

## Appendix 9.9

### MOBILE Input Parameters

## **MOBILE Input Parameters**

All MOBILE6 parameters used in this conformity analysis are listed in this appendix.

Parameters associated with each MOBILE6 command were in general labeled as either EPA default, locality- (or county- or region-) specific, or NOT APPLIED. The tabulated commands where associated input parameters are labeled only as “EPA default” are generally not required as input by the analyst. References to MOBILE6 technical reports (available on the EPA MOBILE Web site [<http://www.epa.gov/otaq/models/mobile6/m6tech.htm>]) pertaining to particular commands/input parameters are provided in the tables. The procedures used to develop the locality-specific inputs to MOBILE6 are also detailed in this Appendix.

**TABLE 1: MOBILE6 external conditions**

<b>Command</b>	<b>Function/Description</b>	<b>Input Parameter Source/Value</b>
CALENDAR YEAR	Identifies calendar year for which emissions factors are to be calculated. (Required to run model).	Control Strategy: 2005, 2007. Attainment Demonstration: 2007, 2010, 2015, 2025.
EVALUATION MONTH	Provides option of calculating January 1 or July 1 emissions factors for calendar year of evaluation.	7 (for July).
MIN/MAX TEMPERATURE	Sets minimum and maximum daily temperatures. (Required to run model if the HOURLY TEMPERATURES command is not used.)	NOT APPLIED. (See HOURLY TEMPERATURES.)
HOURLY TEMPERATURES	Allows temperatures input for each hour of day. (Required to run model if MIN/ MAX TEMPERATURE command is not used.)	For ROP: Region specific ozone season weekday values (provided by TCEQ, see Table 2) For AD: County-specific by episode day (based on local time, ie., central daylight time), provided by TCEQ. See Table 3.
ALTITUDE	Specifies high- or low-altitude for modeling area.	NOT APPLIED. (EPA default, low altitude, is assumed).
ABSOLUTE HUMIDITY	Used to specify daily average humidity. Affects HC, CO, and NOx emissions for the portion of the fleet that MOBILE6 determines is using air conditioning.	NOT APPLIED. (See RELATIVE HUMIDITY.)
<u>Environmental Effects on Air Conditioning:</u>	Commands used to model the extent of vehicle air-conditioning usage.	
CLOUD COVER		NOT APPLIED. (EPA default assumed.)
PEAK SUN	Defines average percent cloud cover for given day.	NOT APPLIED. (EPA default assumed.)
SUNRISE/SUNSET	Specifies Mid-Day hours with peak sun intensity. Allows user to specify time of sunrise and sunset.	Region-specific values (provided by TCEQ), 7 a.m. and 8 p.m.
RELATIVE HUMIDITY	Specifies use of 24 hourly relative humidity values entered by user. MOBILE6 will perform hour-specific calculations with hourly values rather than use daily default absolute humidity value.	For ROP:Region-specific ozone season weekday values (provided by TCEQ, see Table 2). For AD: County-specific by episode day (based on local time, ie., central daylight time), provided by TCEQ. See Table 3.
BAROMETRIC PRES	Specifies use of user input daily average barometric pressure for use with hourly relative humidity to calculate hourly absolute humidity values.	For ROP: Region-specific ozone season weekday values (provided by TCEQ, see Table 2). For AD: County-specific by episode day (based on local time, ie., central daylight time), provided by TCEQ. See Table 3.

**TABLE 2: HGA Peak Ozone Season Average Hourly Temperature, Hourly Relative Humidity, and Daily Barometric Pressure Inputs to MOBILE6 for ROP – 2005 and 2007**

<b>Hour (CDT)</b>	<b>Temperature</b>	<b>Relative Humidity</b>	<b>Barometric Pressure</b>
6 a.m.	70.1	92.6	29.89
7 a.m.	72.0	90.4	29.90
8 a.m.	76.5	79.7	29.91
9 a.m.	81.4	66.6	29.91
10 a.m.	84.9	57.5	29.91
11 a.m.	87.9	50.2	29.90
12 p.m.	90.4	44.6	29.88
1 p.m.	92.5	40.0	29.86
2 p.m.	93.9	36.9	29.83
3 p.m.	94.6	35.7	29.81
4 p.m.	94.2	35.9	29.79
5 p.m.	93.5	37.8	29.79
6 p.m.	91.3	42.5	29.78
7 p.m.	87.3	51.4	29.79
8 p.m.	83.8	61.0	29.80
9 p.m.	81.9	67.2	29.82
10 p.m.	80.6	70.4	29.83
11 p.m.	78.7	74.7	29.83
12 a.m.	73.6	84.6	29.87
1 a.m.	72.1	89.4	29.86
2 a.m.	72.0	89.3	29.86
3 a.m.	71.4	90.3	29.86
4 a.m.	70.8	90.6	29.87
5 a.m.	70.2	91.3	29.87
24-Hour Average			29.85

**TABLE 3: HGA Episode Day (August 30, 2000) Hourly Climatic Parameters input to POLFAC62\_3 for AD 2007, 2010, 2015, 2025**

\* Brazoria Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 76.5 79.7 83.4 86.5 89.7 92.8 95.7 97.9 99.4 98.2 95.2 91.9  
 88.7 85.9 84.4 82.7 80.9 79.1 76.9 76.3 75.3 74.2 75.4 75.2  
 RELATIVE HUMIDITY : 97.0 87.5 75.0 63.5 51.5 40.0 37.0 33.5 30.0 38.0 52.0 59.5  
 68.5 76.0 79.5 85.0 87.5 92.0 97.0 95.5 98.5 98.0 98.5 98.5  
 BAROMETRIC PRES : 29.81

\* Chambers Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 75.5 75.8 78.9 83.1 86.7 90.2 93.3 96.2 98.6 100.2 100.3  
 99.5 97.1 91.7 87.9 84.9 83.5 83.2 79.2 78.8 78.2 78.1 77.8 76.8  
 RELATIVE HUMIDITY : 97.8 97.1 92.3 85.8 74.1 63.1 52.6 45.9 40.4 36.7 35.1 35.1  
 43.0 64.4 78.3 85.0 87.6 85.1 92.9 94.0 95.7 96.5 96.6 97.0  
 BAROMETRIC PRES : 29.79

\* Fort Bend Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 76.7 77.2 80.0 83.1 86.9 90.1 93.9 97.7 100.3 101.8 102.5 103.3  
 101.8 98.3 93.2 90.1 87.9 86.1 81.0 80.2 79.3 78.2 77.8 77.3  
 RELATIVE HUMIDITY : 93.9 92.7 85.3 78.4 63.8 54.1 40.1 33.1 26.3 22.5 21.2 21.1  
 22.0 39.6 60.2 64.6 67.0 62.9 84.9 87.1 86.9 88.3 89.5 91.9  
 BAROMETRIC PRES : 29.79

\* Galveston Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 78.7 78.2 78.9 81.1 84.4 87.7 90.5 92.2 92.4 92.9 92.7 92.1  
 90.5 88.1 86.4 85.7 84.9 84.3 83.9 82.7 82.1 81.1 80.0 79.6  
 RELATIVE HUMIDITY : 97.3 97.8 94.3 90.0 81.0 67.7 59.3 57.5 67.3 71.7 73.5 74.4  
 80.5 85.6 88.7 90.5 91.8 92.5 86.8 86.2 89.0 92.5 96.4 96.2  
 BAROMETRIC PRES : 29.79

\* Harris Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 78.2 78.8 80.8 83.9 87.4 90.6 93.8 96.6 98.6 100.3 101.0 100.5  
 98.5 94.5 90.4 88.0 86.4 85.2 80.7 80.0 79.2 78.5 78.1 78.0  
 RELATIVE HUMIDITY : 93.7 90.4 82.0 71.2 59.5 50.1 40.0 34.3 30.1 27.3 26.9 30.4  
 36.5 51.6 66.9 72.1 73.6 71.6 88.7 90.8 92.6 94.8 94.2 95.2  
 BAROMETRIC PRES : 29.77

\*Liberty Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 74.8 75.0 77.8 81.5 85.4 89.0 92.5 95.7 98.1 100.0 100.8 100.5  
 98.8 93.8 88.9 86.6 84.9 83.7 79.3 78.7 77.8 76.5 75.8 75.4  
 RELATIVE HUMIDITY : 87.0 82.0 61.0 53.0 43.0 32.0 27.0 23.0 23.0 22.0 21.0 22.0  
 36.0 45.0 42.0 57.0 61.0 61.0 77.0 82.0 87.0 88.0 91.0 88.0  
 BAROMETRIC PRES : 29.56

\* Montgomery Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 76.8 78.2 82.0 85.6 88.7 92.7 96.2 99.5 100.7 102.2 102.8 102.5  
 97.2 92.9 91.5 87.4 87.1 86.3 82.0 80.2 78.8 77.7 76.6 76.5  
 RELATIVE HUMIDITY : 87.0 82.0 61.0 53.0 43.0 32.0 27.0 23.0 23.0 22.0 21.0 22.0  
 36.0 45.0 42.0 57.0 61.0 61.0 77.0 82.0 87.0 88.0 91.0 88.0  
 BAROMETRIC PRES : 29.56

\* Waller Wednesday August 30

SUNRISE/SUNSET : 7 8  
 HOURLY TEMPERATURES: 81.8 81.6 80.3 83.5 89.1 93.7 97.6 100.8 103.5 105.5 105.6 105.7  
 104.8 100.7 95.8 93.1 91.2 88.6 82.9 81.3 80.5 80.3 79.9 80.2  
 RELATIVE HUMIDITY : 94.0 88.0 74.0 57.0 46.0 37.0 27.0 26.0 23.0 22.0 23.0 26.0  
 30.0 41.0 63.0 65.0 63.0 60.0 88.0 94.0 97.0 100.0 97.0 100.0  
 BAROMETRIC PRES : 29.67

**TABLE 4: MOBILE6 Vehicle Fleet Characteristics, input to POLFAC62\_3**

Command	Function/Description	Input Parameter Source/Value
REG DIST	Allows the user to supply registration distributions by age for any of the 16 composite (combined gasoline and diesel) vehicle types.	<p>Locality-Specific/EPA default. TTI developed age distributions (for use with all future evaluation years) input using the latest available TxDOT registrations data and MOBILE6 defaults.</p> <p>Mid-year 2004 TxDOT county-level registrations data are applied. Input values are shown in Table 5-12.</p> <p>Locality-Specific/EPA default. TTI developed the evaluation year-specific diesel fractions inputs with the latest available TxDOT registrations data and MOBILE6 defaults.</p>
DIESEL FRACTIONS	Permits user to supply locality-specific diesel fractions for 14 of the 16 composite vehicle categories by age.	<p>Mid-year 2004 TxDOT HGA eight-county regional gasoline/diesel registrations data is used for HDV; LDV, LDT, Bus fractions are MOBILE6 defaults. The latest diesel fractions (2004 for TxDOT-based fractions and 1996 for MOBILE6 defaults) are assumed for each newer model year up to the future year of evaluation. Input values are shown in Table 13.</p>
MILE ACCUM RATE	Allows the user to supply the annual mileage accumulation rates by vehicle type and age	NOT APPLIED. (EPA defaults assumed)
NGV FRACTION	Lets user specify percent of natural gas vehicles (NGV) in the fleet by type and age certified to operate on either compressed or liquefied natural gas.	NOT APPLIED. (The EPA default, zero percent, is assumed.)
NGV EF	Permits the user to enter alternate NGV emissions factors for each of the 28 vehicle types, for running and start emissions.	NOT APPLIED. (The EPA default, none, is assumed.)

