

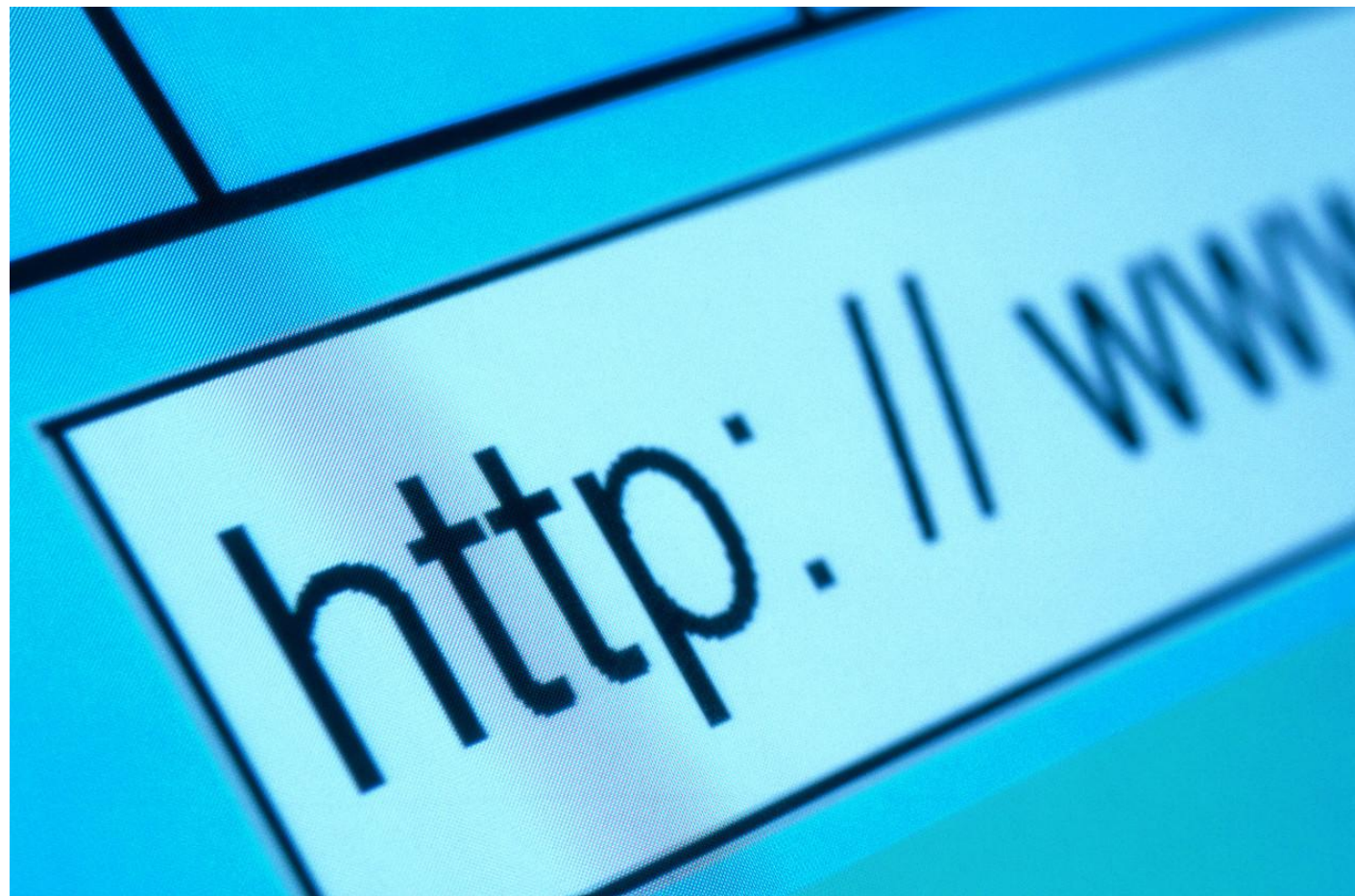
# FHWA Air Quality Activities

**Cecilia Ho, Team Leader**  
**Air Quality and Transportation Conformity Team, FHWA**  
**MTAQS, 2009**  
**Grafton, IL**

