Air Quality + Sustainable Transportation Highlights

U.S. Department of Transportation Federal Highway Administration



Prepared by the Office of Natural Environment

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Announcements



All Fifty States, Plus D.C. and Puerto Rico, Greenlit to Move EV Charging Networks Forward, Covering 75,000 Miles of Highway

Electric Vehicle (EV) Infrastructure Deployment Plans for all 50 States, the District of Columbia and Puerto Rico were approved ahead of schedule under the National Electric Vehicle Infrastructure (NEVI) Formula Program, established and funded by the Bipartisan Infrastructure Law.

With this approval, all States now have access to fiscal year (FY) 22 and FY 23 NEVI formula funding, totaling more than \$1.5 billion to help build EV chargers covering approximately 75,000 miles of highway across the country.

All approved plans are available on the <u>Federal Highway Administration (FHWA) web</u> <u>site</u> and funding tables for the full five years of the NEVI Formula program can be viewed <u>here</u>. An FHWA guide on federal funding available for EV charging infrastructure is available <u>here</u>.

FHWA published a <u>Notice of Proposed Rulemaking (NPRM)</u> on proposed minimum standards and requirements for projects funded under the NEVI Formula Program and plans to finalize that rulemaking expeditiously now that the comment period has closed. FHWA also proposed a Buy America waiver that will allow a short ramp up period for the domestic manufacturing of EV charging. Additionally, FHWA has posted updated <u>Frequently Asked Questions</u> on its website.

For more information on the NEVI Formula program, please visit <u>FHWA's NEVI web site</u> and <u>DriveElectric.gov</u>. For more information on President Biden's Bipartisan Infrastructure Law (BIL) and investments in electric vehicles, please visit <u>FHWA's BIL</u> web site.

New Travel Advisories CMAQ Tool

The FHWA released a new addition to its Congestion Mitigation Air Quality Improvement Program (CMAQ) Emissions Calculator Toolkit. The new tool, entitled "Travel Advisories" will bring to 15 the number of spreadsheet tools available on the FHWA/CMAQ website: Toolkit - CMAQ - Air Quality - Environment - FHWA (dot.gov). This tool estimates emission reductions for CMAQ eligible travel advisory projects that may involve signage or other messaging that alert drivers of upcoming roadway conditions. This tool currently accommodates two types of travel advisories: variable message signs (VMS) and variable speed limits (VSL). Travel advisories can contribute to reduced emissions by modifying driving behavior and smoothing the drive cycle, resulting in fewer speed variations. For more information about the CMAQ Emissions Toolkit contact Mark Glaze, (202) 366-4053.

Addressing Truck Emissions and Noise at Truck Freight Bottlenecks

Truck freight bottlenecks on the Nation's highway network are problematic not only because of economic impacts, wasted fuel, and delayed freight shipments, but they also pose air quality and noise concerns because of the high emission rates and noise levels associated with medium and heavy-duty trucks. This report provides information on strategies to address truck emissions and noise at truck freight bottlenecks, including significant highway bottlenecks and truck access to intermodal connectors.

Information is provided on hypothetical strategies that could be adopted to address truck emissions and noise at truck freight bottlenecks, including significant highway bottlenecks and truck access to intermodal connectors. The report considers the extent to which emissions reduction and noise reduction strategies may be mutually supportive or work at cross purposes. It also considers implementation challenges of these strategies and potential solutions to overcome them.

Included in the report are three case studies that demonstrate the potential benefits of various mitigation strategies at three highway freight bottleneck and intermodal connector locations:

- Case Study Summary: I-90/94 in Chicago, IL
- Case Study Summary: Port of Houston Barbours Cut Terminal
- Case Study Summary: I-5 at the Port of Tacoma

For more information about the report, contact <u>David Kall</u>, (202) 366-6276.

AERMOD RLINE/XT Source Type Analysis

The Federal Highway Administration teamed up with the Georgia Department of Transportation, the New Mexico Department of Transportation and the Virginia Department of Transportation to evaluate the RLINE and RLINEXT source types

introduced by the Environmental Protection Agency (EPA) in their <u>AERMOD Dispersion Model</u>.

The continued improvement of regulatory dispersion models for transportation applications depends on enhancing the current model. The researchers identified enhancements by evaluating the full range of typical transportation applications such as project types, configurations, operating conditions, setting etc. Other applications such as high-volume facilities with and without noise walls require more field data than are currently available. A summary of the research, reports from the participants and links to the data can be found <a href="https://example.com/here/bearch/reports/repo

The U.S. Department of Transportation (USDOT) Thriving Communities Program Technical Assistance

The <u>Thriving Communities Program</u> is part of an ongoing effort to ensure that ensure State, local, Tribal and territorial governments large and small have the tools needed to access federal funding for projects serving their communities. The USDOT released both a call for Letters of Interest (LOI) from community leaders seeking support from the program, as well as a Notice of Funding Opportunity (NOFO) for capacity builders.

The Thriving Communities program will prioritize the selection of communities that are working to advance projects to improve health outcomes; reduce housing and transportation cost burdens and improve housing conditions; preserve or expand jobs and increase reliable mobility options for disadvantaged communities and households to better access health care, food, education, and other essential destinations.

In addition to the NOFO, the Department has a fact sheet for interested capacity builder applicants here. The NOFO will be open until **November 22, 2022**. More information on how to submit a LOI to participate in the Thriving Communities program can be found here.

Two new additions to the Office of the Environment

Zoë Johnson joins FHWA from the Naval Facilities Engineering Command, where she worked as a subject matter expert on climate change, sea level rise, and resilience planning for the U.S. Navy. She has also previously held positions at the National Oceanic and Atmospheric Administration (NOAA), where she coordinated the NOAA and EPA Chesapeake Bay Program Partnership climate change adaptation efforts, and at the Maryland Department of Natural Resources, where she was the Director of Climate Change Policy and Planning. Zoe has a Bachelor's degree in Urban and Regional Planning from Western Washington University, and a Master's degree in Coastal Zone Management from the University of Washington. Zoë will join the Resilience Team.

Mary Kay Murray has over 25 years of experience in the environmental field. She joins FHWA from her work as a Lead Environmental Protection Specialist at the Federal

Railroad Administration. She holds a bachelor's degree in biology form Old Dominion University and a master's degree in environmental science from John Hopkins University. She has a deep background in water and natural resources, environmental reviews under NEPA, permitting, as well policy experience in resiliency, climate change, and environmental justice issues. Mary Kay will join the Sustainable Transportation Team.

Resources and Training



PROTECT Formula Program Webinars

FHWA held two webinars on the Promoting Resilient Operations for Transformative, Efficient, and Cost- Saving Transportation (PROTECT) Formula Program, a new funding program established under the Bipartisan Infrastructure Law. The PROTECT Formula Program provides \$7.3 billion in formula funding over the next five years for projects and planning activities to make highways, transit and ports more resilient to extreme weather events, natural disasters, climate change, etc. Staff from the FHWA Office of Natural Environment provided information about the new program and answered questions from participants. The target audience was primarily State DOTs and MPO staff and project sponsors of transportation projects that go through an MPO/DOT. More information on the PROTECT Formula Program Implementation Guidance can be found here. For more information about the upcoming webinars contact Robert Kafalenos, (202) 366-2079.

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. Contact Chris Dresser if you have questions related to this training course.

FHWA Web-Based Transportation Conformity Training

Several web-based transportation conformity training opportunities are available ondemand from <u>FHWA's conformity training website</u> (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 <u>David Kall</u>.

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 Mark Glaze.

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 George Noel.

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.

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

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