysis (e.g. % increase in traffic on facilities, worst-case intersection, Design Year, Estimated Time of Completion (ETC) and ETC+30)?

Other (please specify):

CO hotspot - Do a screen first (present day emission factors and future peak hour traffic volumes) PM10 hotspot
- Determined via interagency consultation

Q16

Which of the following models do your procedures include for emissions:

MOVES**Q17**

Which of the following models do your procedures include for dispersion:

CAL3QHC,
CAL3QHC/R,
CALINE3,
AERMOD

Q18

Do your procedures require performing a screening analysis initially, then performing a more detailed analysis, depending on the results of the screening analysis?

Yes, by pollutant? Please explain:
Yes, for CO. See answer to #15

Q19

For pollutants that may require a background concentration (CO, PM10, PM2.5, NO2), where do you obtain background concentrations?

Other (please explain):

Directly from Colorado Air Pollution Control Division (of Colorado Department of Public Health and Environment)

State DOT Air Quality Practices

Q20

Please specify the type of meteorological data that your Department uses for air dispersion modeling. Choose all applicable:

Worst case,**Met data sets provided by the state air agency****Q21**

Please describe how your Department decides on appropriate meteorological data based on the scope of the analysis and pollutant(s) to be considered in the analysis:

APCD provides the meteorological data if it is available and agencies agree it is the best data to use. Otherwise, EPA's worst-case meteorological scenario is used.

Q22

Do your procedures consider any type of "rollback" adjustment to background concentrations to account for future improvements in vehicle emission control technology?

No**Q23**

Do your procedures include a source of emissions of roaddust for PM analyses?

No**Q24**

Do your procedures include analysis of construction emissions?

Yes, please explain the method(s) you use (ICE, NCHRP 25-25 Task58, AP-42, other) and circumstances for the analysis:
Analysis is discussed; method is not

Q25

Are the project-level analyses primarily performed:

Consultant services**Q26**

For consultant services analyses (if applicable), please explain how work is contracted out and budgeting considerations(e.g. by pollutant, by project type and scale, by level of public interest, etc.):

Unknown; I don't do this. It is probably by project type and scale.

State DOT Air Quality Practices

Q27**No**

For consultant services analyses (if applicable), do you have estimates of level of effort for the above consideration (Q26)?

Q28**No**

Does your Department's air quality analysis procedures have any Quality Analysis/Quality Control (QA/QC) considerations with regard to modeling inputs, consultant work products and analyses, project level analysis outcomes or other parameters to check on and maintain the technical level of the analysis process?

Q29**No**

Do your Department's air quality analysis procedures consider risks associated with the analysis with regard to modeling inputs, analysis outcomes, or other parameters that could adversely affect project scheduling, scope, and budget that might occur with estimated air quality impacts associated with the project?

Q30

If yes, please list and explain:

Does your Department have a list of mitigation measures for consideration should a project-level air quality analysis result in a possible adverse air quality impact?

See the Air Quality Project-Level Analysis Guidelines, page 28 (step 7) and page 37 (step 7).

Q31**No**

Within the last 5 years, has any project required mitigation based on the results of an air quality analysis?

Q32

Explanation:

How are the results of a project-level air quality analysis documented?

Both (please describe the circumstances of both types of documentation in box)

I don't understand what is meant by "describe the circumstances of both types of documentation." A report contains the details and the report is summarized in the environmental document.

State DOT Air Quality Practices

Q33

Estimate the number of project-level analyses by pollutant by your Department in the last 5 years:

CO 27

PM10 1

Q34

Have any of these analyses resulted in a concentration greater than or equal to the NAAQS?

If any, please explain the outcome of the analysis and the effect on the project:

none have resulted in a concentration greater than or equal to the NAAQS

Q35

Does your Department perform a quantitative analysis of ozone precursors for any project?

Yes_____ (please explain the triggers and the circumstances for the analysis and estimate the number of analyses performed in the last 5 years):

I remember that we did one project, but don't recall what it was or why it was triggered. It is not common. It was requested by Colorado Air Pollution Control Division.

Q36

Has your Department performed a project-level analysis that included estimated concentrations of any MSAT or performed a health risk assessment?

No

Q37

Does your Department perform project level GHG analyses for any projects?

Yes_____, please describe the circumstances for the analysis (e.g. size and scale of the project, environmental classification (EA, EIS), etc.):

EAs use the boilerplate qualitative text. EISs use that also but also include a quantitative analysis

State DOT Air Quality Practices

Q38

Are the analyses...

Both. Please describe the distinction between qualitative and quantitative analyses: :

EAs use the boilerplate qualitative text. EISs use that also but also include a quantitative analysis. However, CDOT hasn't initiated an EIS in the past 5 years.

Q39

Does the quantitative analysis include construction and maintenance GHG emissions?

Neither**Q40**

Has your state been involved in litigation about air quality issues due to a transportation project within the last 5 years?

No**Q41**

Does your state or any part of your state contain a non-attainment or maintenance area?

Yes. Please go to Q43**Q43**

Do you expect any changes in the non-attainment or maintenance status in the next 6 months or so?

Yes (please explain):

A PM10 and a CO maintenance area will each have had 20 years of maintenance in September and October (respectively) and no longer will need to comply with conformity. Two areas came out of maintenance in 2019 (May and October 2019).

Q44

Does your state air quality agency have a transportation conformity regulation specific to your state?

Yes_____(Please include a link or other means to obtain them):

Air Quality Control Commission regulation #10, Criteria for Analysis of Transportation Conformity:

<https://www.colorado.gov/pacific/cdphe/aqcc-regs>

Q45

Does your Department have guidance related to project-level transportation conformity requirements?

If yes, are they included in your project level procedures (Y/N)?

yes

State DOT Air Quality Practices

Q46

Does your project-level transportation conformity guidance

meet Federal requirements (Y/N): **yes**

go beyond Federal requirements to meet State Air Quality Agency requirements? If yes, please explain: **no**

go beyond State Air Quality Agency requirements to meet Department or local requirements? If yes, please explain: **no**

Q47

What is your Department's role in the Interagency Consultation Process for transportation plans, programs and projects in the nonattainment/maintenance area(s)?

The Department is a member and is active in the Interagency Consultation Process

Q48

FHWA and U.S. EPA have developed several guidance documents to assist project-level air quality analysis. Some are: Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas; Guideline for Modeling Carbon Monoxide From Roadway Intersections; Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents; Carbon Monoxide Categorical Hot-Spot Finding; etc. Regarding guidance documents in general, are you familiar with

Most/All

Q49

Based on your familiarity, do you have any comments, thoughts, ideas, recommendations related to the documents that would be beneficial to performing a project-level air quality analysis? Please explain:

1. Better guidance on using Table 2 of 40 CFR 93
2. Better definition of POAQC for projects, including involving changes to existing highways