# Outline

- Recent air quality products and publications
- Active research projects

# Recent Products



# FHWA MSAT Interim Guidance Update

## Status and Timeline:

- Update completed Sept. 30, 2009
- Expect future comprehensive update with MOVES

## Highlights:

- Language to reflect recent EPA regulatory changes
- Broaden horizon years of emissions trends performed by MOBILE6.2 to 2050
- Update summary of scientific research
- Streamline organization and reduce redundancy

<http://www.fhwa.dot.gov/environment/airtoxic/100109guidmem.htm>

# PM2.5 Qualitative Hotspot Analysis Guidance Clarification

- Completed in June, 2009
- Part of a settlement agreement of a lawsuit
- Provides further explanation on how to conduct a qualitative PM2.5 or PM10 hot-spot analysis using method A (comparison to another location with similar characteristics)



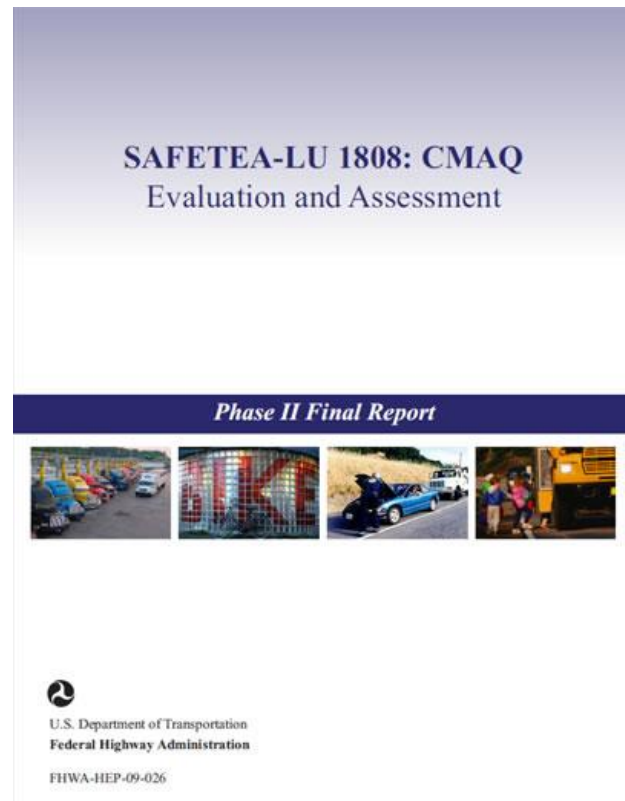
<http://www.fhwa.dot.gov/environment/conformity/tcgfinal.htm>

# CMAQ Evaluation Phase II Final Report

- SAFETEA-LU 1808: CMAQ Evaluation and Assessment: Phase II Final Report
  - Completed in July, 2009, report available on website\*\*
  - Print version available soon
  - Response to SAFETEA-LU 1808 requirements to evaluate and assess the direct and indirect impacts of CMAQ funded projects on air quality and congestion levels
    - Phase I: examined the impacts on 67 projects
    - Phase II: explore practices and approaches to CMAQ project selection and implementation based on 7 case studies

\*\* Phase I report, completed in Oct 2008, is available at:

