## Air Quality + Sustainable Transportation Highlights





**Prepared by the Office of Natural Environment** 

**July / August** 

### **Announcements**



New PROTECT Formula Program, \$7.3 Billion from Bipartisan Infrastructure Law to Help Communities Build Resilient Infrastructure

The Federal Highway Administration (FHWA) announced new guidance and \$7.3 billion in formula funding to help states and communities better prepare for and respond to climate change and extreme weather events like wildfires, flooding, and extreme heat.

The new Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Formula Program funding is available to states over five years, focusing on resilience planning, making resilience improvements to existing transportation assets and evacuation routes, and addressing at-risk highway infrastructure.

For more information about the new PROTECT Formula Program and guidance, please see <u>FHWA's website</u> and <u>fact sheet</u>. The five-year funding table for total estimated PROTECT state-by-state funding for Fiscal Years 2022-2026 is <u>available here</u>.

#### **CMAQ Emissions Calculator Toolkit**

The FHWA has recently released a new addition to its Congestion Mitigation and Air Quality Imrovement Program (CMAQ) Emissions Calculator Toolkit. The new tool, entitled "Travel Advisories Tool" will bring to 15 the number of spreadsheet tools available on the <a href="FHWA/CMAQ website">FHWA/CMAQ website</a>. This tool provides estimates of emission reductions for CMAQ-funded projects that reduce emissions due to implementation of travel advisories and the corresponding change in driving behavior. Travel advisories are comprised of signage that provides traveler information messages. The specific travel advisory types this tool currently accommodates are variable message signs and variable speed limits. For more information about the CMAQ Emissions Toolkit contact Mark Glaze, 202 366-4053.

# All 50 States, DC and Puerto Rico Have Submitted Plans for National Electric Vehicle Charging Network

The U.S. Departments of Transportation and Energy announced that all 50 states, the District of Columbia and Puerto Rico have submitted EV infrastructure deployment plans as required under the National Electric Vehicle Infrastructure (NEVI) Formula Program established and funded by the Bipartisan Infrastructure Law. These plans are required to unlock the first round of the \$5 billion of Bipartisan Infrastructure Law formula funding available over 5 years to help states accelerate the important work of building out the national EV charging network and making electric vehicle charging accessible to all Americans.

With all state EV deployment plans now submitted, the Joint Office of Energy and Transportation and FHWA will review the plans and continue to work with states, with the goal of approving state plans by September 30.

For more information on the Bipartisan Infrastructure Law and investments in electric vehicles, please visit <u>FHWA's web site</u>.

## **Environmental Protection Agency (EPA) Releases Revised AERMOD Dispersion Model**

A revised version of the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Modeling System (dated 22112) was posted to the <a href="EPA's SCRAM website">EPA's SCRAM website</a> and replaces the previous version (dated 21112). Specifically, the <a href="AERMET">AERMET</a> and AERMOD executables, source code, documentation, and test cases have been updated. The v22112 release of the AERMOD Modeling System includes several bug fixes and model enhancements including RLINE/RLINEXT general processing speed improvements, and the addition of RLINE/RLINEXT to FASTALL option, to name a few.

## **EPA posts MOVES3.0.4 --new patch to MOVES Mobile Source Emissions Model**

EPA has posted a "patch" to the Motor Vehicle Emission Simulator (MOVES) that fixes a variety of small issues, including changes in vehicle inspection and maintenance (I/M) program data in the MOVES national defaults. Users should continue to follow the MOVES Technical Guidance that requires modelers at County and Project Scale to review and update the relevant I/M coverage inputs to reflect the latest I/M assumptions in regulatory analyses.

The patched model, designated MOVES3.0.4, includes new code and a new default database, MOVESDB20220802. MOVES3.0.4 is available for download. Please download and use this new version if you have not yet

used MOVES3, have encountered security warnings with previous MOVES versions, use MOVES to generate speciated emissions for air quality modeling, or are interested in using the latest version of MOVES3.