**TABLE 5: Brazoria County Registration Distribution**

REG DIST

\* Brazoria County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.04937 0.08512 0.08632 0.08532 0.09136 0.08093 0.07139 0.06643 0.05709 0.05953 0.04826 0.04285 0.03396  
0.02947 0.02354 0.02053 0.01450 0.00970 0.00851 0.00723 0.00534 0.00315 0.00209 0.00210 0.01589

\* LDT1

2 0.03615 0.07991 0.09348 0.09166 0.08065 0.06880 0.06678 0.06653 0.05189 0.05744 0.05578 0.04035 0.03269  
0.03042 0.02708 0.02539 0.01942 0.01221 0.01239 0.00977 0.00838 0.00472 0.00512 0.00371 0.01927

\* LDT2

3 0.03615 0.07991 0.09348 0.09166 0.08065 0.06880 0.06678 0.06653 0.05189 0.05744 0.05578 0.04035 0.03269  
0.03042 0.02708 0.02539 0.01942 0.01221 0.01239 0.00977 0.00838 0.00472 0.00512 0.00371 0.01927

\* LDT3

4 0.08978 0.13998 0.11837 0.12030 0.09244 0.10471 0.04003 0.06474 0.04578 0.03793 0.02698 0.02278 0.01797  
0.01498 0.01095 0.01095 0.00708 0.00359 0.00669 0.00514 0.00442 0.00249 0.00282 0.00133 0.00780

\* LDT4

5 0.08978 0.13998 0.11837 0.12030 0.09244 0.10471 0.04003 0.06474 0.04578 0.03793 0.02698 0.02278 0.01797  
0.01498 0.01095 0.01095 0.00708 0.00359 0.00669 0.00514 0.00442 0.00249 0.00282 0.00133 0.00780

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDBS is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.07726 0.13088 0.13697 0.10505 0.08530 0.06581 0.04680 0.03656 0.03631 0.02705 0.02900 0.02218 0.01755  
0.01146 0.01024 0.01072 0.00731 0.01170 0.01438 0.01389 0.00780 0.01316 0.01535 0.00926 0.05801

**TABLE 6: Chambers County Registration Distribution**

REG DIST

\* Chambers County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.03382 0.06461 0.09063 0.08372 0.08956 0.08372 0.06968 0.06559 0.05302 0.05721 0.04629 0.04795 0.03859  
0.03411 0.02475 0.02816 0.01598 0.01160 0.00965 0.00994 0.00858 0.00517 0.00341 0.00302 0.02125

\* LDT1

2 0.02315 0.07533 0.09259 0.08483 0.08008 0.06694 0.07295 0.07082 0.04830 0.05631 0.05956 0.04079 0.03441  
0.03191 0.02878 0.02415 0.02040 0.01476 0.01151 0.01164 0.01201 0.00688 0.00638 0.00688 0.01864

\* LDT2

3 0.02315 0.07533 0.09259 0.08483 0.08008 0.06694 0.07295 0.07082 0.04830 0.05631 0.05956 0.04079 0.03441  
0.03191 0.02878 0.02415 0.02040 0.01476 0.01151 0.01164 0.01201 0.00688 0.00638 0.00688 0.01864

\* LDT3

4 0.06767 0.13602 0.13876 0.12953 0.09057 0.11107 0.03896 0.06528 0.04580 0.04033 0.02632 0.02734 0.01606  
0.01196 0.00786 0.01059 0.00786 0.00171 0.00581 0.00444 0.00239 0.00308 0.00273 0.00171 0.00615

\* LDT4

5 0.06767 0.13602 0.13876 0.12953 0.09057 0.11107 0.03896 0.06528 0.04580 0.04033 0.02632 0.02734 0.01606  
0.01196 0.00786 0.01059 0.00786 0.00171 0.00581 0.00444 0.00239 0.00308 0.00273 0.00171 0.00615

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDBS is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.06365 0.13233 0.13568 0.13400 0.09380 0.09380 0.05695 0.03518 0.04188 0.03350 0.02178 0.01675 0.01340  
0.00503 0.00670 0.01340 0.00335 0.00000 0.00838 0.01005 0.01005 0.00670 0.01005 0.01340 0.04020



**TABLE 7: Fort Bend County Registration Distributions**

REG DIST

\* Fort Bend County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.05188 0.08752 0.09700 0.09552 0.09948 0.08432 0.07602 0.06783 0.05935 0.05832 0.04357 0.03726 0.02958  
0.02609 0.02025 0.01451 0.01059 0.00738 0.00602 0.00516 0.00435 0.00237 0.00196 0.00134 0.01231

\* LDT1

2 0.03954 0.08760 0.11794 0.10007 0.09243 0.07487 0.07261 0.06479 0.04693 0.05183 0.04851 0.03443 0.02671  
0.02318 0.02083 0.01727 0.01341 0.00967 0.00937 0.00831 0.00807 0.00403 0.00523 0.00400 0.01836

\* LDT2

3 0.03954 0.08760 0.11794 0.10007 0.09243 0.07487 0.07261 0.06479 0.04693 0.05183 0.04851 0.03443 0.02671  
0.02318 0.02083 0.01727 0.01341 0.00967 0.00937 0.00831 0.00807 0.00403 0.00523 0.00400 0.01836

\* LDT3

4 0.11717 0.18861 0.14253 0.13200 0.08142 0.09800 0.03574 0.05217 0.03135 0.03035 0.01837 0.01687 0.01193  
0.00714 0.00569 0.00569 0.00494 0.00195 0.00329 0.00354 0.00250 0.00130 0.00175 0.00075 0.00494

\* LDT4

5 0.11717 0.18861 0.14253 0.13200 0.08142 0.09800 0.03574 0.05217 0.03135 0.03035 0.01837 0.01687 0.01193  
0.00714 0.00569 0.00569 0.00494 0.00195 0.00329 0.00354 0.00250 0.00130 0.00175 0.00075 0.00494

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDBS is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.07494 0.13881 0.14705 0.10816 0.08756 0.06979 0.05279 0.03786 0.03451 0.03116 0.02344 0.02266 0.01622  
0.01082 0.00798 0.00824 0.00850 0.00901 0.01210 0.00850 0.00850 0.01236 0.01494 0.00773 0.04636

**TABLE 8: Galveston County Registration Distribution**

REG DIST

\* Galveston County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.04706 0.08471 0.08715 0.08375 0.08772 0.08000 0.07115 0.06450 0.05735 0.05959 0.04729 0.04321 0.03406  
0.02991 0.02526 0.02119 0.01483 0.01142 0.00932 0.00838 0.00632 0.00356 0.00252 0.00190 0.01785

\* LDT1

2 0.03976 0.08374 0.10461 0.09185 0.07855 0.07049 0.06862 0.06536 0.04954 0.05304 0.05362 0.04001 0.03069  
0.02711 0.02493 0.02268 0.01679 0.01217 0.01203 0.01047 0.00993 0.00569 0.00519 0.00375 0.01938

\* LDT2

3 0.03976 0.08374 0.10461 0.09185 0.07855 0.07049 0.06862 0.06536 0.04954 0.05304 0.05362 0.04001 0.03069  
0.02711 0.02493 0.02268 0.01679 0.01217 0.01203 0.01047 0.00993 0.00569 0.00519 0.00375 0.01938

\* LDT3

4 0.11321 0.16296 0.12692 0.12013 0.08262 0.10084 0.03583 0.05862 0.03946 0.03839 0.02171 0.02064 0.01593  
0.01116 0.00787 0.00807 0.00612 0.00343 0.00397 0.00491 0.00437 0.00202 0.00249 0.00114 0.00719

\* LDT4

5 0.11321 0.16296 0.12692 0.12013 0.08262 0.10084 0.03583 0.05862 0.03946 0.03839 0.02171 0.02064 0.01593  
0.01116 0.00787 0.00807 0.00612 0.00343 0.00397 0.00491 0.00437 0.00202 0.00249 0.00114 0.00719

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDBS is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.07170 0.13882 0.13362 0.10328 0.07481 0.07024 0.04925 0.03325 0.03741 0.03242 0.02307 0.02203 0.01434  
0.01143 0.01288 0.00914 0.01143 0.00914 0.01621 0.01517 0.01081 0.01330 0.01205 0.00998 0.06421

**TABLE 9: Harris County Registration Distribution**

REG DIST

\* Harris County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.06383 0.07786 0.08168 0.08317 0.08585 0.07438 0.06963 0.06564 0.05864 0.06158 0.04881 0.04390 0.03698  
0.03231 0.02676 0.02046 0.01535 0.01080 0.00836 0.00725 0.00535 0.00325 0.00242 0.00172 0.01403

\* LDT1

2 0.04798 0.08388 0.10113 0.08945 0.07936 0.07124 0.06998 0.06921 0.04998 0.05640 0.05329 0.03904 0.02998  
0.02481 0.02141 0.02044 0.01612 0.01105 0.01087 0.00989 0.00873 0.00483 0.00589 0.00442 0.02062

\* LDT2

3 0.04798 0.08388 0.10113 0.08945 0.07936 0.07124 0.06998 0.06921 0.04998 0.05640 0.05329 0.03904 0.02998  
0.02481 0.02141 0.02044 0.01612 0.01105 0.01087 0.00989 0.00873 0.00483 0.00589 0.00442 0.02062

\* LDT3

4 0.12300 0.16575 0.13490 0.12802 0.08606 0.09724 0.03927 0.05107 0.03355 0.03334 0.02038 0.01738 0.01303  
0.00943 0.00744 0.00705 0.00538 0.00279 0.00387 0.00395 0.00355 0.00201 0.00233 0.00116 0.00804

\* LDT4

5 0.12300 0.16575 0.13490 0.12802 0.08606 0.09724 0.03927 0.05107 0.03355 0.03334 0.02038 0.01738 0.01303  
0.00943 0.00744 0.00705 0.00538 0.00279 0.00387 0.00395 0.00355 0.00201 0.00233 0.00116 0.00804

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDBS is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.10202 0.15367 0.12916 0.10809 0.08340 0.06729 0.04935 0.03584 0.03642 0.03038 0.02352 0.02022 0.01240  
0.00814 0.00922 0.00835 0.00829 0.00779 0.01328 0.01135 0.00852 0.00916 0.01229 0.00706 0.04479

**TABLE 10: Liberty County Registration Distributions**

REG DIST

\* Liberty County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.03384 0.06153 0.06503 0.07242 0.07875 0.07221 0.06563 0.06281 0.06089 0.06379 0.05209 0.05315 0.04363  
0.03982 0.03440 0.02991 0.02218 0.01701 0.01457 0.01303 0.01021 0.00667 0.00359 0.00325 0.01961

\* LDT1

2 0.03225 0.07370 0.08177 0.08160 0.07207 0.05945 0.06394 0.06949 0.04885 0.05911 0.05519 0.04173 0.03494  
0.03118 0.02810 0.02748 0.02479 0.01441 0.01570 0.01587 0.01397 0.00942 0.00965 0.00757 0.02776

\* LDT2

3 0.03225 0.07370 0.08177 0.08160 0.07207 0.05945 0.06394 0.06949 0.04885 0.05911 0.05519 0.04173 0.03494  
0.03118 0.02810 0.02748 0.02479 0.01441 0.01570 0.01587 0.01397 0.00942 0.00965 0.00757 0.02776

\* LDT3

4 0.08244 0.13394 0.11392 0.12120 0.08389 0.09645 0.04713 0.06570 0.05005 0.04113 0.02875 0.02930 0.01692  
0.01310 0.01074 0.00946 0.00764 0.00437 0.00928 0.00801 0.00746 0.00364 0.00346 0.00364 0.00837

\* LDT4

5 0.08244 0.13394 0.11392 0.12120 0.08389 0.09645 0.04713 0.06570 0.05005 0.04113 0.02875 0.02930 0.01692  
0.01310 0.01074 0.00946 0.00764 0.00437 0.00928 0.00801 0.00746 0.00364 0.00346 0.00364 0.00837

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDV8 is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.07197 0.12879 0.14205 0.11174 0.07860 0.07102 0.04640 0.03788 0.04735 0.03598 0.02652 0.02557 0.01515  
0.00663 0.00568 0.00852 0.00568 0.01042 0.01515 0.00852 0.00758 0.01515 0.01420 0.01326 0.05019

**TABLE 11: Montgomery County Registration Distribution**

REG DIST

\* Montgomery County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.05283 0.08241 0.09278 0.09164 0.09347 0.07973 0.07164 0.06632 0.05640 0.05885 0.04516 0.03999 0.03198  
0.02780 0.02284 0.01847 0.01305 0.01006 0.00749 0.00696 0.00532 0.00319 0.00216 0.00165 0.01784

\* LDT1

2 0.04305 0.09252 0.10886 0.09557 0.08028 0.06994 0.06855 0.06475 0.04912 0.05494 0.04836 0.03655 0.02824  
0.02467 0.02133 0.01878 0.01551 0.00967 0.01093 0.00970 0.00848 0.00527 0.00608 0.00487 0.02397

\* LDT2

3 0.04305 0.09252 0.10886 0.09557 0.08028 0.06994 0.06855 0.06475 0.04912 0.05494 0.04836 0.03655 0.02824  
0.02467 0.02133 0.01878 0.01551 0.00967 0.01093 0.00970 0.00848 0.00527 0.00608 0.00487 0.02397

\* LDT3

4 0.10653 0.16862 0.13459 0.13300 0.08505 0.09272 0.03946 0.04865 0.03962 0.03382 0.02243 0.02087 0.01422  
0.01115 0.00752 0.00805 0.00494 0.00355 0.00417 0.00380 0.00453 0.00229 0.00204 0.00094 0.00743

\* LDT4

5 0.10653 0.16862 0.13459 0.13300 0.08505 0.09272 0.03946 0.04865 0.03962 0.03382 0.02243 0.02087 0.01422  
0.01115 0.00752 0.00805 0.00494 0.00355 0.00417 0.00380 0.00453 0.00229 0.00204 0.00094 0.00743

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDBS is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.10950 0.14163 0.11876 0.11526 0.08872 0.06200 0.05204 0.03580 0.03423 0.02951 0.02270 0.01956 0.01188  
0.00716 0.01118 0.00908 0.00873 0.00978 0.01380 0.01310 0.01030 0.01030 0.01415 0.00891 0.04191

**TABLE 12: Waller County Registration Distribution**

REG DIST

\* Waller County

\* Calculated from Mid-Year (July) 2004 Registration data (from TTI)

\* LDV

1 0.03154 0.06283 0.06861 0.07277 0.08206 0.06389 0.06095 0.06234 0.05484 0.06331 0.05280 0.05272 0.04237  
0.03854 0.03504 0.02909 0.02616 0.01907 0.01410 0.01222 0.01059 0.00758 0.00440 0.00367 0.02852

\* LDT1

2 0.03370 0.07491 0.08656 0.08192 0.06902 0.05875 0.06288 0.06025 0.04986 0.05437 0.05574 0.04384 0.03507  
0.02931 0.02869 0.02731 0.02317 0.01591 0.01453 0.01804 0.01453 0.00827 0.01065 0.00664 0.03608

