

Air Quality and Sustainable Transportation Highlights

*Prepared by the Office of Natural Environment
Federal Highway Administration*



U.S. Department of Transportation
Federal Highway Administration

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Announcements and Recent Events

2017 Carbon Monoxide (CO) Categorical Hot-spot Finding

The 2017 CO categorical hot-spot finding is now available. It updates and supersedes the February 2014 finding, and uses the latest version of the MOVES emissions model, MOVES2014a. Any CO hot-spot analysis begun after October 7, 2016, was not able to rely on the 2014 CO categorical hot-spot finding which was based on the MOVES2010b model. The CO categorical hot-spot finding can be used on urban highway projects that include one or more intersections in CO maintenance areas (except in California). The 2017 Carbon Monoxide Categorical Hot-spot materials and documentation are available: https://www.fhwa.dot.gov/environment/air_quality/conformity/policy_and_guidance/cmcf_2017/index.cfm If you have questions related to the CO Categorical Hot-spot Finding, please contact Karen Perritt at karen.perritt@dot.gov.

FHWA Publishes Report on Innovative Financing to Support Alternative Fuels Infrastructure

FHWA published a Report to Congress to [Innovative Financing to Support Alternative Fuels Infrastructure](#) in March 2017. The report discusses current efforts in the U.S. Department of Energy and FHWA to identify barriers to greater private investment in alternative fuels infrastructure, and describes current traditional and innovative financing mechanisms that could be used to help address them. This report updates the previously requested report (Senate Report 113-45) to incorporate new legislative initiatives introduced with the signing of the Fixing America's Surface Transportation (FAST) Act in 2015.

FHWA Holds Webinars on ICE Tool and EERPAT Model.

In April and June 2017, FHWA hosted webinars to review tools for energy and greenhouse gas emissions analysis. The first webinar introduced recent improvements in [EERPAT Version 4.0](#) and the results from State pilot tests. In the second webinar, FHWA staff provided an overview of [FHWA's ICE Tool](#), a spreadsheet-based model for estimating the energy and carbon dioxide emissions associated with the construction and maintenance of transportation facilities. The tool can be used for project-specific or planning-level analysis. Webinar presentations and recordings are available [here](#).

FHWA Global Benchmarking Study on Climate Resilience Highlights Practices in Denmark, the Netherlands, and Norway

In July, 2017, FHWA published [a summary](#) of a global benchmarking study on climate resilience that highlights practices used by transportation agencies in Denmark, the Netherlands, and Norway. The study includes international practices on integrating climate projections into highway planning and design procedures, managing uncertainty, and emergency management. These countries were selected based on information gathered from a virtual review, which gathered information via webinars with a broad range of countries to identify where climate adaptation and resilience activities have yielded demonstrable results.

FHWA Announces 2017 Environmental Excellence Awards

FHWA announced the [2017 Environmental Excellence Awards](#) (EEA) recipients in April 2017. Awards were granted to projects making contributions to environmental stewardship and partnerships in three areas: Organization and Process Innovation, Natural Environment, and Human Environment. The [Atlanta Roadside Emissions Exposure Study](#) was recognized in the Air Quality category, and the [Vulnerability Assessments and Adaptation Options for Central Artery](#) study was recognized in the Adaptation and Resilience category. The 2017 EEA ceremony took place at the AASHTO Subcommittee on Environment meeting, on July 19, 2017, in Des Moines, IA.

AASHTO Releases Practitioner Handbook on “Addressing Air Quality Issues in the NEPA Process for Highway Projects”

In June, AASHTO released a handbook on [Addressing Air Quality Issues in the NEPA Process for Highway Projects](#). The handbook contains a Background Briefing section, which provides an overview of requirements and terminology, as well as a section offering Practical Tips on the NEPA process and conformity determinations. In addition to the handbook download, the AASHTO link contains an archive of the webinar describing the handbook and the webinar presentation.

U.S. EPA Proposes to Retain Existing NAAQS Standard for NO_x

On July 14, 2017, the U.S. EPA proposed to retain the current [national ambient air quality standards \(NAAQS\) for oxides of nitrogen \(NO_x\)](#), based on a review of the scientific evidence. The U.S. EPA proposed that the current NAAQS for NO_x do not require a change because the existing standards provide the appropriate public health protection, with an adequate margin of safety, including for older adults, children, and people with asthma. Details on the current NAAQS, the scientific review documents, and other materials related to this action are available via the U.S. EPA link above, or via [the Federal Register](#). Comments are being accepted in the Federal Register through September 25, 2017.

U.S. EPA Hosts Webinar Series on NAAQS for Communities

The U.S. Environmental Protection Agency (EPA) is hosting a three-part webinar series on the National Ambient Air Quality Standards (NAAQS) for communities. Under the Clean Air Act (CAA), the EPA is required to set the NAAQS and review those standards every five years for six common air pollutants. The three webinars cover the three phases of the NAAQS review process: Webinar #1: NAAQS (101), on June 27, reviewed how EPA sets, reviews and revises the primary (health) and secondary (environmental) standards. [Webinar #2: NAAQS – Designations](#), on July 25, details how EPA designates areas that are meeting or not meeting these standards. Finally, [Webinar #3: NAAQS – Implementation](#), on August 30,

discusses how EPA works with areas to meet and maintain these standards. All webinars are from 1-2:30pm ET and registration is not required to join.

