

The following is from an e-mail sent out by Chris Kite on July 27 that explains the recent Texas MOVES Model Work

For anyone interested in how Texas has begun implementing the new Motor Vehicle Emission Simulator (MOVES) model (<http://www.epa.gov/otaq/models/moves/>) for on-road emissions inventory development, I can recommend the results of some recent work performed by the Texas Transportation Institute (TTI) under contract to TCEQ:

Methodologies for Conversion of Data Sets for MOVES Model Compatibility, Final Report, August 2009

- The primary task was to develop approaches compatible with MOVES for using vehicle registration data and vehicle classification counts.
- Instead of categorizing the fleet into fuel and weight categories as MOBILE6 does, MOVES uses a "source use type" (SUT) categorization.
- The final report is available at http://www.tceq.state.tx.us/implementation/air/airmod/project/pj_report_mob.html.

Update of On-Road Inventory Development Methodologies for MOVES Model Compatibility, Draft Report, July 2010

- The primary task was to create various utilities for combining emission rates from MOVES with vehicle miles traveled (VMT) and population estimates from transportation data sets.
- In some cases, new utilities were created, while in some cases some "older" ones for MOBILE6 were upgraded.
- The report describes the development of the utilities and is not intended as a user's guide; there will be a user's guide in the future.
- The draft report and electronic attachments are available at ftp://ftp.tceq.state.tx.us/pub/OEPAA/TAD/Modeling/Mobile_EI/MOVES/utilities/.

Production of MOVES On-Road Mobile Link-Based Emissions Estimates and Document Preparation, Draft Report, July 2010

- These efforts were a "practice run" to develop MOVES link-based emission inventories using the same travel demand model (TDM) output that was previously used for MOBILE6 inventories.
- The test cases were 2006 and 2018 scenarios for the eight-county Houston/Galveston/Brazoria (HGB) area, while holding summer weekday VMT constant at 133,868,661 and 180,993,087, respectively.
- The MOBILE6 data sets are available at ftp://ftp.tceq.state.tx.us/pub/OEPAA/TAD/Modeling/Mobile_EI/HGB/m62/2006/ and ftp://ftp.tceq.state.tx.us/pub/OEPAA/TAD/Modeling/Mobile_EI/HGB/m62/2018/.

- The MOVES data sets are available at ftp://ftp.tceq.state.tx.us/pub/OEPAA/TAD/Modeling/Mobile_EI/MOVES/HGB/2006/ and ftp://ftp.tceq.state.tx.us/pub/OEPAA/TAD/Modeling/Mobile_EI/MOVES/HGB/2018/.

- The only data sets not posted are extremely large link emission files for every road segment, hour, vehicle type, day type, etc. If you want these, you'll need to send a hard drive (e-mail me for details).

- The draft report is available at ftp://ftp.tceq.state.tx.us/pub/OEPAA/TAD/Modeling/Mobile_EI/MOVES/HGB/.

- I recommend the entire report, but if you're just interested in how total estimates of NO_x, VOC, and CO changed by calendar year from MOBILE6 to MOVES (while holding VMT constant), TTI provided excellent overviews in the Executive Summary and Conclusions sections.

It is expected that MOVES will be periodically updated and improved by EPA, which necessitates that we have future work orders with TTI to continue refining the on-road inventory development process.

If you have comments or suggestions for what can and should be improved after reviewing TTI's work from above, please send them to me via e-mail so I can incorporate them into future TTI work orders.

Please feel free to forward this e-mail to any interested party, or to anyone that I may have inadvertently neglected to copy.

Thanks.

Chris