\* LDT2

3 0.03370 0.07491 0.08656 0.08192 0.06902 0.05875 0.06288 0.06025 0.04986 0.05437 0.05574 0.04384 0.03507  
0.02931 0.02869 0.02731 0.02317 0.01591 0.01453 0.01804 0.01453 0.00827 0.01065 0.00664 0.03608

\* LDT3

4 0.08567 0.13178 0.11589 0.12399 0.08318 0.09252 0.04486 0.06573 0.04548 0.04517 0.02430 0.02991 0.01713  
0.01371 0.01153 0.01028 0.00717 0.00561 0.00717 0.00717 0.00748 0.00218 0.00312 0.00405 0.01495

\* LDT4

5 0.08567 0.13178 0.11589 0.12399 0.08318 0.09252 0.04486 0.06573 0.04548 0.04517 0.02430 0.02991 0.01713  
0.01371 0.01153 0.01028 0.00717 0.00561 0.00717 0.00717 0.00748 0.00218 0.00312 0.00405 0.01495

\* HDV2b

6 0.13100 0.15840 0.12630 0.12752 0.09999 0.07565 0.03659 0.04742 0.02635 0.03231 0.01897 0.01817 0.01397  
0.01255 0.01041 0.00927 0.00801 0.00525 0.00671 0.00558 0.00537 0.00306 0.00604 0.00394 0.01116

\* HDV3

7 0.05032 0.07008 0.07675 0.10501 0.11638 0.11650 0.03837 0.07399 0.03791 0.07479 0.05113 0.03412 0.02757  
0.02137 0.02344 0.01654 0.01448 0.00632 0.00574 0.00816 0.00402 0.00218 0.00299 0.00287 0.01896

\* HDV4

8 0.04831 0.08239 0.08849 0.09684 0.13431 0.11896 0.04831 0.08172 0.06614 0.06230 0.03431 0.02235 0.01874  
0.01512 0.01648 0.01242 0.00835 0.00587 0.00361 0.00293 0.00497 0.00113 0.00429 0.00339 0.01828

\* HDV5

9 0.06375 0.08525 0.10138 0.10484 0.12942 0.14516 0.03687 0.04071 0.02458 0.03379 0.01920 0.01767 0.02381  
0.01882 0.02035 0.01421 0.01498 0.01690 0.01152 0.00883 0.00845 0.00768 0.00883 0.00730 0.03571

\* HDV6

10 0.05380 0.04359 0.05219 0.09279 0.10176 0.11359 0.08843 0.04808 0.04446 0.06626 0.03276 0.03724 0.02553  
0.02927 0.03151 0.02105 0.01694 0.01644 0.01370 0.01183 0.01121 0.00673 0.00934 0.00760 0.02391

\*HDV7

11 0.02981 0.05736 0.05210 0.06839 0.08943 0.09669 0.06513 0.06463 0.06062 0.08467 0.04158 0.03657 0.03257  
0.05110 0.03958 0.02255 0.02054 0.01478 0.01253 0.01278 0.00952 0.00551 0.00551 0.00927 0.01678

\*HDV8a

12 0.02274 0.03027 0.03589 0.03781 0.05137 0.04753 0.04384 0.03370 0.05068 0.07822 0.06438 0.05904 0.04644  
0.05288 0.05192 0.05945 0.04548 0.03356 0.02384 0.02671 0.02041 0.00671 0.01397 0.01466 0.04849

\*HDV8b

13 0.07996 0.05946 0.04408 0.07330 0.08919 0.12301 0.07227 0.06151 0.03639 0.08457 0.06407 0.04613 0.01384  
0.02563 0.02665 0.04100 0.01486 0.01230 0.00769 0.00461 0.00564 0.00205 0.00308 0.00205 0.00666

\* HDBS is MOBILE6 default

\* HDBT is MOBILE6 default

\* MC

16 0.05141 0.10797 0.13625 0.11311 0.08226 0.06427 0.05141 0.03342 0.04370 0.03599 0.01799 0.02828 0.01542  
0.01799 0.01542 0.02057 0.01799 0.01542 0.00771 0.01028 0.02314 0.01285 0.01285 0.00771 0.05656

**TABLE 13: Houston-Eight-County Region Diesel sales Fraction Estimates**

- \* 2007 Statewide Diesel Sales Fractions Estimates
- \* HDV fractions are estimated from TxDOT registration data (Mid-year July 2004)
- \* LDV, LDT and Bus fractions are EPA defaults
- \* One record per vehicle type. The order of vehicle types is: LDV, LDT1, LDT2, LDT3, LDT4, HDV2B, HDV3, HDV4, HDV5, HDV6, HDV7, HDV8a, HDV8b, HDBS

DIESEL FRACTIONS :

0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00090	0.00060
0.00010	0.00030	0.00060	0.00130	0.00040	0.00040	0.00010	0.00270	0.00320	0.00970	0.01620	0.02410		
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01150
0.01110	0.01450	0.01150	0.01290	0.00960	0.00830	0.00720	0.00820	0.01240	0.01350	0.01690	0.02090		
0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01260	0.01150
0.01110	0.01450	0.01150	0.01290	0.00960	0.00830	0.00720	0.00820	0.01240	0.01350	0.01690	0.02090		
0.88563	0.88563	0.88563	0.88563	0.81309	0.77966	0.72044	0.59186	0.63002	0.54190	0.46056	0.43055	0.20553	
0.38983	0.37310	0.34438	0.35788	0.27757	0.22879	0.18284	0.15413	0.19001	0.17778	0.19679	0.17158		
0.72198	0.72198	0.72198	0.72198	0.65470	0.64998	0.63211	0.64506	0.61992	0.49298	0.57222	0.53758	0.33289	
0.54565	0.57020	0.61950	0.49214	0.52674	0.46608	0.35632	0.27254	0.31264	0.21457	0.23404	0.19136		
0.81565	0.81565	0.81565	0.81565	0.72670	0.69889	0.70449	0.71724	0.64706	0.68324	0.74152	0.65808	0.44894	
0.67123	0.67488	0.64012	0.72156	0.55718	0.61592	0.29545	0.25161	0.11336	0.12227	0.21429	0.18182		
0.87557	0.87557	0.87557	0.87557	0.86605	0.88606	0.85864	0.89074	0.86116	0.70180	0.72335	0.79849	0.47491	
0.66552	0.72481	0.65278	0.73464	0.60057	0.59797	0.34050	0.35968	0.23649	0.30435	0.25000	0.30189		
0.87680	0.87680	0.87680	0.87680	0.90476	0.91638	0.87145	0.86580	0.82740	0.79135	0.76770	0.80283	0.59535	
0.78600	0.77429	0.59492	0.67919	0.73922	0.73063	0.57382	0.65900	0.56172	0.46842	0.46250	0.42308		
0.94783	0.94783	0.94783	0.94783	0.98257	0.90545	0.89330	0.90961	0.89110	0.84945	0.78594	0.81909	0.53993	
0.82827	0.85079	0.88206	0.86895	0.84016	0.85782	0.81713	0.83038	0.78906	0.75852	0.72185	0.68944		
0.94693	0.94693	0.94693	0.94693	0.96067	0.95596	0.94286	0.93528	0.95292	0.95020	0.90000	0.92354	0.73845	
0.96314	0.94870	0.95054	0.93254	0.93707	0.94532	0.95140	0.94860	0.91219	0.91164	0.94034	0.90625		
0.98522	0.98522	0.98522	0.98522	0.98188	0.98089	0.98964	0.98790	0.97927	0.97708	0.95161	0.99275	0.79417	
0.96019	0.98762	0.96552	0.99248	0.93578	0.96970	0.96104	0.97826	0.92188	0.92683	0.96386	0.95000		
0.95850	0.95850	0.95850	0.95850	0.95850	0.95850	0.95850	0.95850	0.95850	0.95850	0.95850	0.95850	0.88570	
0.85250	0.87950	0.99000	0.91050	0.87600	0.77100	0.75020	0.73450	0.67330	0.51550	0.38450	0.32380		

**TABLE 14: MOBILE6 Activity, input to POLFAC62\_3**

<b>Command</b>	<b>Function/Description</b>	<b>Input Parameter Source/Value</b>
VMT FRACTIONS	Used in MOBILE6 to weight the emissions of various vehicle types into average rates for groupings of vehicle classes.	NOT APPLIED. (EPA default assumed, used for aggregate results which are not applied in this analysis.)
VMT BY FACILITY	VMT fractions by MOBILE6 road type combine the four road type emissions factors into the “all road types” emissions factors.	EPA default assumed. See Appendix 9.11.
VMT BY HOUR	Allows VMT fractions allocation by hour-of-day; applied in conversion of grams per hour (g/hr) to g/mi, as well as in weighting of hourly g/mi rates to obtain daily emissions factors.	The hourly VMT fractions are developed as county hourly total VMT divided by county 24-hour total VMT. See Table 21-26.
SPEED VMT	Allows user to allocate VMT by average speed (14 pre-selected: 2.5 and 5 through 65 at 5 mph increments) for arterials and freeways for each hour of the day.	Generic input. Same for all counties. Inputs are set up to calculate emissions factors by 14 MOBILE6 speed bin speed scenarios for MOBILE6 Freeway and Arterial road types. See Appendix 9.11.
AVERAGE SPEED	Allows a single average speed for combined freeways and arterials for the entire day.	NOT APPLIED.
STARTS PER DAY	Lets user specify the average number of engine starts per vehicle per day by vehicle types for weekend days and weekdays.	NOT APPLIED (EPA weekday defaults are applied)
START DIST	Allows user to allocate engine starts by hour of the day for weekend days and weekdays	NOT APPLIED (EPA weekday defaults are applied).
SOAK DISTRIBUTION	Allows use of alternate vehicle soak duration distributions for weekend days and weekdays.	NOT APPLIED (EPA weekday defaults assumed)
HOT SOAK ACTIVITY	Allows users to specify a hot soak duration distribution for each of 14 daily time periods for weekend days and for weekdays.	NOT APPLIED (EPA weekday defaults assumed)
DIURN SOAK ACTIVITY	Allows user set diurnal soak time distributions for each of 18 daily time periods.	NOT APPLIED. (EPA defaults assumed)
WE DA TRI LEN DI	Specifies alternate fractions of VMT that occur during trips of various durations at each hour of the average weekday.	Locality-Specific. Latest HGA regional TDM-based weekday distributions Developed by HGAC (see Tables 15-20).
WE EN TRI LEN DI	Specifies hourly alternate fractions of VMT for trips of various lengths for weekend days.	NOT APPLIED
WE VEH US	Directs MOBILE6 to use weekend activity data for calculating emissions factors.	NOT APPLIED.



**TABLE 15: 2005-ROP HGA Percent of VMT by Trip Length, Hourly input to POLFAC62\_3**

Hour	Trip Length Ranges (minutes)					
	< 10	11-20	21-30	31-40	41-50	>51
6 a.m.	12.58	27.63	24.78	16.77	9.04	9.20
7 a.m.	12.58	27.63	24.78	16.77	9.04	9.20
8 a.m.	12.58	27.63	24.78	16.77	9.04	9.20
9 a.m.	16.87	31.09	22.55	13.10	6.94	9.45
10 a.m.	16.87	31.09	22.55	13.10	6.94	9.45
11 a.m.	16.87	31.09	22.55	13.10	6.94	9.45
12 a.m.	16.87	31.09	22.55	13.10	6.94	9.45
1 p.m.	16.87	31.09	22.55	13.10	6.94	9.45
2 p.m.	16.87	31.09	22.55	13.10	6.94	9.45
3 p.m.	15.30	29.92	23.33	14.40	7.71	9.34
4 p.m.	15.30	29.92	23.33	14.40	7.71	9.34
5 p.m.	15.30	29.92	23.33	14.40	7.71	9.34
6 p.m.	15.30	29.92	23.33	14.40	7.71	9.38
7 p.m. through 5 a.m.	15.93	30.10	22.11	13.33	7.46	11.07

**TABLE 16: 2007-ROP HGA Percent of VMT by Trip Length, Hourly input to POLFAC62\_3**

Hour	Trip Length Ranges (minutes)					
	< 10	11-20	21-30	31-40	41-50	>51
6 a.m.	12.44	27.46	24.57	16.90	9.19	9.44
7 a.m.	12.44	27.46	24.57	16.90	9.19	9.44
8 a.m.	12.44	27.46	24.57	16.90	9.19	9.44
9 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
10 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
11 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
12 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
1 p.m.	16.66	30.91	22.51	13.18	6.99	9.75
2 p.m.	16.66	30.91	22.51	13.18	6.99	9.75
3 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
4 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
5 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
6 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
7 p.m. through 5 a.m.	15.76	29.99	22.02	13.40	7.45	11.38

