MOVES4 Database Conversion Tool Help

Introduction

The database conversion tool supplied with MOVES4 can be used to convert input databases developed with any version of MOVES3 to be compatible with MOVES4.

It is important to note that when running MOVES for regulatory purposes, the latest local information should be used wherever possible. This tool should only be used when the input databases developed for MOVES3 still contain the latest local information. If you have newer data, EPA recommends that you create a new input database using the MOVES4 interface.

Using the Tool

The tool is accessible via the Tools menu in the MOVES Graphical User Interface (GUI): "Convert MOVES3 Input Database to MOVES4".

Follow the instructions provided in the GUI for selecting the old database to be converted, entering the name of the new database to be created, and running the tool.

Additional Steps Necessary to Use Converted Databases with MOVES4

After running the tool, additional work is required to use the converted databases with MOVES4. First, you will need to select the newly converted database on the Create Input Database panel.

> **Note**: If this panel is grayed out, you will need to completely fill out the RunSpec in accordance with the data in your converted database so that you get green checks for all the other panels.

Once on the Create Input Database Panel, you may need to click the Refresh button if your new database does not automatically appear in the list. After selecting it, click the Enter/Edit Data button to open the County, Project, or Nonroad Data Manager (depending on the type of RunSpec being edited). The following sections detail the tabs that may need additional attention before running the model. See the MOVES4 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity (EPA-420-B-23-011) for more information.

Fuels

- The fuels tables are not converted by the tool; instead, it simply produces empty fuels tables. From the Fuels Tab, export the default fuels, review them, and make any changes as necessary to the *AVFT*, *FuelSupply*, and *FuelUsageFraction* tables. When ready, import the fuels data.
- Use the Fuels Wizard to make any changes to the fuel formulation parameters.

Age Distribution

- The data in your MOVES3 input database's *SourceTypeAgeDistribution* table are carried over to the new database. However, if the inputs in your table were based on previous model defaults for some source types, those data should be discarded and the MOVES4 defaults (for those source types only) should be used instead.

I/M Programs

- The data in your MOVES3 input database's *IMCoverage* table are carried over to the new database. However, if the inputs in your table were based on previous model defaults, these data should be discarded and the MOVES4 defaults should be used instead. To do so, click the Clear Imported Data for the *IMCoverage* table, export the default data, review and make any necessary changes, and then import this table.

Hotelling

- The *HotellingActivityDistribution* table schema has changed, along with the definitions of the hotelling operating modes. This table is now used to allocate hotelling activity by vehicle model year and fuel type across the following operating modes:
    - Extended Idling (OpModeID 200)
    - Diesel Auxiliary Power Units Use (201)
    - Shore Power / AC Plug-in (203)
    - Battery Use / Engine Off (204)
- This is an optional table, so the converter tool only handles this table if it contains data.
- Since MOVES3 could only model diesel hotelling activity, the converter tool assigns the diesel fuel type (fuelTypeID 2) to all transferred data. The converter then adds rows for other fuel types, using the default values.
- If local hotelling activity distribution data are available for alternative fuel types, export the imported data for this table, review and make any necessary changes, and then reimport this table.