


<http://www3.epa.gov/otaq/models/moves/index.htm>

Modeling and Inventories

MOVES (Motor Vehicle Emission Simulator)

EPA's Motor Vehicle Emission Simulator (MOVES) is a state-of-the-science emission modeling system that estimates emissions for mobile sources at the national, county, and project level for criteria air pollutants, greenhouse gases, and air toxics.

MOVES2014a. MOVES2014a is the latest version of MOVES. It incorporates significant improvements in calculating onroad and nonroad equipment emissions. MOVES2014a does not significantly change the criteria pollutant emissions results of MOVES2014 and therefore is not considered a new model for SIP and transportation conformity purposes.

- [General Information about MOVES2014a](#)
- [MOVES2014a User Documents and Tools](#)
- [Downloading MOVES2014a](#)

Please find the latest guidance on Using MOVES for State Implementation Plans (SIP) and Transportation Conformity here:

- [Using MOVES2014a for SIP and conformity purposes](#)

For further information:

- [MOVES Technical Reports.](#) These technical reports document the data and analysis used to develop MOVES.
- [MOVES Training Sessions.](#)
- [Federal Advisory Committee Act \(FACA\) MOVES Model Review Work Group.](#) This work group provided EPA with stakeholder input on MOVES.
- [NONROAD2008 Model Documentation.](#) These technical reports document the data and analysis used to develop NONROAD2008, which has been incorporated into MOVES2014.
- MOVES staff [email](mailto:mobile@epa.gov): mobile@epa.gov.
- Updates and news on EPA mobile source emission models: [Listserv Information](#)

General Information about MOVES2014a

- [MOVES2014a Questions and Answers \(PDF\)](#) (6 pp, 714K, EPA-420-F-15-046, November 2015) This document highlights the differences between MOVES2014a and earlier versions of MOVES and explains EPA policy on using MOVES2014a in State Implementation Plans and Transportation Conformity Analyses.

NOTE: You will need Adobe Acrobat Reader, available as a free download, to view some of the files on this page. See [EPA's PDF page](#) to learn more about PDF, and for a link to the free Acrobat Reader.

MOVES2014a User Documents and Tools

- [MOVES2014a User Guide \(PDF\)](#) (266 pp, 29.13MB, EPA-420-B-15-095, November 2015) Walks users through various MOVES examples and provides an overview of menu items and options.
- [MOVES2014a User Interface Reference Manual \(PDF\)](#) (58 pp, 1.1MB, EPA-420-B-15-094, November 2015) Provides details on using the MOVES interface, commands and menu options.
- [MOVES2014a Software Design Reference Manual \(PDF\)](#) (112 pp, 1.0MB, EPA-420-B-15-096, November 2015) Provides background on configuring and installing MOVES and describes MOVES code structure.
- [MOVES2014a Module Reference](#) (October 2015) Provides step-by-step algorithms for MOVES calculations and cross references for MOVES modules and database tables.
- [Tools for MOVES.](#) Tools designed to help users develop inputs for MOVES2014 and post-process the output.

Downloading MOVES2014a

- [Download the December 2015 Update to MOVES2014a \(EXE\)](#) (58MB, December 2015) MOVES2014a is the most recent version of MOVES. The December 2015 Update to MOVES2014a fixes some issues with CB05 and CB6 chemical mechanism results. It also adds support for MySQL 5.7 and fixes a configuration issue with running MOVES on 32-bit computers. **After downloading the setup file, run MOVES2014a-Setup-20151201.exe and follow the on-screen instructions to complete the MOVES2014a installation.** NOTE: Other than the CB05 and CB6 chemical species, this update produces the same results as the November 2015 release of MOVES2014a. MOVES modelers who are not using MOVES results as input to chemical transport air quality models are unaffected by this update.

Using MOVES2014a for SIP and Conformity Purposes (also see MOVES2014a Questions & Answers)

- [Federal Register Notice of Availability: Official Release of MOVES2014 Motor Vehicle Emissions Model for Emissions Inventories in SIPs and Transportation Conformity \(PDF\)](#) (5 pp, 230K, published October 7, 2014)

This notice approves the use of MOVES2014 and MOVES2014a in official SIP submissions and starts a two-year grace period before MOVES2014 and MOVES2014a are required to be used in new regional emissions analyses for transportation conformity determinations outside of California. For transportation conformity questions, contact: [Astrid Larsen](#) at 734-214-4812 or larsen.astrid@epa.gov. For SIP questions, contact [Rudy Kapichak](#) at 734-214-4574 or kapichak.rudolph@epa.gov.

- [Policy Guidance on the Use of MOVES2014 and Subsequent Minor Revisions for State Implementation Plan Development, Transportation Conformity, and Other Purposes \(PDF\)](#) (18 pp, 230K, EPA-420-B-14-008, July 2014)

This document describes how and when to use the MOVES2014 and subsequent minor revisions, including MOVES2014a, for SIP development, transportation conformity, general conformity, and other purposes.

- [MOVES2014 and 2014a Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity \(PDF\)](#) (63 pp, 1.0MB, EPA-420-B-15-093, November 2015)

This document provides guidance on appropriate input assumptions and sources of data for the use of MOVES2014 and MOVES2014a in SIP submissions and regional emissions analyses for transportation conformity purposes.

- For further information on transportation conformity and SIPs, see the following website: <http://www.epa.gov/otaq/stateresources/>

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