

# RAQPAC Notes – EPA Update

12/12/2024 Meeting

## **MOVES5 Model Release**

On November 21<sup>st</sup>, EPA's Office of Transportation and Air Quality (OTAQ) announced the web posting of the latest version of the MOtor Vehicle Emission Simulator, MOVES5. This update to EPA's official mobile source model for SIP and conformity purposes replaces the MOVES4 version. On December 11<sup>th</sup>, the [MOVES5 Notice of Availability](#) was published in the *Federal Register* to establish the model as EPA's officially-supported mobile source model for SIP inventory and transportation conformity purposes. The Notice begins a 24-month grace period before transportation conformity analyses must use the MOVES5 model. *Note:* Areas may continue to use MOVES3 for transportation conformity analyses until September 12, 2025, due to the MOVES4 24-month grace period for conformity use.

MOVES5 incorporates several important updates beyond MOVES4, including:

- Accounting for EPA's [Light- and Medium-Duty Multi-Pollutant Rule](#) with higher projected electric vehicle (EV) fractions and more stringent standards for CO<sub>2</sub>, particulate matter (PM), non-methane organic gases (NMOG), and NO<sub>x</sub>.
- Accounting for EPA's [Heavy-Duty Greenhouse Gas Emissions-Phase 3 Rule](#) with higher projected EV fractions and updated energy consumption for heavy-duty EVs.
- Incorporating new data on light-duty and heavy-duty brake wear emissions.
- Expanding detailed calculations for a given analysis year to vehicles up to 40 years old, instead of 30.
- Updating fuel properties for calendar year 2021 and later.
- Updating historical and forecast default travel activity, vehicle population, age distributions, and fuel distributions.

[EPA's MOVES Informational Webpage](#) offers the MOVES5 software for download, as well as supporting documentation such as a detailed "Question & Answer" document, the MOVES Overview Report, MOVES Policy Guidance, MOVES Technical Guidance, and technical reports documenting data and algorithms used in MOVES5. The website also includes links to tools for use with MOVES and information on MOVES training.

OTAQ will host a MOVES5 webinar on Wednesday, December 18<sup>th</sup> from 1:00 to 2:30 pm CST. Please register in advance [HERE](#) – upon registration, you will be sent a Microsoft Teams link for the webinar.

The webinar will cover:

- How MOVES5 differs from MOVES4,
- How MOVES5 emission results compare to MOVES4,
- How and when to use MOVES5 for SIP development, transportation conformity, and other purposes, and
- How to adapt MOVES3 and MOVES4 inputs to work with MOVES5.

## **Quantifying and Characterizing Near-Port Populations in the Conterminous United States**

On December 4<sup>th</sup>, EPA released [this report](#) which identifies populations near ports in a more sophisticated manner than traditional proximity analyses by leveraging a 2010 high-resolution population dataset of the conterminous United States and port geometries from two different Federal agencies.

A total of 123 major ports in the conterminous United States were investigated in this study based on their inclusion in the U.S. Army Corps of Engineers (USACE) 2017 Principal Ports list of the top 150 ports by tonnage throughput and their representation in two different Federal datasets: EPA's National Emissions Inventory (NEI) and USACE's Master Docks Plus. ([EPA's Quantifying and Characterizing Near-Port Populations in the Conterminous United States Webpage](#))