<http://www.fhwa.dot.gov/environment/cmaqpgs/safetealu1808/index.htm>

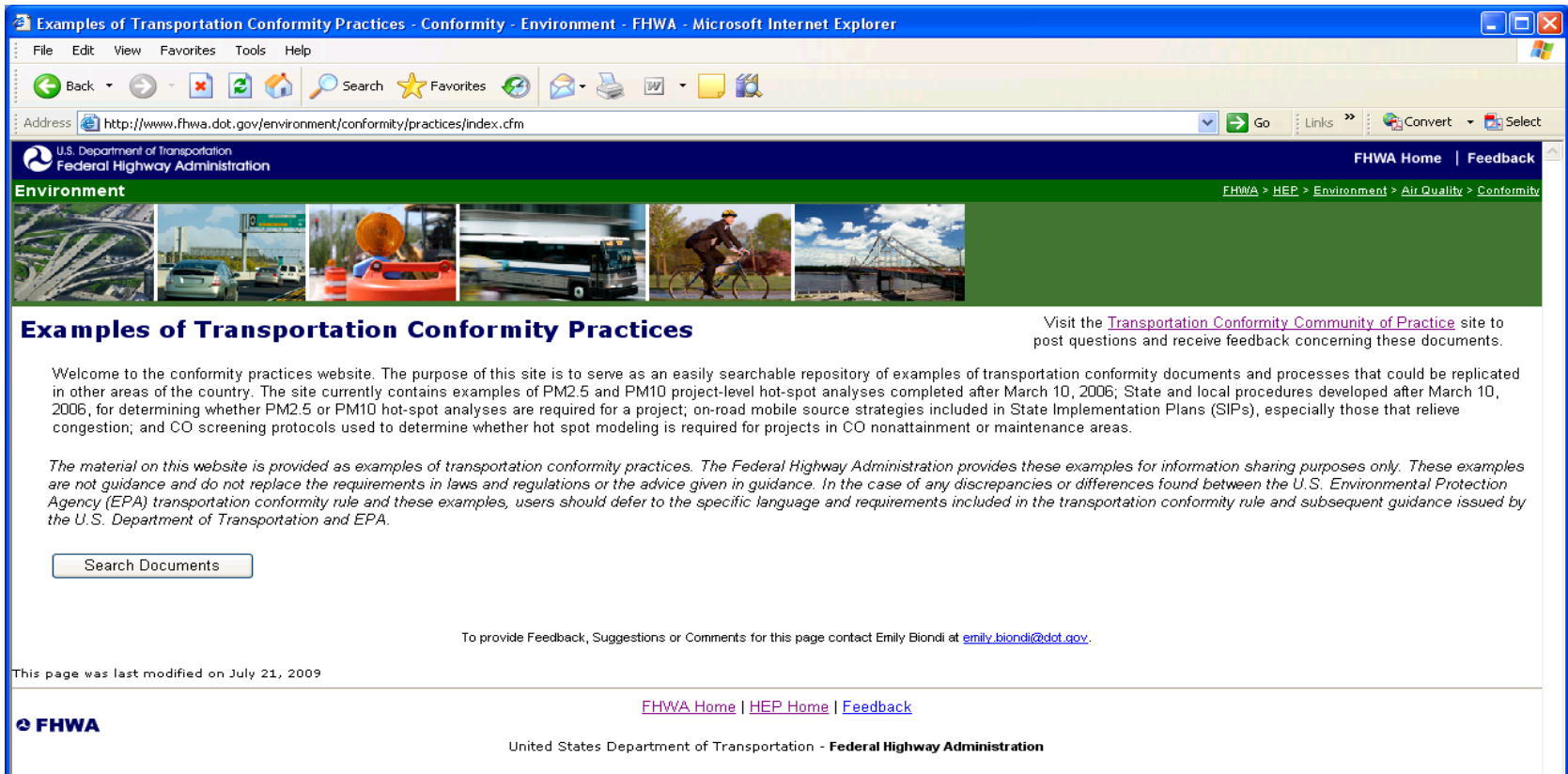


# Examples of Transportation Conformity Practices Website

- Easily searchable repository of examples of transportation conformity documents and processes that could be replicated in other areas of the country