**TABLE 17: 2007-AD HGA Percent of VMT by Trip Length, Hourly input to POLFAC62\_3**

Hour	Trip Length Ranges (minutes)					
	< 10	11-20	21-30	31-40	41-50	>51
6 a.m.	12.44	27.46	24.57	16.90	9.19	9.44
7 a.m.	12.44	27.46	24.57	16.90	9.19	9.44
8 a.m.	12.44	27.46	24.57	16.90	9.19	9.44
9 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
10 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
11 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
12 a.m.	16.66	30.91	22.51	13.18	6.99	9.75
1 p.m.	16.66	30.91	22.51	13.18	6.99	9.75
2 p.m.	16.66	30.91	22.51	13.18	6.99	9.75
3 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
4 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
5 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
6 p.m.	15.11	29.75	23.25	14.52	7.77	9.60
7 p.m. through 5 a.m.	15.76	29.99	22.02	13.40	7.45	11.38

**TABLE 18: 2010-AD HGA Percent of VMT by Trip Length, Hourly input to POLFAC62\_3**

Hour	Trip Length Ranges (minutes)					
	< 10	11-20	21-30	31-40	41-50	>51
6 a.m.	12.61	27.82	24.84	16.76	9.08	8.89
7 a.m.	12.61	27.82	24.84	16.76	9.08	8.89
8 a.m.	12.61	27.82	24.84	16.76	9.08	8.89
9 a.m.	16.72	31.23	22.87	13.26	6.95	8.97
10 a.m.	16.72	31.23	22.87	13.26	6.95	8.97
11 a.m.	16.72	31.23	22.87	13.26	6.95	8.97
12 a.m.	16.72	31.23	22.87	13.26	6.95	8.97
1 p.m.	16.72	31.23	22.87	13.26	6.95	8.97
2 p.m.	16.72	31.23	22.87	13.26	6.95	8.97
3 p.m.	15.24	30.13	23.57	14.48	7.69	8.89
4 p.m.	15.24	30.13	23.57	14.48	7.69	8.89
5 p.m.	15.24	30.13	23.57	14.48	7.69	8.89
6 p.m.	15.24	30.13	23.57	14.48	7.69	8.89
7 p.m. through 5 a.m.	16.00	30.49	22.39	13.39	7.38	10.35

**TABLE 19: 2015-AD HGA Percent of VMT by Trip Length, Hourly input to POLFAC62\_3**

Hour	Trip Length Ranges (minutes)					
	< 10	11-20	21-30	31-40	41-50	>51
6 a.m.	12.60	28.19	25.37	16.60	8.78	8.46
7 a.m.	12.60	28.19	25.37	16.60	8.78	8.46
8 a.m.	12.60	28.19	25.37	16.60	8.78	8.46
9 a.m.	16.43	31.28	23.27	13.25	6.86	8.91
10 a.m.	16.43	31.28	23.27	13.25	6.86	8.91
11 a.m.	16.43	31.28	23.27	13.25	6.86	8.91
12 a.m.	16.43	31.28	23.27	13.25	6.86	8.91
1 p.m.	16.43	31.28	23.27	13.25	6.86	8.91
2 p.m.	16.43	31.28	23.27	13.25	6.86	8.91
3 p.m.	15.15	30.38	23.96	14.35	7.50	8.66
4 p.m.	15.15	30.38	23.96	14.35	7.50	8.66
5 p.m.	15.15	30.38	23.96	14.35	7.50	8.66
6 p.m.	15.15	30.38	23.96	14.35	7.50	8.66
7 p.m. through 5 a.m.	15.92	30.67	22.66	13.26	7.21	10.28

**TABLE 20: 2025-AD HGA Percent of VMT by Trip Length, Hourly input to POLFAC62\_3**

Hour	Trip Length Ranges (minutes)					
	< 10	11-20	21-30	31-40	41-50	>51
6 a.m.	12.35	28.34	25.68	16.75	8.75	8.13
7 a.m.	12.35	28.34	25.68	16.75	8.75	8.13
8 a.m.	12.35	28.34	25.68	16.75	8.75	8.13
9 a.m.	15.82	31.38	23.81	13.60	6.95	8.44
10 a.m.	15.82	31.38	23.81	13.60	6.95	8.44
11 a.m.	15.82	31.38	23.81	13.60	6.95	8.44
12 a.m.	15.82	31.38	23.81	13.60	6.95	8.44
1 p.m.	15.82	31.38	23.81	13.60	6.95	8.44
2 p.m.	15.82	31.38	23.81	13.60	6.95	8.44
3 p.m.	14.72	30.52	24.40	14.61	7.52	8.23
4 p.m.	14.72	30.52	24.40	14.61	7.52	8.23
5 p.m.	14.72	30.52	24.40	14.61	7.52	8.23
6 p.m.	14.72	30.52	24.40	14.61	7.52	8.23
7 p.m. through 5 a.m.	15.55	30.95	23.19	13.49	7.16	9.66

**TABLE 21: VMT by Hour for 2005-ROP**

<b>Brazoria</b>	<b>Chambers</b>	<b>Fort Bend</b>	<b>Galveston</b>	<b>Harris</b>	<b>Liberty</b>	<b>Montgomery</b>	<b>Waller</b>
0.071193	0.053274	0.066733	0.067119	0.071644	0.062009	0.067668	0.051933
0.085288	0.063822	0.079946	0.080408	0.085829	0.074286	0.081065	0.062215
0.069883	0.052293	0.065505	0.065884	0.070326	0.060868	0.066422	0.050977
0.051232	0.054582	0.051890	0.054994	0.052354	0.051661	0.050682	0.055163
0.050110	0.053386	0.050753	0.053790	0.051207	0.050529	0.049571	0.053954
0.052526	0.055960	0.053199	0.056383	0.053676	0.052965	0.051961	0.056555
0.054124	0.057662	0.054818	0.058098	0.055309	0.054576	0.053542	0.058276
0.055224	0.058834	0.055932	0.059279	0.056433	0.055686	0.054630	0.059460
0.058408	0.062227	0.059158	0.062697	0.059687	0.058897	0.057780	0.062889
0.074168	0.071374	0.074126	0.073881	0.073946	0.073620	0.074293	0.071641
0.081821	0.078740	0.081775	0.081505	0.081577	0.081217	0.081960	0.079033
0.087821	0.084514	0.087771	0.087482	0.087561	0.087171	0.087970	0.084827
0.071077	0.068400	0.071037	0.070803	0.070865	0.070553	0.071198	0.068656
0.029049	0.039177	0.031217	0.027048	0.027452	0.035158	0.032043	0.039069
0.022645	0.030540	0.024335	0.021085	0.021400	0.027407	0.024979	0.030455
0.020075	0.027074	0.021573	0.018692	0.018971	0.024297	0.022144	0.026999
0.015964	0.021529	0.017155	0.014864	0.015086	0.019321	0.017609	0.021470
0.010853	0.014637	0.011663	0.010106	0.010257	0.013136	0.011972	0.014597
0.005934	0.008003	0.006377	0.005525	0.005608	0.007182	0.006545	0.007980
0.003826	0.005159	0.004111	0.003562	0.003615	0.004630	0.004220	0.005145
0.003461	0.004667	0.003719	0.003222	0.003271	0.004189	0.003818	0.004655
0.003147	0.004245	0.003382	0.002930	0.002974	0.003809	0.003472	0.004233
0.005322	0.007178	0.005719	0.004955	0.005030	0.006441	0.005871	0.007158
0.016849	0.022723	0.018106	0.015688	0.015922	0.020392	0.018585	0.022660

**TABLE 22: VMT by Hour for 2007-ROP**

<b>Brazoria</b>	<b>Chambers</b>	<b>Ft. Bend</b>	<b>Galveston</b>	<b>Harris</b>	<b>Liberty</b>	<b>Montgomery</b>	<b>Waller</b>
0.071511	0.052936	0.067160	0.066733	0.071785	0.061679	0.067958	0.052331
0.085669	0.063416	0.080457	0.079945	0.085997	0.073890	0.081413	0.062692
0.070194	0.051962	0.065924	0.065505	0.070464	0.060544	0.066707	0.051368
0.050802	0.054884	0.051691	0.055442	0.052359	0.052527	0.050801	0.055271
0.049689	0.053682	0.050559	0.054227	0.051212	0.051376	0.049688	0.054060
0.052085	0.056270	0.052996	0.056841	0.053681	0.053852	0.052083	0.056666
0.053669	0.057982	0.054608	0.058570	0.055314	0.055491	0.053668	0.058390
0.054760	0.059160	0.055718	0.059761	0.056438	0.056619	0.054759	0.059577
0.057918	0.062572	0.058931	0.063207	0.059693	0.059884	0.057917	0.063012
0.074425	0.071153	0.074301	0.073748	0.073923	0.073087	0.074264	0.071698
0.082105	0.078495	0.081968	0.081358	0.081551	0.080629	0.081927	0.079096
0.088129	0.084252	0.087977	0.087325	0.087531	0.086542	0.087935	0.084896
0.071324	0.068188	0.071205	0.070675	0.070843	0.070042	0.071169	0.068710
0.029176	0.039202	0.031036	0.026833	0.027372	0.034708	0.031716	0.038605
0.022743	0.030559	0.024194	0.020917	0.021338	0.027056	0.024723	0.030094
0.020162	0.027091	0.021448	0.018544	0.018916	0.023986	0.021918	0.026679
0.016033	0.021543	0.017056	0.014746	0.015042	0.019074	0.017429	0.021215
0.010900	0.014646	0.011596	0.010025	0.010227	0.012968	0.011849	0.014424
0.005960	0.008008	0.006340	0.005481	0.005591	0.007090	0.006478	0.007886
0.003842	0.005163	0.004087	0.003534	0.003605	0.004571	0.004177	0.005084
0.003476	0.004670	0.003698	0.003197	0.003261	0.004135	0.003779	0.004599
0.003161	0.004247	0.003363	0.002907	0.002966	0.003760	0.003436	0.004183
0.005345	0.007182	0.005686	0.004916	0.005015	0.006359	0.005811	0.007073
0.016922	0.022737	0.018001	0.015563	0.015876	0.020131	0.018395	0.022391

**TABLE 23: VMT by Hour for 2007-AD**

<b>Brazoria</b>	<b>Chambers</b>	<b>Ft. Bend</b>	<b>Galveston</b>	<b>Harris</b>	<b>Liberty</b>	<b>Montgomery</b>	<b>Waller</b>
0.071374	0.052835	0.067032	0.066605	0.071648	0.061561	0.067828	0.052231
0.085488	0.063282	0.080287	0.079776	0.085816	0.073734	0.081241	0.062560
0.070512	0.052197	0.066222	0.065801	0.070782	0.060818	0.067009	0.051600
0.051245	0.055362	0.052141	0.055924	0.052815	0.052984	0.051243	0.055752
0.049522	0.053501	0.050388	0.054044	0.051040	0.051203	0.049521	0.053877
0.051892	0.056061	0.052800	0.056630	0.053482	0.053653	0.051891	0.056456
0.053271	0.057551	0.054203	0.058135	0.054903	0.055079	0.053270	0.057956
0.054737	0.059135	0.055695	0.059736	0.056415	0.056595	0.054736	0.059552
0.058257	0.062939	0.059277	0.063578	0.060043	0.060235	0.058256	0.063381
0.074068	0.070811	0.073943	0.073394	0.073568	0.072736	0.073907	0.071353
0.082269	0.078652	0.082131	0.081520	0.081713	0.080790	0.082090	0.079254
0.088752	0.084853	0.088603	0.087946	0.088154	0.087154	0.088559	0.085501
0.070892	0.067775	0.070773	0.070247	0.070413	0.069618	0.070738	0.068294
0.029572	0.039734	0.031458	0.027198	0.027744	0.035180	0.032147	0.039130
0.023176	0.031141	0.024655	0.021315	0.021744	0.027572	0.025194	0.030667
0.019933	0.026782	0.021204	0.018332	0.018701	0.023713	0.021668	0.026375
0.014962	0.020104	0.015916	0.013761	0.014037	0.017800	0.016265	0.019798
0.009683	0.013010	0.010301	0.008906	0.009085	0.011519	0.010526	0.012813
0.006128	0.008234	0.006519	0.005636	0.005749	0.007290	0.006662	0.008109
0.003951	0.005308	0.004202	0.003633	0.003706	0.004700	0.004294	0.005227
0.003624	0.004869	0.003855	0.003333	0.003400	0.004311	0.003939	0.004795
0.003304	0.004440	0.003515	0.003039	0.003100	0.003931	0.003592	0.004372
0.005590	0.007511	0.005947	0.005142	0.005245	0.006651	0.006077	0.007397
0.017798	0.023913	0.018933	0.016369	0.016697	0.021173	0.019347	0.023550

