

MANE-VU Mobile Source Projection Inventory: Data Preparation for SMOKE/MOBILE6 Application

I. Background

The MANE-VU Emissions Inventory group decided to utilize our in-house abilities to develop future year mobile source emission estimates for use in Ozone, PM_{2.5}, and Regional Haze SIP modeling. Jung-Hun Woo, NESCAUM, and Megan Schuster, MARAMA will be compiling all the information necessary to run Mobile6 with SMOKE. States are requested to provide the information described below.

II. Purpose

The purpose of this document is to help states prepare mobile source activity data (i.e. non-link based VMT & Speed) and Mobile6 scenario input files for the development of future year projection inventories.

States should utilize the 2002 MANE-VU inventory SMOKE/Mobile6 files as examples of how to create the required files. The SMOKE/MOBILE6 data files for MANE-VU 2002 EI are available on the MARAMA FTP site for your reference:

<ftp.marama.org>

username: mane-vu

password: exchange

or <ftp://mane-vu:exchange@ftp.marama.org>

III. Tasks

States are requested to supply NESCAUM and MARAMA with the data described below, under Required Data. States may supply NESCAUM and MARAMA with the Optional Data.

REQUIRED DATA:

- 1) SMOKE/IDA Activity File
 - a. Go to MARAMA FTP site (above), click on Onroad/ Final Smoke Files/ MANEVU_2002_mbinv.txt
 - b. Open the MANEVU_2002_mbinv.txt file
 - c. Delete all data that is not your state's.
 - d. Update file with new header and annual VMT by SCC for 2009
 - e. Name file: state_2009_mbinv.txt
 - f. Repeat steps 'b' through 'e' for years 2012 and 2018
- 2) MOBILE6 input scenario files
 - a. Go to MARAMA ftp site, click on MANE-VU Onroad/ Final Smoke Files/ MANEVU_2002_SMOKE_M6_InputFiles_12032004.zip /m6_2002/month/statecounty.in

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- b. Provide updated statecounty.in files for each month and year 2009, 2012 and 2018
- c. Use same naming convention as the 2002 files – statecounty.in

OPTIONAL DATA (You do not have to submit this):

- 1) If a state wants to, they can update registration data to either 2004 or 2005
 - a. Go to MARAMA FTP site - Onroad/ Final Smoke Files/MANEVU_2002_SMOKE_M6_ExternalFiles.zip
 - b. As an example, open file 0900002.reg (or any files with extension .reg)
 - c. There is a long header followed by the real data. Real data starts at the line called REG DIST. (See example file below).
 - d. States should update the registration data by vehicle class and age for 2004 or 2005.
 - e. If you update this data and change the name of the file, make sure the M6 input scenario file (required data from above) includes the correct file name for registration data (REG DIST).

Example of a registration file for New Castle, DE (2002/2003) (ex. /m6ext/NC02.RDT):

```
REG DIST

* RESULTING MOBILE6-BASED REGISTRATION FRACTIONS LDV, LDT1, LDT2, LDT3,
* LDT4 and MC CT Specific
*
* MOBILE6 REGISTRATION FRACTIONS BY VEHICLE CLASS AND AGE
* LDV
1 0.0700 0.0803 0.0851 0.0757 0.0708 0.0714 0.0618 0.0705 0.0593 0.0569
   0.0490 0.0427 0.0416 0.0396 0.0331 0.0280 0.0198 0.0131 0.0087 0.0047
   0.0027 0.0021 0.0016 0.0023 0.0092
* LDT1
2 0.0745 0.0458 0.0350 0.0342 0.0412 0.0415 0.0594 0.0691 0.0708 0.0544
   0.0404 0.0505 0.0555 0.0705 0.0639 0.0713 0.0489 0.0278 0.0169 0.0081
   0.006 0.0053 0.0008 0.001 0.0072
* LDT2
3 0.1051 0.1115 0.1209 0.1029 0.1030 0.0930 0.0697 0.0677 0.0586 0.0453
   0.0311 0.0218 0.0128 0.0144 0.0191 0.0053 0.0046 0.0033 0.0026 0.0018
   0.0007 0.0006 0.0006 0.0009 0.0027
* LDT3
4 0.0824 0.0993 0.0875 0.0994 0.0632 0.0586 0.0497 0.0643 0.0526 0.0378
   0.0273 0.0204 0.0280 0.0418 0.0451 0.0321 0.0269 0.0201 0.0128 0.0081
   0.0036 0.0024 0.0019 0.0051 0.0296
.
.
.
.
* HDBT
15 0.0307 0.0614 0.0614 0.0614 0.0614 0.0614 0.0614 0.0614 0.0614 0.0613
```

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```
0.0611 0.0607 0.0595 0.0568 0.0511 0.0406 0.0254 0.0121 0.0099 0.0081
0.0066 0.0054 0.0044 0.0037 0.0114
* Motorcycles
16 0.0975 0.0943 0.0744 0.0676 0.0500 0.0425 0.0401 0.0357 0.0290
0.0285
0.0215 0.0170 0.0182 0.0189 0.0181 0.0231 0.0308 0.0298 0.0217
0.0257
0.0351 0.0302 0.0263 0.0183 0.1057
```

2) If a state wants to supply monthly VMT temporal profiles that differ from MANE-VU 2002 temporal files (which were based off of state data), please contact Megan Schuster 410-467-0170.

IV. Schedule

States should supply this data to Jung-Hun Woo (jwoo@nescaum.org) and Megan Schuster (mschuster@marama.org) by August 12. If you have any questions, please contact Megan Schuster or Jung-Hun Woo.