Air Quality + Sustainable Transportation Highlights

U.S. Department of Transportation
Federal Highway Administration



Prepared by the Office of Natural Environment

July/ August

Announcements

Electric Vehicle (EV) Charger Reliability and Accessibility Accelerator

FHWA released the Electric Vehicle (EV) Charger Reliability and Accessibility Accelerator Notice of Funding Opportunity (NOFO) on September 13, 2023. The NOFO is funded through an annual 10 percent set-aside from the National Electric Vehicle Infrastructure (NEVI) Formula Program. The fiscal year (FY) 2022/2023 funding amount for this NOFO is approximately up to \$100M. The NOFO is intended to provide grants to State Departments of Transportation and local governments to improve reliability of electric vehicle infrastructure by repairing and replacing existing chargers that are broken or non-operational. For more information, please visit the EV Charger Reliability and Accessibility Accelerator website. Questions on the NOFO should be submitted to: RAA-NEVI@dot.gov.

Metropolitan Planning Organization (MPO) Emissions Measure Target Setting and Reporting Fact Sheet

Federal Highway Administration's (FHWA) Office of Natural Environment has released a new Metropolitan Planning Organization (MPO) emissions measure <u>Target Setting and Reporting Fact Sheet</u>. The fact sheet is as an easy-to-read flow chart for MPOs to understand reporting requirements, target setting process and timeline for the on-road mobile source emissions performance measure related to the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.

FHWA publishes <u>applicability tables</u> for MPOs who are required to establish targets and report progress for the performance measures related to the CMAQ Program. FHWA does not approve or reject MPO-established targets, instead MPOs have the discretion to establish their targets. MPOs set 2– and 4-year targets for on-road mobile source emissions for the purpose of carrying out the CMAQ Program.

For additional information visit the <u>FHWA Air Quality CMAQ website</u> or contact <u>Edward Dancausse</u> at (919) 747-7026 or <u>Karen Perritt</u> at (202) 366-9066.

Making the Healthy Connections in Transportation

Transportation and health are interconnected. Beyond moving people and goods, transportation can play a key role in improving physical, mental, social, environmental, and economic health. Investments that promote active and public transportation benefit people's health, their quality of life, the environment, and the economy. Through programs, policies, and infrastructure investment, the Department of Transportation, and its federal partners, such as the Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC), are working together to improve the connection between transportation and health, underscoring the vital importance of making equitable investments in our communities. The Making Healthy Connections in Transportation article was published in the Summer 2023 edition of FHWA's Public Roads Magazine.

Teaching Sustainable Transportation Webinar and INVEST

On February 23rd, the Federal Highway Administration (FHWA) presented the Teaching Sustainable Transportation with FHWA-INVEST Webinar to inform participants about the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST), designed to help educate the next generation of transportation professionals. The webinar showcased how the INVEST curriculum can be integrated into new or existing sustainability or transportation planning and engineering courses. Phil Lewis, PhD, PE, Associate Professor and Interim



Department Head, Texas Transportation Institute, Texas A&M University presented on the first INVEST curriculum pilot and shared the positive impacts of the course. There were 193 INVEST webinar participants, in which 21 academics are planning or have interest to utilize the INVEST curriculum.

If you are interested in potentially using the INVEST course materials in future classes, please take this <u>short poll</u>.

MOtor Vehicle Emission Simulator Model Major Release

EPA announced in the <u>Federal Register</u> on September 12, 2023 the availability of the latest version of the emissions model, Motor Vehicle Emissions Simulator (MOVES4) for official use in State Implementation Plan (SIP) submissions, and for transportation conformity analyses, for all States except California. EPA also announced a 2-year

conformity grace period for the use of MOVES4 for conformity purposes, that will end on September 12, 2025. Conformity analyses started before the end of the grace period may continue to use the MOVES3 series of the model. MOVES4 incorporates several updates that will have an impact on emissions estimates of criteria pollutants, air toxics, and greenhouse gases (GHG) from mobile sources. MOVES4 includes major updates to incorporate new and changed emissions rules, updates the modeling of electric vehicles (EVs), updates vehicle population and activity defaults, improves fuel properties data and projections, and improves emissions rates and adjustments. EPA made significant improvements in estimating emissions and energy use of EVs in MOVES4 by adding the ability to model heavy-duty EVs, improving the modeling of light-duty EVs, and updating the national EV fleet fraction defaults. EPA also provides a tool to allow users to enter local EV fractions.

The MOVES4 software and associated guidance and technical reports are available on EPA's website.