U.S. EPA Delays Update to 2015 Ozone Standard

The U.S. EPA announced that it will delay implementation of the [2015 ground-level ozone standard](#) by one year, as part of updates to the National Ambient Air Quality Standards. Within this timeframe, the U.S. EPA will be evaluating issues that could undermine associated compliance efforts by States, localities, and regulated entities. In addition, U.S. EPA will establish an Ozone Cooperative Compliance Task Force to develop additional flexibilities in compliance for States. More details are available [here](#).

MnDOT Installs Electric Vehicle Corridor Signs on I-94

The Minnesota Department of Transportation (MnDOT) began [installing Alternative Fuels Corridor signs](#) indicating the availability of electric vehicle charging stations along Interstate 94. These are the first Alternative Fuels Corridor signs installed in the US, after FHWA selected 55 routes spanning 35 States for [alternative fuel corridor designation](#), as enabled by the FAST Act.

Genesee Transportation Council Completes Assessment of Critical Transportation Infrastructure Vulnerability Assessment

The Genesee Transportation Council, the metropolitan planning organization (MPO) for the Genesee-Finger Lakes Region of Greater Rochester, NY, completed an assessment of potential vulnerabilities of critical regional transportation infrastructure to natural and human-caused hazards in June 2016. To highlight the process and experience FHWA recently [published a case study](#) highlighting the objectives, approach, and key results and findings from this assessment. The case study also lists resources from Genesee Transportation Council and FHWA to support other agencies conducting climate change and extreme weather vulnerability assessments.

OECD Working Paper Highlights FHWA-MassDOT Climate Resilience Pilot, International Resilience Efforts

[Climate-resilient infrastructure: Getting the Policies Right](#) is a working paper that highlights actions Organization for Economic Cooperation and Development (OECD) countries can take to ensure new and existing infrastructure is resilient to climate changes. An annex to the paper describes MassDOT's vulnerability and resilience assessment study of the Boston Central Artery/Tunnel System.

Meetings, Conferences, and Workshops

2017 International Emission Inventory Conference

[The 2017 International Emission Inventory Conference](#) will be held at the Hyatt Regency Baltimore Inner Harbor in Baltimore, MD on August 14-18, 2017. Registration information and conference schedule are available via the link above. The U.S. EPA will also be offering a MOVES2014a Hands-on Training Session in conjunction with the conference (see Training Opportunities below for details).

2017 Southern Transportation and Air Quality Summit (STAQS)

[The 2017 Southern Transportation and Air Quality Summit \(STAQS\)](#) will be held at the North Central Texas Council of Governments (NCTCOG) in Arlington, Texas on August 29-30, 2017. Registration information and conference details will be made available soon.

11th University Transportation Center (UTC) Spotlight Conference: Rebuilding and Retrofitting the Transportation Infrastructure:

TRB is sponsoring the [11th University Transportation Center \(UTC\) Spotlight Conference: Rebuilding and Retrofitting the Transportation Infrastructure](#) on September 26-27, 2017, in Washington, D.C. The preliminary program is now available and early bird registration runs through July 15, 2017.

Reminders

Congestion Mitigation and Air Quality Improvement Program Emission Reductions Calculator Updated

The FHWA developed a series of tools to provide technical for the implementation of the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. CMAQ project justifications, as well as annual reporting, require reliable air quality benefit estimates. This CMAQ Emission Reductions Calculator is offered as an additional resource to assist DOTs, MPOs, and project sponsors in the project justification process. Agencies using an existing methodology to generate emissions benefits can continue their current practice. The Traffic Flow Improvements, the Advanced Diesel Truck/Engine Technologies and the Alternative Fuels and Vehicles modules are available on the [FHWA CMAQ Emissions Calculator Toolkit](#) webpage. For more information, please contact Mark Glaze at Mark.Glaze@dot.gov or (202) 366-4053.

Frequently Asked Questions on the Revocation of the 1997 Primary Annual Particulate Matter (PM_{2.5}) National Ambient Air Quality Standard (NAAQS) and Implementation of the 2012 PM_{2.5} NAAQS Available

These FAQs provide information on the transportation conformity and transportation planning implications as a result of implementation of the 2012 PM_{2.5} NAAQS and the revocation of the 1997 primary annual PM_{2.5} NAAQS. The FAQs are available on the FHWA Air Quality website [here](#).