*<http://www.fhwa.dot.gov/environment/conformity/practices/index.cfm>*

# What Does It Look Like?



The screenshot shows a Microsoft Internet Explorer browser window displaying the FHWA website. The address bar shows the URL: <http://www.fhwa.dot.gov/environment/conformity/practices/index.cfm>. The page header includes the U.S. Department of Transportation Federal Highway Administration logo and navigation links for FHWA Home and Feedback. A breadcrumb trail reads: FHWA > HEP > Environment > Air Quality > Conformity. Below the header is a banner image with six small photos: a highway interchange, a car in traffic, a person in a hard hat, a bus, a person on a bicycle, and a bridge. The main heading is "Examples of Transportation Conformity Practices". To the right of this heading is a link to the "Transportation Conformity Community of Practice" site. The main text welcomes visitors and describes the site's purpose as a repository of examples of transportation conformity documents and processes. It includes a disclaimer stating that the material is provided as examples and does not replace legal requirements. A "Search Documents" button is located below the text. At the bottom of the page, there is a contact information for Emily Biondi and a footer with the FHWA logo and the text "United States Department of Transportation - Federal Highway Administration".

Examples of Transportation Conformity Practices

Visit the [Transportation Conformity Community of Practice](#) site to post questions and receive feedback concerning these documents.

Welcome to the conformity practices website. The purpose of this site is to serve as an easily searchable repository of examples of transportation conformity documents and processes that could be replicated in other areas of the country. The site currently contains examples of PM2.5 and PM10 project-level hot-spot analyses completed after March 10, 2006; State and local procedures developed after March 10, 2006, for determining whether PM2.5 or PM10 hot-spot analyses are required for a project; on-road mobile source strategies included in State Implementation Plans (SIPs), especially those that relieve congestion; and CO screening protocols used to determine whether hot spot modeling is required for projects in CO nonattainment or maintenance areas.

*The material on this website is provided as examples of transportation conformity practices. The Federal Highway Administration provides these examples for information sharing purposes only. These examples are not guidance and do not replace the requirements in laws and regulations or the advice given in guidance. In the case of any discrepancies or differences found between the U.S. Environmental Protection Agency (EPA) transportation conformity rule and these examples, users should defer to the specific language and requirements included in the transportation conformity rule and subsequent guidance issued by the U.S. Department of Transportation and EPA.*

To provide Feedback, Suggestions or Comments for this page contact Emily Biondi at [emily.biondi@dot.gov](mailto:emily.biondi@dot.gov).

This page was last modified on July 21, 2009

[FHWA Home](#) | [HEP Home](#) | [Feedback](#)

**FHWA**

United States Department of Transportation - **Federal Highway Administration**

# What is on the site?

- CO project-level modeling protocol from several States (recently added)
- Samples of PM<sub>2.5</sub> and PM<sub>10</sub> project level hot-spot analyses completed after March 10, 2006;
- State and local procedures developed after March 10, 2006, for determining whether PM<sub>2.5</sub> or PM<sub>10</sub> hot-spot analyses are required for a project; and
- On-road mobile source strategies included in State Implementation Plans (SIPs), especially those that relieve congestion

# Examples of Conformity Practices

## Examples of Transportation Conformity Practices

Visit the [Transportation Conformity Community of Practice](#) site to post questions and receive feedback concerning these documents.

### Select Document Type:

- PM2.5/PM10 Qualitative Hot-Spot Analyses
- PM2.5/PM10 Hot-Spot Procedures
- SIPs with On-Road Mobile Source Measures
- CO Protocols

Select

All Documents

Return all 6 PM2.5/PM10 Qualitative Hot-Spot Analyses

Select from the parameter(s) below to filter the documents that are returned. Use the <CTRL> key to select/deselect multiple items.

NOTE: Parameter values are limited to those associated with documents in the repository.

#### Pollutant

---  
PM10  
PM2.5

#### State

---  
Alabama  
District of Columbia  
Illinois

#### Type of Methodology

---  
Air quality study  
Comparison to another location

#### Project Type

---  
Expanded highway  
New highway

Clear

Search

### Search Results:

To view PDF files, you need the [Acrobat® Reader®](#).