**TABLE 24: VMT by Hour for 2010-AD**

<b>Brazoria</b>	<b>Chambers</b>	<b>Ft. Bend</b>	<b>Galveston</b>	<b>Harris</b>	<b>Liberty</b>	<b>Montgomery</b>	<b>Waller</b>
0.070584	0.052940	0.066900	0.066594	0.071237	0.061686	0.067588	0.052290
0.084542	0.063409	0.080129	0.079763	0.085324	0.073884	0.080953	0.062630
0.069732	0.052301	0.066092	0.065790	0.070377	0.060941	0.066772	0.051658
0.051703	0.055346	0.052300	0.055925	0.053094	0.053003	0.051449	0.055860
0.049965	0.053485	0.050542	0.054045	0.051309	0.051221	0.049719	0.053982
0.052356	0.056045	0.052960	0.056631	0.053764	0.053672	0.052098	0.056566
0.053747	0.057534	0.054368	0.058136	0.055193	0.055099	0.053483	0.058069
0.055227	0.059118	0.055864	0.059736	0.056713	0.056615	0.054955	0.059668
0.058779	0.062920	0.059457	0.063578	0.060360	0.060256	0.058489	0.063505
0.073937	0.070832	0.074007	0.073372	0.073542	0.072731	0.073831	0.071187
0.082124	0.078675	0.082202	0.081496	0.081685	0.080784	0.082006	0.079070
0.088597	0.084874	0.088682	0.087923	0.088123	0.087152	0.088470	0.085302
0.070767	0.067795	0.070834	0.070227	0.070389	0.069613	0.070666	0.068135
0.029619	0.039665	0.031278	0.027224	0.027676	0.035074	0.032106	0.039097
0.023213	0.031086	0.024513	0.021336	0.021690	0.027488	0.025162	0.030641
0.019964	0.026736	0.021082	0.018350	0.018655	0.023641	0.021641	0.026352
0.014986	0.020069	0.015825	0.013774	0.014003	0.017746	0.016244	0.019781
0.009698	0.012988	0.010241	0.008914	0.009062	0.011484	0.010513	0.012802
0.006138	0.008220	0.006481	0.005641	0.005735	0.007268	0.006653	0.008102
0.003957	0.005299	0.004178	0.003637	0.003697	0.004686	0.004289	0.005223
0.003630	0.004861	0.003833	0.003336	0.003392	0.004298	0.003934	0.004791
0.003310	0.004432	0.003495	0.003042	0.003092	0.003919	0.003587	0.004368
0.005599	0.007498	0.005913	0.005146	0.005232	0.006630	0.006069	0.007391
0.017826	0.023872	0.018824	0.016384	0.016656	0.021109	0.019323	0.023530

**TABLE 25: VMT by Hour for 2015-AD**

<b>Brazoria</b>	<b>Chambers</b>	<b>Ft. Bend</b>	<b>Galveston</b>	<b>Harris</b>	<b>Liberty</b>	<b>Montgomery</b>	<b>Waller</b>
0.070216	0.052963	0.066818	0.066520	0.070967	0.061424	0.067452	0.052545
0.084100	0.063436	0.080031	0.079674	0.085001	0.073571	0.080790	0.062936
0.069368	0.052323	0.066011	0.065717	0.070110	0.060682	0.066637	0.051911
0.051972	0.055428	0.052456	0.056043	0.053311	0.053412	0.051631	0.055959
0.050224	0.053564	0.050693	0.054159	0.051519	0.051617	0.049895	0.054078
0.052628	0.056128	0.053119	0.056750	0.053985	0.054087	0.052283	0.056666
0.054027	0.057619	0.054530	0.058258	0.055419	0.055524	0.053672	0.058172
0.055514	0.059205	0.056031	0.059862	0.056945	0.057053	0.055150	0.059773
0.059084	0.063013	0.059635	0.063712	0.060607	0.060722	0.058697	0.063617
0.073943	0.070768	0.073928	0.073248	0.073499	0.072874	0.073901	0.071206
0.082130	0.078604	0.082113	0.081358	0.081637	0.080943	0.082083	0.079090
0.088603	0.084800	0.088583	0.087769	0.088074	0.087322	0.088553	0.085324
0.070773	0.067734	0.070758	0.070108	0.070347	0.069750	0.070732	0.068153
0.029507	0.039599	0.031198	0.027232	0.027610	0.034575	0.031892	0.038773
0.023125	0.031034	0.024451	0.021342	0.021638	0.027097	0.024994	0.030387
0.019889	0.026691	0.021029	0.018355	0.018610	0.023305	0.021496	0.026134
0.014929	0.020035	0.015785	0.013778	0.013969	0.017493	0.016136	0.019617
0.009662	0.012966	0.010215	0.008917	0.009040	0.011321	0.010443	0.012696
0.006115	0.008206	0.006465	0.005643	0.005721	0.007165	0.006609	0.008035
0.003942	0.005290	0.004168	0.003638	0.003688	0.004619	0.004260	0.005180
0.003616	0.004852	0.003823	0.003337	0.003383	0.004237	0.003908	0.004751
0.003297	0.004424	0.003486	0.003043	0.003085	0.003863	0.003563	0.004332
0.005578	0.007486	0.005898	0.005148	0.005219	0.006536	0.006029	0.007330
0.017758	0.023832	0.018776	0.016389	0.016616	0.020808	0.019194	0.023335



**TABLE 26: VMT by Hour for 2025-AD**

<b>Brazoria</b>	<b>Chambers</b>	<b>Ft. Bend</b>	<b>Galveston</b>	<b>Harris</b>	<b>Liberty</b>	<b>Montgomery</b>	<b>Waller</b>
0.077234	0.067990	0.075161	0.075942	0.076864	0.073247	0.073096	0.069495
0.092510	0.081435	0.090024	0.090961	0.092063	0.087730	0.087552	0.083235
0.076301	0.067169	0.074254	0.075025	0.075936	0.072363	0.072213	0.068656
0.050736	0.052317	0.050635	0.053962	0.052313	0.051160	0.050681	0.052551
0.049030	0.050558	0.048933	0.052148	0.050555	0.049440	0.048977	0.050784
0.051376	0.052978	0.051275	0.054643	0.052974	0.051806	0.051321	0.053215
0.052742	0.054386	0.052637	0.056095	0.054382	0.053183	0.052685	0.054629
0.054193	0.055883	0.054086	0.057640	0.055879	0.054647	0.054135	0.056133
0.057679	0.059477	0.057564	0.061346	0.059472	0.058161	0.057617	0.059743
0.071633	0.066432	0.071494	0.070474	0.071399	0.069057	0.071926	0.066230
0.079565	0.073788	0.079410	0.078277	0.079305	0.076704	0.079890	0.073564
0.085836	0.079604	0.085669	0.084447	0.085556	0.082750	0.086187	0.079362
0.068562	0.063584	0.068429	0.067453	0.068338	0.066097	0.068843	0.063391
0.028474	0.037448	0.030154	0.026108	0.026833	0.032994	0.031109	0.036291
0.022315	0.029349	0.023632	0.020461	0.021030	0.025858	0.024381	0.028442
0.019192	0.025241	0.020325	0.017598	0.018086	0.022239	0.020968	0.024462
0.014406	0.018947	0.015256	0.013209	0.013576	0.016693	0.015740	0.018362
0.009323	0.012262	0.009873	0.008549	0.008786	0.010803	0.010186	0.011883
0.005900	0.007760	0.006249	0.005410	0.005560	0.006837	0.006446	0.007520
0.003804	0.005003	0.004028	0.003488	0.003585	0.004408	0.004156	0.004848
0.003489	0.004589	0.003695	0.003199	0.003288	0.004043	0.003812	0.004447
0.003181	0.004184	0.003369	0.002917	0.002998	0.003686	0.003476	0.004055
0.005383	0.007079	0.005700	0.004935	0.005073	0.006237	0.005881	0.006861
0.017136	0.022537	0.018148	0.015713	0.016149	0.019857	0.018722	0.021841

**TABLE 27: MOBILE6 State Programs for ROP and AD**

Command	Function Description	Input Parameter Source/Value
STAGE II REFUELING	Allows modeling of at-the-pump refueling emissions.	NOT APPLIED. Accounted for as an area source category.
ANTI-TAMP PROG	Allows user to model impacts of an ATP.	Locality-Specific. Program design by county. Applied to Harris and urban counties. Rural counties: no ATP. See Table 43-44.
<u>I/M Commands:</u>		
I/M PROGRAM	Required for exhaust/evaporative I/M programs.	
I/M MODEL YEARS	Required for exhaust/evaporative I/M programs.	
I/M VEHICLES	Required for exhaust/evaporative I/M programs.	
I/M STRINGENCY	Required for exhaust. Do not use for evaporative.	
I/M COMPLIANCE	Required for exhaust. Optional for evaporative.	Locality Specific. Program design by county. Applied to Harris and urban counties. See Tables 28-42. The I/M program for rural counties was excluded.
I/M WAIVER RATES	Required for exhaust. Optional for evaporative.	
I/M CUTPOINTS	Optional for exhaust (but required for IM240). Do not use with evaporative.	
I/M EXEMPTION AGE	Optional for both exhaust and evaporative.	
I/M GRACE PERIOD	Optional for both exhaust and evaporative.	
NO I/M TTC CREDITS	Optional for exhaust. Do not use with evaporative.	
I/M EFFECTIVENESS	Optional for exhaust. Do not use with evaporative.	
I/M DESC FILE	Optional for both.	

**TABLE 28: 2005 Exhaust and Evaporative I/M setups for Harris County input to RATEADJ62**

<p>* 2005 Exhaust and Evaporative I/M setups for Harris County</p> <p>&gt; Exhaust I/M: 2005; 2500/IDLE (all HDG)  I/M PROGRAM : 1 1997 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1981 2003  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2005; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 1997 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1981 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2005; OBD I/M (LDG 96+)  I/M PROGRAM : 3 1997 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2003  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2005: GC (all HDG)  I/M PROGRAM : 4 1997 2050 1 TRC GC  I/M MODEL YEARS : 4 1981 2003  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2005: GC (LDG 95-)  I/M PROGRAM : 5 1997 2050 1 TRC GC  I/M MODEL YEARS : 5 1981 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2005: EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 1997 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2003  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 29: 2005 Exhaust and Evaporative I/M setups for HGA Urban Counties:  
Brazoria, Fort Bend, Galveston, Montgomery input to RATEADJ62**

<p>* 2005 Exhaust and Evaporative I/M setups for  * HGA Urban County Group: Brazoria, Fort Bend, Galveston, Montgomery</p> <p>&gt; Exhaust I/M: 2005 eval; 2003 start; 2500/IDLE (all HDG)  I/M PROGRAM : 1 2003 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1981 2003  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2005 eval; 2003 start; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 2003 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1981 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2005 eval; 2003 start; OBD I/M (LDG 96+)  I/M PROGRAM : 3 2003 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2003  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2005 eval; 2000 start; GC (all HDG)  I/M PROGRAM : 4 2000 2050 1 TRC GC  I/M MODEL YEARS : 4 1981 2003  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2005 eval; 2000 start; GC (LDG 95-)  I/M PROGRAM : 5 2000 2050 1 TRC GC  I/M MODEL YEARS : 5 1981 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2005 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2003  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 30: 2005 Exhaust and Evaporative I/M setups for HGA Urban County Ratio  
Calculation to get May 1 start (actual Urban County start year is 2003) input to  
RATEADJ62**

<p>* 2005 Exhaust and Evaporative I/M setups for  * HGA Urban County Ratio Calculation to get May 1 start  * (actual Urban County start year is 2003)</p> <p>&gt; Exhaust I/M: 2005 eval; 2004 start; 2500/IDLE (all HDG)  I/M PROGRAM : 1 2004 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1981 2003  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2005 eval; 2004 start; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 2004 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1981 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2005 eval; 2004 start; OBD I/M (LDG 96+)  I/M PROGRAM : 3 2004 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2003  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2005 eval; 2000 start; GC (all HDG)  I/M PROGRAM : 4 2000 2050 1 TRC GC  I/M MODEL YEARS : 4 1981 2003  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2005 eval; 2000 start; GC (LDG 95-)  I/M PROGRAM : 5 2000 2050 1 TRC GC  I/M MODEL YEARS : 5 1981 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2005 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2003  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 31: 2007 Exhaust and Evaporative I/M setups for Harris County input to RATEADJ62**

<p>&gt; Exhaust I/M: 2007; 2500/IDLE (all HDG)  I/M PROGRAM : 1 1997 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1983 2005  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2007; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 1997 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1983 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2007; OBD I/M (LDG 96+)  I/M PROGRAM : 3 1997 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2005  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2007: GC (all HDG)  I/M PROGRAM : 4 1997 2050 1 TRC GC  I/M MODEL YEARS : 4 1983 2005  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2007: GC (LDG 95-)  I/M PROGRAM : 5 1997 2050 1 TRC GC  I/M MODEL YEARS : 5 1983 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2007: EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 1997 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2005  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 32: 2007 Exhaust and Evaporative I/M setups for HGA Urban Counties:  
Brazoria, Fort Bend, Galveston, Montgomery input to RATEADJ62**

<p>&gt; Exhaust I/M: 2007 eval; 2003 start; 2500/IDLE (all HDG)  I/M PROGRAM : 1 2003 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1983 2005  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p>
<p>&gt; Exhaust I/M: 2007 eval; 2003 start; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 2003 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1983 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p>
<p>&gt; Exhaust I/M: 2007 eval; 2003 start; OBD I/M (LDG 96+)  I/M PROGRAM : 3 2003 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2005  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p>
<p>I/M EFFECTIVENESS : 1 1 1</p>
<p>&gt; Evaporative I/M: 2007 eval; 2000 start; GC (all HDG)  I/M PROGRAM : 4 2000 2050 1 TRC GC  I/M MODEL YEARS : 4 1983 2005  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p>
<p>&gt; Evaporative I/M: 2007 eval; 2000 start; GC (LDG 95-)  I/M PROGRAM : 5 2000 2050 1 TRC GC  I/M MODEL YEARS : 5 1983 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p>
<p>&gt; Evaporative I/M: 2007 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2005  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>