Quantitative MSAT Analysis for a Hypothetical Transportation Project Published

This [Quantitative Mobile Source Air Toxics \(MSAT\) for a Hypothetical Transportation Project](#) is intended as a resource for project sponsors to better document methodology and assumptions that are used when estimating MSAT emissions. The paper examines a hypothetical project involving widening of a 10-mile stretch of urban freeway. The project includes interchange ramps and segments of connecting arterials for six interchanges and an analysis of how the project affects roadway volumes and congested speeds. Emissions are compared between several alternatives and timeframes, and for different volumes of truck traffic. For additional information contact Victoria Martinez, victoria.martinez@dot.gov or 787-771-2524.

Updated Version of “Transportation Conformity: A Basic Guide for State and Local Officials” Released

[This document](#) replaces the 2010 version of the Basic Guide, which helps State and local officials understand transportation conformity and how conformity requirements relate to transportation investments in their communities. Specifically, the implications of conformity on metropolitan transportation plans, transportation improvement programs (TIPs), and transportation projects are discussed.

MOVES Model Review Work Group

The U.S. EPA’s Federal Advisory Committee Act MOVES Model Review Work Group continues to provide input on the development of the next official version of MOVES, expected to be released in 2018 at the earliest. Presentations and meeting summaries are available on the [Work Group website](#).

Training Opportunities

MOVES2014a Hands-on Training Session Scheduled and New Training Materials Posted

EPA's Office of Transportation and Air Quality has scheduled a MOVES2014a Hands-on Training session: September 20-21, Denver, CO. Contact: Chris Dresser, US EPA, dresser.chris@epa.gov

FHWA NEPA Air Quality Analysis for Highway Projects

The FHWA Resource Center Planning and Air Quality team will be conducting a series of training sessions on NEPA Air Quality Analysis for Highway Projects. The training includes sessions appropriate for managers, practitioners, and modelers, which address guidance and current practice for assessing air pollutant impacts from highways; the general approach for using the EPA’s MOVES model in highway air quality analysis; and the general approach for using the EPA’s dispersion models in highway air quality analysis. The training also includes hands-on sessions intended for modelers, which focus on the data needs for conducting highway air quality analyses; using MOVES for project-level mobile source air toxics (MSAT) and energy analysis; using MOVES to develop emission rates for dispersion modeling; and using AERMOD and the CAL3 series of dispersion models for highway project analysis. Please note that the training covers specialized project-level applications of MOVES, and is not a more general MOVES training course. It does not address using MOVES for regional applications, such as SIP emissions inventories or regional (plan and TIP) conformity analyses. If you are interested in this training, please contact Michael Claggett at michael.claggett@dot.gov.

CMAQ 101 Training

The FHWA posted a 27-minute YouTube video on the CMAQ program. The video provides a basic introduction to the program, how CMAQ funds are distributed to states, and the types of projects eligible for the CMAQ program. The training is available via the FHWA’s YouTube channel [here](#). For more information about the CMAQ program, please contact Mark Glaze at mark.glaze@dot.gov or (202) 366-4053.

Air Quality Planning Web Course Available at No Cost

The National Highway Institute (NHI) Air Quality Planning web-based training series is designed for transportation practitioners. It includes four modules: Clean Air Act Overview (FHWA-NHI-142068),

State Implementation Plan (SIP) and Transportation Control Measure (TCM) Requirements and Policies (FHWA-NHI-142069), SIP Development Process (FHWA-NHI-142070), and Transportation Conformity (FHWA-NHI-142071). All courses are free. For more information, visit the [NHI website](#) and search “Air Quality Planning,” or look for the specific course number. Please contact Karen Perritt at (202) 366-9066, or Karen.Perritt@dot.gov with any questions or comments.

MOVES2014a Training Materials

The U.S. EPA posted [updated training materials and schedule](#) for the MOVES2014a two-day hands-on training course. The next training is scheduled for August 14-15, 2017, in Baltimore, MD, in conjunction with the [2017 International Emission Inventory Conference](#) (conference registration is required to attend the training).

On its [training materials](#) webpage, the U.S. EPA also posted an abbreviated version of the MOVES2014a course materials used as a one-day training course. MOVES users who did not attend a previous hands-on training session can use the “MOVES2014 Training Materials” as a self-taught course.

MySQL Training for MOVES Model Users

Two training opportunities are available for MOVES model users. A three-hour webinar provides an introduction to MySQL Query Browser and MOVES interface. A six-hour training over two days will enable users to do MySQL programming and to write their own MySQL scripts and to manipulate MySQL databases including MOVES input and outputs. For more information or to schedule training, please contact Paul Heishman at Paul.Heishman@dot.gov.

FHWA Resource Center Training Activities

FHWA’s Resource Center Air Quality Technical Services Team is available to offer MOVES training, and information is available at the [Resource Center website](#).

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Past issues of the *Air Quality and Sustainability Highlights* are available on FHWA’s website:
http://www.fhwa.dot.gov/environment/air_quality/conformity/highlights/ or
<https://www.fhwa.dot.gov/environment/sustainability/newsletter/>.

Please e-mail Victoria.Martinez@dot.gov with any suggestions for future issues.