- [PM10 Hot Spot Analysis for US 93 \(MT\)](#) (or [PDF](#), 29 KB)
- [PM2.5 Conformity Analysis for the Woodrow Wilson Bridge \(DC-MD-VA\)](#) (or [PDF](#), 1.4 MB)
- [PM2.5 Conformity Determination for the Baltimore Beltway I-695 \(MD\)](#) (or [PDF](#), 1.2 MB)
- [PM2.5 Project Level Conformity Analysis for the Ohio River Bridges \(KY\)](#) (or [PDF](#), 1.7 MB)
- [PM2.5 Project Level Conformity Determination for Corridor X \(AL\)](#) (or [PDF](#), 2.9 MB)
- [PM2.5 Project Level Hot Spot Analysis for the Prairie Parkway \(IL\)](#) (or [PDF](#), 1 MB)

*The PM hot-spot screening procedures and analyses posted on this website are offered as examples only. Users will need to tailor their efforts to meet the needs and circumstances of their particular situations. Please refer to the EPA/FHWA guidance document, "[Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas](#)" for guidance concerning specific requirements regarding determining whether or not a project may be a "project of air quality concern" and guidance concerning the requirements for conducting a qualitative PM hot-spot analysis. In particular, refer to question 4.2 for what should be documented in a hot-spot analysis.*

# Air Quality Research



# Research Program: STEP

- **S**urface **T**ransportation **E**nvironment **P**lanning Cooperative Research Program
- A federally-administered nationally oriented research program
- Authorized in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy of Users (SAFETEA-LU)
  - Section 5207 – Surface Transportation Environment and Planning Cooperative Research Program (STEP)
  - Section 5208 – Transportation Research and Development (R&D) Strategic Planning

# FHWA's STEP Emphasis Areas



# Stakeholder Involvement

- **On-going outreach & stakeholder feedback are used to refine & implement the national STEP research agenda**
- **Partnerships are formed to leverage funds with other sources including:**
  - Federal, State and Local agencies
  - National Cooperative Highway Research Program
  - Future Strategic Highway Research Program
  - Pooled funds & foreign jurisdictions
- **Examples of outreach activities include:**
  - National workshops
  - Annual community of practice conferences
  - Program advisory groups
  - Peer reviews

# FY2009 and FY2010 STEP Research Program

## FY2009 STEP

- A Federal Register notice in June 2008 requested public comment on FY09 STEP Implementation Strategy
- 424 comments were received
- STEP Plan posted on STEP website January 2009  
<http://www.fhwa.dot.gov/hep/step/plans.htm>

## FY2010 STEP

- A Federal Register notice in Sept 2009 requested public comment on FY10 STEP Implementation Strategy
- FY 2010 STEP research comments will be accepted through December 3, 2009 at this website:  
<http://knowledge.fhwa.dot.gov/cops/step.nsf/home/>

# 2009 Transportation and Air Quality Emissions Analysis Research

- Broad Agency Announcements (BAA) are used to obtain broad & diverse perspectives and options for advancing research initiatives
- Four focus areas:
  1. Testing, Evaluation and Validation of New Emission Models and Methodologies
  2. Research on Conducting Project Level Analysis
  3. Air Quality and Transportation Conformity Outreach and Communication
  4. Fleet Data for On-road Mobile Sources Emissions Inventory

# The BAA Process

- 2-step process
- Solicited preproposals
- Invited selected preproposals to submit full proposals
- 3 already under contract
- Research will cover:
  - Improving vehicle data for MOVES
  - Modeling procedures and applications for MOVES
  - Advanced methods in conducting project level emissions analysis
  - Evaluating traffic, emissions, and dispersion modeling applications
  - Air quality outreach and communications strategies
  - Continue to support an Air Quality Workgroup

# Need more information ?

- FHWA's Air Quality and Transportation Conformity webpages:

<http://www.fhwa.dot.gov/environment/aqupdate/index.htm>

<http://www.fhwa.dot.gov/environment/conform.htm>

- FHWA Resource Center Air Quality Technical Services Team

<http://www.fhwa.dot.gov/resourcecenter/teams/airquality/index.cfm>

# Questions



## Contact Information:

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