**TABLE 33: 2007 Exhaust and Evaporative I/M setups for HGA Urban County Ratio  
Calculation to get May 1 start (actual Urban County start year is 2003) input to  
RATEADJ62**

<p>&gt; Exhaust I/M: 2007 eval; 2004 start; 2500/IDLE (all HDG)  I/M PROGRAM : 1 2004 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1983 2005  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2007 eval; 2004 start; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 2004 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1983 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2007 eval; 2004 start; OBD I/M (LDG 96+)  I/M PROGRAM : 3 2004 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2005  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2007 eval; 2000 start; GC (all HDG)  I/M PROGRAM : 4 2000 2050 1 TRC GC  I/M MODEL YEARS : 4 1983 2005  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2007 eval; 2000 start; GC (LDG 95-)  I/M PROGRAM : 5 2000 2050 1 TRC GC  I/M MODEL YEARS : 5 1983 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2007 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2005  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 34: 2010 Exhaust and Evaporative I/M setups for Harris County input to RATEADJ62**

> Exhaust I/M: 2010; 2500/IDLE (all HDG)	
I/M PROGRAM	: 1 1997 2050 1 TRC 2500/IDLE
I/M MODEL YEARS	: 1 1986 2008
I/M VEHICLES	: 1 11111 22222222 2
I/M STRINGENCY	: 1 20
I/M COMPLIANCE	: 1 96
I/M WAIVER RATES	: 1 3 3
> Exhaust I/M: 2010; ASM 2525/5015 PHASE-IN (LDG 95-)	
I/M PROGRAM	: 2 1997 2050 1 TRC ASM 2525/5015 PHASE-IN
I/M MODEL YEARS	: 2 1986 1995
I/M VEHICLES	: 2 22222 11111111 1
I/M STRINGENCY	: 2 20
I/M COMPLIANCE	: 2 96
I/M WAIVER RATES	: 2 3 3
> Exhaust I/M: 2010; OBD I/M (LDG 96+)	
I/M PROGRAM	: 3 1997 2050 1 TRC OBD I/M
I/M MODEL YEARS	: 3 1996 2008
I/M VEHICLES	: 3 22222 11111111 1
I/M STRINGENCY	: 3 20
I/M COMPLIANCE	: 3 96
I/M WAIVER RATES	: 3 3 3
I/M EFFECTIVENESS : 1 1 1	
> Evaporative I/M: 2010: GC (all HDG)	
I/M PROGRAM	: 4 1997 2050 1 TRC GC
I/M MODEL YEARS	: 4 1986 2008
I/M VEHICLES	: 4 11111 22222222 2
I/M COMPLIANCE	: 4 96
I/M WAIVER RATES	: 4 3 3
> Evaporative I/M: 2010: GC (LDG 95-)	
I/M PROGRAM	: 5 1997 2050 1 TRC GC
I/M MODEL YEARS	: 5 1986 1995
I/M VEHICLES	: 5 22222 11111111 1
I/M COMPLIANCE	: 5 96
I/M WAIVER RATES	: 5 3 3
> Evaporative I/M: 2010: EVAP OBD & GC (LDG 96+)	
I/M PROGRAM	: 6 1997 2050 1 TRC EVAP OBD & GC
I/M MODEL YEARS	: 6 1996 2008
I/M VEHICLES	: 6 22222 11111111 1
I/M COMPLIANCE	: 6 96
I/M WAIVER RATES	: 6 3 3

**TABLE 35: 2010 Exhaust and Evaporative I/M setups for HGA Urban County Group:  
Brazoria, Fort Bend, Galveston, Montgomery input to RATEADJ62**

<p>&gt; Exhaust I/M: 2010 eval; 2003 start; 2500/IDLE (all HDG)  I/M PROGRAM : 1 2003 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1986 2008  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2010 eval; 2003 start; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 2003 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1986 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2010 eval; 2003 start; OBD I/M (LDG 96+)  I/M PROGRAM : 3 2003 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2008  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2010 eval; 2000 start; GC (all HDG)  I/M PROGRAM : 4 2000 2050 1 TRC GC  I/M MODEL YEARS : 4 1986 2008  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2010 eval; 2000 start; GC (LDG 95-)  I/M PROGRAM : 5 2000 2050 1 TRC GC  I/M MODEL YEARS : 5 1986 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2010 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2008  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 36: 2010 Exhaust and Evaporative I/M setups for HGA Urban County Ratio  
Calculation to get May 1 start (actual Urban County start year is 2003) input to  
RATEADJ62**

<p>* 2010 Exhaust and Evaporative I/M setups for  * HGA Urban County Ratio Calculation to get May 1 start  * (actual Urban County start year is 2003)</p> <p>&gt; Exhaust I/M: 2010 eval; 2004 start; 2500/IDLE (all HDG)  I/M PROGRAM : 1 2004 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1986 2008  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2010 eval; 2004 start; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 2004 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1986 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2010 eval; 2004 start; OBD I/M (LDG 96+)  I/M PROGRAM : 3 2004 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2008  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2010 eval; 2000 start; GC (all HDG)  I/M PROGRAM : 4 2000 2050 1 TRC GC  I/M MODEL YEARS : 4 1986 2008  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2010 eval; 2000 start; GC (LDG 95-)  I/M PROGRAM : 5 2000 2050 1 TRC GC  I/M MODEL YEARS : 5 1986 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2010 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2008  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 37: 2015 Exhaust and Evaporative I/M setups for Harris County input to RATEADJ62**

* 2015 Exhaust and Evaporative I/M setups for Harris County	
> Exhaust I/M: 2015; 2500/IDLE (all HDG)	
I/M PROGRAM	: 1 1997 2050 1 TRC 2500/IDLE
I/M MODEL YEARS	: 1 1991 2013
I/M VEHICLES	: 1 11111 22222222 2
I/M STRINGENCY	: 1 20
I/M COMPLIANCE	: 1 96
I/M WAIVER RATES	: 1 3 3
> Exhaust I/M: 2015; ASM 2525/5015 PHASE-IN (LDG 95-)	
I/M PROGRAM	: 2 1997 2050 1 TRC ASM 2525/5015 PHASE-IN
I/M MODEL YEARS	: 2 1991 1995
I/M VEHICLES	: 2 22222 11111111 1
I/M STRINGENCY	: 2 20
I/M COMPLIANCE	: 2 96
I/M WAIVER RATES	: 2 3 3
> Exhaust I/M: 2015; OBD I/M (LDG 96+)	
I/M PROGRAM	: 3 1997 2050 1 TRC OBD I/M
I/M MODEL YEARS	: 3 1996 2013
I/M VEHICLES	: 3 22222 11111111 1
I/M STRINGENCY	: 3 20
I/M COMPLIANCE	: 3 96
I/M WAIVER RATES	: 3 3 3
I/M EFFECTIVENESS : 1 1 1	
> Evaporative I/M: 2015: GC (all HDG)	
I/M PROGRAM	: 4 1997 2050 1 TRC GC
I/M MODEL YEARS	: 4 1991 2013
I/M VEHICLES	: 4 11111 22222222 2
I/M COMPLIANCE	: 4 96
I/M WAIVER RATES	: 4 3 3
> Evaporative I/M: 2015: GC (LDG 95-)	
I/M PROGRAM	: 5 1997 2050 1 TRC GC
I/M MODEL YEARS	: 5 1991 1995
I/M VEHICLES	: 5 22222 11111111 1
I/M COMPLIANCE	: 5 96
I/M WAIVER RATES	: 5 3 3
> Evaporative I/M: 2015: EVAP OBD & GC (LDG 96+)	
I/M PROGRAM	: 6 1997 2050 1 TRC EVAP OBD & GC
I/M MODEL YEARS	: 6 1996 2013
I/M VEHICLES	: 6 22222 11111111 1
I/M COMPLIANCE	: 6 96
I/M WAIVER RATES	: 6 3 3

**TABLE 38: 2015 Exhaust and Evaporative I/M setups for HGA Urban County Group: Brazoria, Fort Bend, Galveston, Montgomery input to RATEADJ62**

<p>* 2015 Exhaust and Evaporative I/M setups for  * HGA Urban County Group: Brazoria, Fort Bend, Galveston, Montgomery</p> <p>&gt; Exhaust I/M: 2015 eval; 2003 start; 2500/IDLE (all HDG)  I/M PROGRAM : 1 2003 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 1991 2013  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2015 eval; 2003 start; ASM 2525/5015 PHASE-IN (LDG 95-)  I/M PROGRAM : 2 2003 2050 1 TRC ASM 2525/5015 PHASE-IN  I/M MODEL YEARS : 2 1991 1995  I/M VEHICLES : 2 22222 11111111 1  I/M STRINGENCY : 2 20  I/M COMPLIANCE : 2 96  I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2015 eval; 2003 start; OBD I/M (LDG 96+)  I/M PROGRAM : 3 2003 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2013  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2015 eval; 2000 start; GC (all HDG)  I/M PROGRAM : 4 2000 2050 1 TRC GC  I/M MODEL YEARS : 4 1991 2013  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2015 eval; 2000 start; GC (LDG 95-)  I/M PROGRAM : 5 2000 2050 1 TRC GC  I/M MODEL YEARS : 5 1991 1995  I/M VEHICLES : 5 22222 11111111 1  I/M COMPLIANCE : 5 96  I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2015 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2013  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 39: 2015 Exhaust and Evaporative I/M setups for HGA Urban County Ratio  
Calculation to get May 1 start (actual Urban County start year is 2003) input to  
RATEADJ62**

<p>* 2015 Exhaust and Evaporative I/M setups for          * HGA Urban County Group: Brazoria, Fort Bend, Galveston, Montgomery          * (actual Urban County start year is 2003)</p> <p>&gt; Exhaust I/M: 2015 eval; 2004 start; 2500/IDLE (all HDG)          I/M PROGRAM : 1 2004 2050 1 TRC 2500/IDLE          I/M MODEL YEARS : 1 1991 2013          I/M VEHICLES : 1 11111 22222222 2          I/M STRINGENCY : 1 20          I/M COMPLIANCE : 1 96          I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2015 eval; 2004 start; ASM 2525/5015 PHASE-IN (LDG 95-)          I/M PROGRAM : 2 2004 2050 1 TRC ASM 2525/5015 PHASE-IN          I/M MODEL YEARS : 2 1991 1995          I/M VEHICLES : 2 22222 11111111 1          I/M STRINGENCY : 2 20          I/M COMPLIANCE : 2 96          I/M WAIVER RATES : 2 3 3</p> <p>&gt; Exhaust I/M: 2015 eval; 2004 start; OBD I/M (LDG 96+)          I/M PROGRAM : 3 2004 2050 1 TRC OBD I/M          I/M MODEL YEARS : 3 1996 2013          I/M VEHICLES : 3 22222 11111111 1          I/M STRINGENCY : 3 20          I/M COMPLIANCE : 3 96          I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2015 eval; 2000 start; GC (all HDG)          I/M PROGRAM : 4 2000 2050 1 TRC GC          I/M MODEL YEARS : 4 1991 2013          I/M VEHICLES : 4 11111 22222222 2          I/M COMPLIANCE : 4 96          I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2015 eval; 2000 start; GC (LDG 95-)          I/M PROGRAM : 5 2000 2050 1 TRC GC          I/M MODEL YEARS : 5 1991 1995          I/M VEHICLES : 5 22222 11111111 1          I/M COMPLIANCE : 5 96          I/M WAIVER RATES : 5 3 3</p> <p>&gt; Evaporative I/M: 2015 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)          I/M PROGRAM : 6 2000 2050 1 TRC EVAP OBD &amp; GC          I/M MODEL YEARS : 6 1996 2013          I/M VEHICLES : 6 22222 11111111 1          I/M COMPLIANCE : 6 96          I/M WAIVER RATES : 6 3 3</p>
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**Table 40: 2025 Exhaust and Evaporative I/M setups for Harris County input to RATEADJ62**

<p>* 2025 Exhaust and Evaporative I/M setups for Harris County</p> <p>&gt; Exhaust I/M: 2025; 2500/IDLE (all HDG)  I/M PROGRAM : 1 1997 2050 1 TRC 2500/IDLE  I/M MODEL YEARS : 1 2001 2023  I/M VEHICLES : 1 11111 22222222 2  I/M STRINGENCY : 1 20  I/M COMPLIANCE : 1 96  I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2025; OBD I/M (LDG 96+)  I/M PROGRAM : 3 1997 2050 1 TRC OBD I/M  I/M MODEL YEARS : 3 1996 2023  I/M VEHICLES : 3 22222 11111111 1  I/M STRINGENCY : 3 20  I/M COMPLIANCE : 3 96  I/M WAIVER RATES : 3 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2025: GC (all HDG)  I/M PROGRAM : 4 1997 2050 1 TRC GC  I/M MODEL YEARS : 4 2001 2023  I/M VEHICLES : 4 11111 22222222 2  I/M COMPLIANCE : 4 96  I/M WAIVER RATES : 4 3 3</p> <p>&gt; Evaporative I/M: 2025: EVAP OBD &amp; GC (LDG 96+)  I/M PROGRAM : 6 1997 2050 1 TRC EVAP OBD &amp; GC  I/M MODEL YEARS : 6 1996 2023  I/M VEHICLES : 6 22222 11111111 1  I/M COMPLIANCE : 6 96  I/M WAIVER RATES : 6 3 3</p>
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**TABLE 41: 2025 Exhaust and Evaporative I/M setups for HGA Urban County Group: Brazoria, Fort Bend, Galveston, Montgomery input to RATEADJ62**