Otherwise, MOVES3 users can continue to use <u>previous versions of MOVES3</u>. For more information about regulatory uses of MOVES, see the <u>MOVES3 Policy Guidance</u> which applies to all versions of MOVES3.

For additional technical details on these changes, see the MOVES3.0.4 milestone on the MOVES GitHub site.

#### NCHRP FY 2023 HEP Funded Projects

The <u>National Cooperative Highway Research Program</u> (NCHRP) has awarded funding to 11 research programs related to Air Quality and Sustainability. The annual research program is developed on the basis of research needs identified by administrators and staff of the highway and transportation departments, by committees of AASHTO, and by FHWA. This year's projects include:

- Impact of Flooding and Inundation on the Resiliency of Pavements. Staff Contact: Elizabeth Habic
- Benefit Analysis of Private Health Sector Investments in Public/Human Transportation. Staff Contact: <u>Victoria Martinez</u>
- Guidance in Planning for Managed Retreat as an Extreme Weather and Climate Adaptation Strategy. Staff Contact: <u>Suraiya Motsinger</u>
- Update the National REMEL Database Used in FHWA Traffic Noise Model. Staff Contact: <u>Aileen Varela-Margolles</u>

## Rebecca (Becky) Lupes is the New Team Leader in the Office of Natural Environment

Becky leads the Resilience Team in the FHWA Office of Natural Environment. Becky was an Environmental Protection Specialist on the Sustainable Transportation and Resilience Team and has extensive experience in FHWA related to climate change and resilience. She recently led the establishment of the new Carbon Reduction Program under the Bipartisan Infrastructure Law. She also has led the Office's activities related to assessing climate change under the National Environmental Policy Act. She successfully managed the Climate Vulnerability and Risk Assessment Pilot Program which awarded over \$6 million in research funds to States and local governments across the country. Becky previously served in the FHWA Office of Project Development and Environmental Review, as well as the FHWA Texas Division.

#### Two new additions to the Office of Natural Environment

**Will Stein** was the Sustainability Program Lead for the FHWA Minnesota Division Office where he worked with the Minnesota DOT on climate change, resiliency, and sustainability issues. Will has served as the Division contact for the National Electric Vehicle Infrastructure Formula Program, the Carbon Reduction Program, and the PROTECT Program. Will is based in Saint Paul, MN and is on the Sustainable Transportation Team.

**Emily Cline** was the Environmental Program Manager for the FHWA Oregon Division Office, where she led National Environmental Policy Act (NEPA) and Programmatic Categorical Exclusion activities, providing program direction to the Oregon DOT, and the Division office. She has served as the Division's representative on multiple climate change and resilience issues with the Oregon DOT. Emily is based in Salem, OR and is on the Resilience Team.

## **Resources and Training**



### **Carbon Reduction Program Webinar**

The Carbon Reduction Program (CRP) webinar will provide an overview of the CRP and provide opportunity for Q&A. The purpose of the CRP is to reduce transportation emissions through the development of State carbon reduction strategies and by funding projects designed to reduce transportation emissions. CRP is one of the new programs within BIL with a goal of reducing transportation CO2 emissions. The target audience includes primarily State DOTs and MPO staff and project sponsors of transportation projects that go through an MPO/DOT. More information on the CRP Implementation Guidance can be <u>found here</u>. For more information about the upcoming webinars contact <u>David D'Onofrio</u>, 202-981-2815.

- 2:00 PM 3:00 PM, Thursday, Sept 15<sup>th</sup>: Registration Link
- 11:00 AM -12:00 PM, Wednesday, Sept 21st: Registration Link

## FHWA Resource Center Environment, Air Quality & Realty Team Training Activities

FHWA's Resource Center Environment, Air Quality & Realty Team is available to offer EPA's Motor Vehicle Emission Simulator MOVES and other trainings. Please contact Mike Roberts, for additional information or to discuss scheduling a training.