Resource Center Air Quality Team To Offer MOVES4 Training

The FHWA Resource Center's Air Quality Team will begin delivering MOVES4 training through virtual and in-person courses. The purpose of this training is to provide attendees with an overview of EPA's MOVES4 mobile source emissions model. The training will cover the functionality of the model, input requirements, output processing, and relevant EPA and FHWA guidance documents. The course also includes hands-on exercises that will demonstrate several realistic modeling scenarios applicable to greenhouse gases, conformity (regional and project-level), and National Environmental Policy Act (NEPA) analyses. The intended audience are those who use (or expect to use) MOVES or those who will be reviewing MOVES-based analyses. Please reach out to Chris Dresser to request a MOVES4 training for your state.

Reconnecting Communities Program

The Department of Transportation is combining two major discretionary grant programs, the Reconnecting Communities Pilot (RCP) and Neighborhood Access and Equity (NAE) programs, into one Notice of Funding Opportunity (NOFO).

Funds for the fiscal year (FY) 2023 <u>RCP grant program</u> are to be awarded on a competitive basis to support planning and capital construction activities that aim to restore community connectivity. <u>Applications</u> must be submitted by 11:59 p.m. (Eastern Time) Thursday, September 28, 2023.

It All Adds Up to Cleaner Air

It All Adds Up to Cleaner Air is a public education and partnership-building initiative developed by several federal agencies for the purpose of informing the public about the

impact of their transportation choices on traffic congestion and air quality. *It All Adds Up to Cleaner Air* provides State and local agencies free commercial-quality promotional materials that emphasize simple, convenient actions people can take to improve air quality. Organizations that use *It All Adds Up to Cleaner Air* enjoy access to free customizable materials, including advertisements, billboards, and television public service announcements. Tutorials in the Education Center assist with planning, implementing, and evaluating an air quality campaign.

Learn more about the program on the <u>It All Adds Up webpage</u>.

National Cooperative Highway Research Program (NCHRP) Report 1058: Assessing Air Pollution Dispersion Models for Emissions Regulation Released



This report presents state-of-the-art methods and analytical approaches for project-level air quality modeling by reviewing eight air quality models in use for transportation project analyses. This report will be of immediate interest to state and regional transportation planners and decision-makers as they seek to improve analytical modeling methods to assess project impacts on air quality.

The Assessing Air Pollution Dispersion Models for Emissions Regulation report is available on NCHRP website.

Resources and Training

Air Quality Courses:

NHI Free Air Quality Planning Web-based Course

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 with any questions or comments.

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 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.

Training Available for PM Hot-spot Analysis

The FHWA Resource Center has developed a training course to cover the Particluate Matter (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 Christopresser if you have questions related to this training course.

Resilience Courses:

National Highway Institute (NHI) In-Person Resilience Course

NHI recently posted a new in-person course focused on planning and designing highway projects to be more resilient to changing climate conditions. It is a 2.5 day course in inland areas, or 3 day course in coastal areas, and includes material on climate science, tools and methods for assessing future conditions and addressing them in project development, and consideration in a range of engineering disciplines: inland flooding, costal hydraulics, pavements and geohazards. 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. Fees related to the course would be eligible under the Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation Formula Program For more information about the NHI In-Person Resilience Course, please contact Robert Kafalenos.

In-person course: <u>Addressing Climate Resilience in Highway Project Development and Preliminary Design (NHI 142085)</u>

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. Virtual courses (free):

- 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

Traffic Noise Courses:

FHWA Web-Based TNM Training

FHWA 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.

CMAQ Course:

FHWA Web-Based Training on the Congestion Mitigation and Air Quality Improvement (CMAQ) Program

Several web-based CMAQ training opportunities are available on-demand on FHWA's CMAQ training website. This page includes CMAQ program training such as CMAQ Overview, the CMAQ Transportation Performance Measures and the CMAQ Annual Reporting/Public Access System. Training Information for CMAQ Emissions Calculator Toolkit such as available tools and their associated webinars along with CMAQ Toolkit Video Series are available on the CMAQ Emissions Calculator Toolkit website. For questions, please contact Mark Glaze, Karen Perritt or Eddie Dancausse.

Conformity Course:

FHWA Web-Based Transportation Conformity Training

Several web-based transportation conformity training opportunities are available on-demand from FHWA's conformity training website (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 (Metropolitan Planning Organizations and State Departments of Transportation) who are either new to or would like a refresher training on the conformity process. For questions, please contact David Kall.

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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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