<p>* 2025 Exhaust and Evaporative I/M setups for          * HGA Urban County Group: Brazoria, Fort Bend, Galveston, Montgomery</p> <p>&gt; Exhaust I/M: 2025 eval; 2003 start; 2500/IDLE (all HDG)          I/M PROGRAM : 1 2003 2050 1 TRC 2500/IDLE          I/M MODEL YEARS : 1 2001 2023          I/M VEHICLES : 1 11111 22222222 2          I/M STRINGENCY : 1 20          I/M COMPLIANCE : 1 96          I/M WAIVER RATES : 1 3 3</p> <p>&gt; Exhaust I/M: 2025 eval; 2003 start; OBD I/M (LDG 96+)          I/M PROGRAM : 2 2003 2050 1 TRC OBD I/M          I/M MODEL YEARS : 2 2001 2023          I/M VEHICLES : 2 22222 11111111 1          I/M STRINGENCY : 2 20          I/M COMPLIANCE : 2 96          I/M WAIVER RATES : 2 3 3</p> <p>I/M EFFECTIVENESS : 1 1 1</p> <p>&gt; Evaporative I/M: 2025 eval; 2000 start; GC (all HDG)          I/M PROGRAM : 3 2000 2050 1 TRC GC          I/M MODEL YEARS : 3 2001 2023          I/M VEHICLES : 3 11111 22222222 2          I/M COMPLIANCE : 3 96          I/M WAIVER RATES : 3 3 3</p> <p>&gt; Evaporative I/M: 2025 eval; 2000 start; EVAP OBD &amp; GC (LDG 96+)          I/M PROGRAM : 4 2000 2050 1 TRC EVAP OBD &amp; GC          I/M MODEL YEARS : 4 1996 2023          I/M VEHICLES : 4 22222 11111111 1          I/M COMPLIANCE : 4 96          I/M WAIVER RATES : 4 3 3</p>
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**TABLE 42: 2025 Exhaust and Evaporative I/M setups for HGA Urban County Ratio  
Calculation to get May 1 start (actual Urban County start year is 2003) input to  
RATEADJ62**

\* 2025 Exhaust and Evaporative I/M setups for  
 \* HGA Urban County Group: Brazoria, Fort Bend, Galveston, Montgomery  
 \* (actual Urban County start year is 2003)

> Exhaust I/M: 2025 eval; 2004 start; 2500/IDLE (all HDG)

I/M PROGRAM : 1 2004 2050 1 TRC 2500/IDLE  
 I/M MODEL YEARS : 1 2001 2023  
 I/M VEHICLES : 1 11111 22222222 2  
 I/M STRINGENCY : 1 20  
 I/M COMPLIANCE : 1 96  
 I/M WAIVER RATES : 1 3 3

> Exhaust I/M: 2025 eval; 2004 start; OBD I/M (LDG 96+)

I/M PROGRAM : 2 2004 2050 1 TRC OBD I/M  
 I/M MODEL YEARS : 2 2001 2023  
 I/M VEHICLES : 2 22222 11111111 1  
 I/M STRINGENCY : 2 20  
 I/M COMPLIANCE : 2 96  
 I/M WAIVER RATES : 2 3 3

I/M EFFECTIVENESS : 1 1 1

> Evaporative I/M: 2025 eval; 2000 start; GC (all HDG)

I/M PROGRAM : 3 2000 2050 1 TRC GC  
 I/M MODEL YEARS : 3 2001 2023  
 I/M VEHICLES : 3 11111 22222222 2  
 I/M COMPLIANCE : 3 96  
 I/M WAIVER RATES : 3 3 3

> Evaporative I/M: 2025 eval; 2000 start; EVAP OBD & GC (LDG 96+)

I/M PROGRAM : 4 2000 2050 1 TRC EVAP OBD & GC  
 I/M MODEL YEARS : 4 1996 2023  
 I/M VEHICLES : 4 22222 11111111 1  
 I/M COMPLIANCE : 4 96  
 I/M WAIVER RATES : 4 3 3

**TABLE 43: HGA Counties ATP: 2005-ROP  
MOBILE6 Command and Data Parameter Values input to RATEADJ62**

**MOBILE6 Inputs:** The command and data parameter values for the two ATP sub-programs, ATP1 and ATP2, respectively , are:

**Harris County:**

ANTI-TAMP PROG :  
84 81 83 22222 22222222 2 11 096. 21112222

ANTI-TAMP PROG :  
84 84 03 22222 22222222 2 11 096. 22112222

**Urban Counties:**

ANTI-TAMP PROG :  
03 81 83 22222 22222222 2 11 096. 21112222

ANTI-TAMP PROG :  
03 84 03 22222 22222222 2 11 096. 22112222

**Rural Counties:** no ATP programs.

**Data parameter value definitions:**

- the first number is the last two digits of the program start year.
- the second number is the last two digits of earliest model year covered\* by the program. The program is designed to cover 24-year-old vehicles and newer.
- the third number is the final model year covered by the program.\* Vehicles less than two years old are exempt from the program.
- the next 14 values are on/off toggles to identify the vehicle types covered (1 = no, 2 = yes). The vehicle are in input string order are: LDGV, LDGT1, LDGT2, LDGT3, LDGT4; and HDGV2B, HDGV3, HDGV4, HDGV5, HDGV6, HDGV7, HDGV8A, HDGV8B; and GAS BUS.
- the next entry must be one (EPA no longer supports additional credit for test only program). A “2” will cause ATP credit to be discontinued.
- the next data parameter is the program inspection frequency (1 = annual, 2 = biennial).
- the next number is the program compliance rate in percent.
- the last eight data parameters in the input string are on/off toggles (1 = no, 2 = yes) indicating which checks are performed, in the following order: 1) air pump disablement; 2) catalyst removal; 3) fuel inlet restrictor removal; 4) tailpipe lead deposit; 5) exhaust gas recirculation disablement; 6) evaporative system disablement; 7) positive crankcase ventilation system disablement; and 8) missing gas cap.

\*Note: Vehicles less than two years old and 25 years old and older are exempt from inspection.

**TABLE 44: HGA Counties ATP: 2007, 2010, 2015, 2025  
MOBILE6 Command and Data Parameter Values input to RATEADJ62**

<p><b>2007-ATP inputs:</b>  <b>Harris County:</b>  ATP1: 84 83 83 22222 22222222 2 11 096. 21112222  ATP2: 84 84 05 22222 22222222 2 11 096. 22112222  <b>Urban Counties:</b>  ATP1: 03 83 83 22222 22222222 2 11 096. 21112222  ATP2: 03 84 05 22222 22222222 2 11 096. 22112222</p>
<p><b>2010-ATP inputs:</b>  <b>Harris County:</b>  ATP2: 84 86 08 22222 22222222 2 11 096. 22112222  <b>Urban Counties:</b>  ATP2: 03 86 08 22222 22222222 2 11 096. 22112222</p>
<p><b>2015-ATP inputs:</b>  <b>Harris County:</b>  ATP2: 84 91 13 22222 22222222 2 11 096. 22112222  <b>Urban Counties:</b>  ATP2: 03 91 13 22222 22222222 2 11 096. 22112222</p>
<p><b>2025-ATP inputs:</b>  <b>Harris County:</b>  ATP2: 84 01 23 22222 22222222 2 11 096. 22112222  <b>Urban Counties:</b>  ATP2: 03 01 23 22222 22222222 2 11 096. 22112222</p>

**TABLE 45: MOBILE6 Fuels**

<b>Command</b>	<b>Function/Description</b>	<b>Input Parameter Source/Value</b>
FUEL PROGRAM	Allows specification of one of four options: 1) Conventional Gasoline East Tier2 sulfur phase-in schedule (includes Texas); 2) RFG; 3) Conventional Gasoline West Tier2 sulfur geographical phase-in area schedule; or 4) Sulfur content for gasoline after 1999.	Option 2: Applied to all counties for all years.
SULFUR CONTENT	Allows alternate sulfur content for conventional gasoline through calendar year 1999.	NOT APPLIED. (MOBILE6 default assumed.)
DIESEL SULFUR	Allows alternate diesel sulfur levels for all calendar years, for PARTICULATES. No affect on HC, CO, NOx, air toxics (except if calculated as ratio to PM).	NOT APPLIED.
OXYGENATED FUELS	Allows modeling of oxygenated gasoline effects on exhaust for all gasoline-fueled vehicle types. Not for use with AIR TOXICS command.	NOT APPLIED.
FUEL RVP	Allows user to specify fuel RVP for area being modeled (required to run model).	MOBILE6 default RFG is applied via FUEL PROGRAM command. The default RFG RVP is 6.8 psi.
SEASON	Identifies effective season for RFG calculation regardless of month modeled.	NOT APPLIED.
GAS AROMATIC%	Only when AIR TOXICS command is used.	NOT APPLIED.
GAS OLEFIN%	Only when AIR TOXICS command is used.	NOT APPLIED.
GAS BENZENE%	Only when AIR TOXICS command is used.	NOT APPLIED.
E200	Only when AIR TOXICS command is used.	NOT APPLIED.
E300	Only when AIR TOXICS command is used.	NOT APPLIED.
OXYGENATE	Only when AIR TOXICS command is used.	NOT APPLIED.
RVP OXY WAIVER	Only when AIR TOXICS command is used.	NOT APPLIED.

**TABLE 46: MOBILE6 Alternative Emissions Regulations and Control Measures**

<b>Command</b>	<b>Function/Description</b>	<b>Input Parameter Source/Value</b>
NO CLEAN AIR ACT	Models vehicle emissions as if the Federal Clean Air Act Amendments of 1990 had not been implemented.	NOT APPLIED for control strategy analyses.
<u>HDDV NOx Off Cycle Emissions Effects:</u>		
NO DEFEAT DEVICE	Turns off effects of HDD vehicle NOx offcycle emissions effects (defeat device emissions).	NOT APPLIED.
NO NOX PULL AHEAD	Turns off HDD NOx emissions reduction effects of pull- ahead program.	NOT APPLIED.
NO REBUILD	Turns off HDD NOx emissions reduction effects of rebuild program.	NOT APPLIED.
REBUILD EFFECTS	Allows user change rebuild program effectiveness rate.	Applied. MOBILE6 default (0.90) was assumed for affected analyses.
<u>Tier 2 Emission Standards and Fuel Requirements:</u>	Allow the overriding of the default Tier 2 emissions standards and fuel requirements settings.	
NO TIER2	Disables Tier 2 requirements.	
T2 EXH PHASE-IN	Allows alternate Tier 2 exhaust standard phase-in schedules.	NOT APPLIED.
T2 EVAP PHASE-IN	Allows alternate Tier 2 evaporative standard phase-in schedules.	
T2 CERT	Allows user to specify alternate Tier 2 50,000-mile certification standards.	
94+ LDG IMPLEMENTATION	Allows use of alternate 1994 and later fleet penetration fractions for LDGVs under the Tier 1, NLEV (or California LEV 1), and Tier 2 emissions standard programs.	NOT APPLIED.
NO 2007 HDDV RULE	Disables 2007 HDV emissions standards.	NOT APPLIED.

**TABLE 47: Composite Vehicle Classes and Data Sources for Vehicle Age Distributions (REG DIST Command)**

<b>Number</b>	<b>Abbreviation</b>	<b>Description</b>	<b>Source of Distributions</b>
1	LDV	Light-Duty Vehicles	TxDOT July 2004 HGA County Registrations
2	LDT1	Light-Duty Trucks 1	TxDOT July 2004 HGA County Registrations
3	LDT2	Light-Duty Trucks 2	TxDOT July 2004 HGA County Registrations
4	LDT3	Light-Duty Trucks 3	TxDOT July 2004 HGA County Registrations
5	LDT4	Light-Duty Trucks 4	TxDOT July 2004 HGA County Registrations
6	HDV2B	Class 2b Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
7	HDV3	Class 3 Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
8	HDV4	Class 4 Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
9	HDV5	Class 5 Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
10	HDV6	Class 6 Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
11	HDV7	Class 7 Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
12	HDV8A	Class 8a Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
13	HDV8B	Class 8b Heavy-Duty Vehicles	TxDOT July 2004 HGA County Registrations
14	HDBS	School Buses	MOBILE6 Defaults
15	HDBT	Transit and Urban Buses	MOBILE6 Defaults
16	MC	Motorcycles	TxDOT July 2004 HGA County Registrations

These 2004 registrations have been used for 2005, 2007, 2010, 2015 and 2025 future years.

**TABLE 48: Source of Diesel Fractions for Composite Vehicle Types (DIESEL FRACTIONS Command)**

<b>Number<sup>1</sup></b>	<b>Abbreviation</b>	<b>Description</b>	<b>Source of Fractions</b>
1	LDV	Light-Duty Vehicles	EPA MOBILE6 Evaluation Year Default
2	LDT1	Light-Duty Trucks 1	EPA MOBILE6 Evaluation Year Default
3	LDT2	Light-Duty Trucks 2	EPA MOBILE6 Evaluation Year Default
4	LDT3	Light-Duty Trucks 3	EPA MOBILE6 Evaluation Year Default
5	LDT4	Light-Duty Trucks 4	EPA MOBILE6 Evaluation Year Default
6	HDV2B	Class 2b Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
7	HDV3	Class 3 Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
8	HDV4	Class 4 Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
9	HDV5	Class 5 Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
10	HDV6	Class 6 Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
11	HDV7	Class 7 Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
12	HDV8A	Class 8a Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
13	HDV8B	Class 8b Heavy-Duty Vehicles	TxDOT July 2004 HGA Region Registrations for all years.
14	HDBS	School Buses	TxDOT July 2004 HGA Region Registrations for all years.