### **National Highway Institute (NHI) Resilience Training Courses**

The National Highway Institute (NHI) recently released four one-hour web-based courses focused on resilience to climate change and extreme weather events. The four courses provide an introduction to past and expected future environmental conditions, future sea levels, climate datasets and modeling tools for temperature and precipitation change, system level vulnerability assessment, and methods for conducting project-level resilience assessments. The target audience includes engineering, project planning and environmental staff; the series is also relevant to regional planners, asset managers, and others seeking to integrate climate change considerations into their practices.

- FHWA-NHI-142081 Understanding Past, Current and Future Climate Conditions
- FHWA-NHI-142082 Introduction to Temperature and Precipitation Projections
- FHWA-NHI-142083 Systems Level Vulnerability Assessments
- FHWA-NHI-142084 Adaptation Analysis for Project Decision Making

## **Training Available for PM Hot-spot Analysis**

The FHWA Resource Center has developed a training course to cover the PM hot-spot requirement under the transportation conformity rule. This three-day course provides detailed, hands-on instruction on how to complete a quantitative PM hot-spot analysis in accordance with EPA's guidance. The course is geared towards state and local agency staff who will be completing these analyses, as well as those who may be reviewing, approving, or otherwise assessing hot-spot analyses. Previous modeling experience is not necessary, although familiarity with MOVES and air quality dispersion modeling may be helpful. The course includes class discussion and numerous hands-on exercises, including a hypothetical project that will be carried through the course as an example of a quantitative PM hot-spot analysis. The first in-person training session is scheduled from October 12-14 at FHWA's Colorado Division Office in Lakewood, CO. Additional sessions will be announced when they are scheduled later this summer. Contact <a href="Christopresser">Christopresser</a> if you would like to register for the Colorado training or have questions related to this training course.

### **FHWA Web-Based Transportation Conformity Training**

Several web-based transportation conformity training opportunities are available on-demand from <a href="FHWA's conformity training website">FHWA's conformity training website</a> (under "Web-based Training"). This page includes a new webinar recording for "Introduction to MOVES3 for Non-Modelers." The target audience for these training materials are FHWA staff and State and local transportation partners (MPOs and State DOTs) who are either new to or would like a refresher training on the conformity process. For questions, please contact <a href="David Kall">David Kall</a>.

#### **FHWA CMAQ 101 Training**

FHWA posted a <u>22-minute YouTube video</u> 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. For more information about the CMAQ program, please contact <u>Mark Glaze</u>.

#### FHWA NEPA Air Quality Analysis for Highway Projects

The FHWA Resource Center Environment, Air Quality & Realty Team periodically conducts a series of training sessions on National Environmental Policy Act (NEPA) Air Quality Analysis for Highway Projects. The training includes sessions on project-level applications appropriate for managers and practitioners, as well as hands-on sessions intended for modelers. If you are interested in this training, please contact <u>George Noel</u>.

### **FHWA Web-Based TNM Training**

FHWA has created a <u>Traffic Noise Model (TNM) Playlist on its YouTube Channel</u>. These short-format videos demonstrate how to install TNM, complete basic tasks in the software, and provide details on specific features. Additional videos will be added throughout the year. Additional TNM Training materials are available on the <u>FWHA Noise Training Website</u>. For technical assistance with TNM please contact <u>TNMHelp@dot.gov</u>.

### **NHI No Cost Highway Traffic and Construction Noise Course**

FHWA's Planning, Environment, and Realty office and the National Highway Institute (NHI), in cooperation with the Resource Center and Division Offices, have updated and launched a web-based Traffic Noise Training Course. This on-demand, web-based training was a previously multi-day, instructor-led course. This course is now available on the NHI website at no cost and provides a comprehensive overview of all aspects of the highway traffic noise program. The courses are available on the NHI website by searching for "highway noise" and locating course codes 142086 – 142094.

#### Contacts



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Past issues of the Air Quality and Sustainability Highlights are available on
FHWA's Air Quality website and Sustainability website

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