MOBILE6 input sequence

**TABLE 49: H-GAC TDM Functional Classification Groupings for Application of VMT  
Mix and MOBILE6 Drive Cycle Emissions Factors**



**TABLE 50: HGA 2005 Weekday VMT Mix by Time Period and Roadway Functional Classification Group input to IMPSUM62**

Obs	TP	FC	P_LDGV	P_LDGT1	P_LDGT2	P_LDGT3	P_LDGT4	P_HDGV2b	P_HDGV_3	P_HDGV_4	P_HDGV_5
1	AM_Peak	Art	0.5997858	0.0570941	0.1900653	0.0486995	0.0223959	0.0070223	0.0026451	0.0011816	0.0004431
2	AM_Peak	Col	0.512323	0.0650443	0.216531	0.0599922	0.0275892	0.0103887	0.0039132	0.001748	0.0006555
3	AM_Peak	Fway	0.6350107	0.0534614	0.1779718	0.0437406	0.0201154	0.0060579	0.0022818	0.0010193	0.0003822
4	Mid_Day	Art	0.5641972	0.0540964	0.180086	0.046175	0.021235	0.0114971	0.0043307	0.0019345	0.0007254
5	Mid_Day	Col	0.4943759	0.0624866	0.2080168	0.0576745	0.0265234	0.0146856	0.0055317	0.002471	0.0009266
6	Mid_Day	Fway	0.6035871	0.0508446	0.1692605	0.0416531	0.0191554	0.0099159	0.0037351	0.0016685	0.0006257
7	Ovr_Nite	Art	0.6008756	0.0576465	0.1919039	0.0490796	0.0225707	0.0049616	0.0018689	0.0008348	0.0003131
8	Ovr_Nite	Col	0.532376	0.0681028	0.226713	0.0627377	0.0288518	0.0075658	0.0028498	0.001273	0.0004774
9	Ovr_Nite	Fway	0.6229381	0.0523523	0.1742796	0.0428252	0.0196945	0.0046875	0.0017657	0.0007887	0.0002958
10	PM_Peak	Art	0.6019339	0.0577992	0.1924125	0.0493479	0.0226941	0.0068572	0.0025829	0.0011538	0.0004327
11	PM_Peak	Col	0.5260616	0.0670663	0.2232624	0.0618162	0.028428	0.0087327	0.0032894	0.0014694	0.000551
12	PM_Peak	Fway	0.6358283	0.0536862	0.1787204	0.0440693	0.0202666	0.0057848	0.002179	0.0009733	0.000365
Obs	P_HDGV_6	P_HDGV_7	P_HDGV8a	P_HDGV8b	P_LDDV	P_LDDT12	P_HDDV2b	P_HDDV_3	P_HDDV_4	P_HDDV_5	
1	0.0012353	0.0004297	0.0004162	0.0000537	0.000805	0.0001403	0.0108002	0.0042597	0.0025491	0.0016771	
2	0.0018275	0.0006356	0.0006158	0.0000795	0.0006878	0.0001599	0.0166986	0.0065861	0.0039413	0.0025929	
3	0.0010656	0.0003707	0.0003591	0.0000463	0.0008522	0.0001314	0.0082526	0.0032549	0.0019478	0.0012815	
4	0.0020224	0.0007035	0.0006815	0.0000879	0.0007573	0.000133	0.017481	0.0068947	0.0041259	0.0027144	
5	0.0025833	0.0008985	0.0008705	0.0001123	0.0006638	0.0001536	0.0237474	0.0093662	0.005605	0.0036875	
6	0.0017443	0.0006067	0.0005878	0.0000758	0.0008101	0.000125	0.0134429	0.005302	0.0031729	0.0020874	
7	0.0008728	0.0003036	0.0002941	0.0000379	0.0008064	0.0001417	0.0076652	0.0030232	0.0018092	0.0011903	
8	0.0013309	0.0004629	0.0004484	0.0000579	0.0007147	0.0001674	0.0123572	0.0048738	0.0029166	0.0019188	
9	0.0008246	0.0002868	0.0002778	0.0000359	0.000836	0.0001287	0.0064051	0.0025262	0.0015118	0.0009946	
10	0.0012062	0.0004196	0.0004064	0.0000524	0.0008079	0.0001421	0.0105147	0.0041471	0.0024817	0.0016327	
11	0.0015361	0.0005343	0.0005176	0.0000668	0.0007062	0.0001648	0.0144316	0.005692	0.0034062	0.0022409	
12	0.0010176	0.0003539	0.0003429	0.0000442	0.0008533	0.0001319	0.0078742	0.0031057	0.0018585	0.0012227	

Obs	P_HDDV_6	P_HDDV_7	P_HDDV8a	P_HDDV8b	P_MC	P_HDGB	P_HDDBT	P_HDDBS	P_LDDT34
1	0.0054337	0.0030522	0.0057691	0.0269742	0.001	0.000561	0.0015711	0.0027238	0.0012159
2	0.0084011	0.0047192	0.0089197	0.0344003	0.001	0.0010588	0.0029652	0.0051407	0.0013852
3	0.0041519	0.0023323	0.0044082	0.0251984	0.001	0.0004815	0.0013484	0.0023376	0.0011385
4	0.0087948	0.0049403	0.0093377	0.0528904	0.001	0.0002317	0.000649	0.0011251	0.001152
5	0.0119474	0.0067112	0.0126849	0.0427769	0.001	0.0003661	0.0010252	0.0017774	0.0013307
6	0.0067632	0.0037991	0.0071807	0.0493417	0.001	0.0002809	0.0007868	0.0013641	0.0010828
7	0.0038564	0.0021663	0.0040945	0.0396809	0.001	0.0002051	0.0005744	0.0009957	0.0012276
8	0.006217	0.0034923	0.0066007	0.0230403	0.001	0.0002315	0.0006482	0.0011238	0.0014503
9	0.0032224	0.0018101	0.0034213	0.0532013	0.001	0.0003206	0.0008979	0.0015567	0.0011149
10	0.00529	0.0029715	0.0056165	0.0234749	0.001	0.0003918	0.0010972	0.0019021	0.0012309
11	0.0072606	0.0040785	0.0077088	0.0200883	0.001	0.0009776	0.0027379	0.0047466	0.0014282
12	0.0039616	0.0022253	0.0042061	0.0252993	0.001	0.0004028	0.001128	0.0019557	0.0011433

**TABLE 51: HGA 2007 Weekday VMT Mix by Time Period and Roadway Functional Classification Group input to IMPSUM62**

Obs	TP	FC	P_LDGV	P_LDGT1	P_LDGT2	P_LDGT3	P_LDGT4	P_HDGV2b	P_HDGV_3	P_HDGV_4	P_HDGV_5
1	AM_Peak	Art	0.5999884	0.0571094	0.1901133	0.0486997	0.0223957	0.0070223	0.0026451	0.0011816	0.0004431
2	AM_Peak	Col	0.5124961	0.0650617	0.2165857	0.0599924	0.027589	0.0103887	0.0039132	0.001748	0.0006555
3	AM_Peak	Fway	0.6352252	0.0534757	0.1780168	0.0437407	0.0201152	0.0060579	0.0022818	0.0010193	0.0003822
4	Mid_Day	Art	0.5643878	0.0541109	0.1801314	0.0461752	0.0212348	0.0114971	0.0043307	0.0019345	0.0007254
5	Mid_Day	Col	0.494543	0.0625034	0.2080693	0.0576748	0.0265231	0.0146856	0.0055317	0.002471	0.0009266
6	Mid_Day	Fway	0.603791	0.0508582	0.1693033	0.0416533	0.0191553	0.0099159	0.0037351	0.0016685	0.0006257
7	Ovr_Nite	Art	0.6010786	0.0576619	0.1919524	0.0490798	0.0225705	0.0049616	0.0018689	0.0008348	0.0003131
8	Ovr_Nite	Col	0.5325559	0.0681211	0.2267702	0.062738	0.0288516	0.0075658	0.0028498	0.001273	0.0004774
9	Ovr_Nite	Fway	0.6231485	0.0523663	0.1743236	0.0428254	0.0196943	0.0046875	0.0017657	0.0007887	0.0002958
10	PM_Peak	Art	0.6021372	0.0578147	0.1924611	0.0493481	0.0226939	0.0068572	0.0025829	0.0011538	0.0004327
11	PM_Peak	Col	0.5262393	0.0670843	0.2233188	0.0618164	0.0284278	0.0087327	0.0032894	0.0014694	0.000551
12	PM_Peak	Fway	0.6360431	0.0537006	0.1787655	0.0440695	0.0202664	0.0057848	0.002179	0.0009733	0.000365

  

Obs	P_HDGV_6	P_HDGV_7	P_HDGV8a	P_HDGV8b	P_LDDV	P_LDDT12	P_HDDV2b	P_HDDV_3	P_HDDV_4	P_HDDV_5
1	0.0012353	0.0004297	0.0004162	0.0000537	0.0006024	0.0000435	0.0108002	0.0042597	0.0025491	0.0016771
2	0.0018275	0.0006356	0.0006158	0.0000795	0.0005147	0.0000496	0.0166986	0.0065861	0.0039413	0.0025929
3	0.0010656	0.0003707	0.0003591	0.0000463	0.0006377	0.0000408	0.0082526	0.0032549	0.0019478	0.0012815
4	0.0020224	0.0007035	0.0006815	0.0000879	0.0005667	0.0000413	0.017481	0.0068947	0.0041259	0.0027144
5	0.0025833	0.0008985	0.0008705	0.0001123	0.0004967	0.0000477	0.0237474	0.0093662	0.005605	0.0036875
6	0.0017443	0.0006067	0.0005878	0.0000758	0.0006062	0.0000388	0.0134429	0.005302	0.0031729	0.0020874
7	0.0008728	0.0003036	0.0002941	0.0000379	0.0006035	0.000044	0.0076652	0.0030232	0.0018092	0.0011903
8	0.0013309	0.0004629	0.0004484	0.0000579	0.0005348	0.0000519	0.0123572	0.0048738	0.0029166	0.0019188
9	0.0008246	0.0002868	0.0002778	0.0000359	0.0006256	0.0000399	0.0064051	0.0025262	0.0015118	0.0009946
10	0.0012062	0.0004196	0.0004064	0.0000524	0.0006045	0.0000441	0.0105147	0.0041471	0.0024817	0.0016327
11	0.0015361	0.0005343	0.0005176	0.0000668	0.0005285	0.0000511	0.0144316	0.005692	0.0034062	0.0022409
12	0.0010176	0.0003539	0.0003429	0.0000442	0.0006385	0.0000409	0.0078742	0.0031057	0.0018585	0.0012227

Obs	P_HDDV_6	P_HDDV_7	P_HDDV8a	P_HDDV8b	P_MC	P_HDGB	P_HDDBT	P_HDDBS	P_LDDT34
1	0.0054337	0.0030522	0.0057691	0.0269742	0.001	0.0004523	0.0015729	0.0028308	0.0012494
2	0.0084011	0.0047192	0.0089197	0.0344003	0.001	0.0008536	0.0029685	0.0053425	0.0014233
3	0.0041519	0.0023323	0.0044082	0.0251984	0.001	0.0003882	0.0013499	0.0024294	0.0011699
4	0.0087948	0.0049403	0.0093377	0.0528904	0.001	0.0001868	0.0006497	0.0011693	0.0011838
5	0.0119474	0.0067112	0.0126849	0.0427769	0.001	0.0002951	0.0010264	0.0018472	0.0013674
6	0.0067632	0.0037991	0.0071807	0.0493417	0.001	0.0002265	0.0007877	0.0014176	0.0011126
7	0.0038564	0.0021663	0.0040945	0.0396809	0.001	0.0001653	0.000575	0.0010348	0.0012614
8	0.006217	0.0034923	0.0066007	0.0230403	0.001	0.0001866	0.000649	0.0011679	0.0014903
9	0.0032224	0.0018101	0.0034213	0.0532013	0.001	0.0002585	0.0008989	0.0016178	0.0011456
10	0.00529	0.0029715	0.0056165	0.0234749	0.001	0.0003158	0.0010984	0.0019768	0.0012648
11	0.0072606	0.0040785	0.0077088	0.0200883	0.001	0.0007882	0.002741	0.004933	0.0014676
12	0.0039616	0.0022253	0.0042061	0.0252993	0.001	0.0003247	0.0011293	0.0020325	0.0011748

**TABLE 52: HGA 2010 Weekday VMT Mix by Time Period and Roadway Functional Classification Group input to IMPSUM62**

Obs	TP	FC	P_LDGV	P_LDGT1	P_LDGT2	P_LDGT 3	P_LDGT4	P_HDGV2b	P_HDGV_3	P_HDGV_4	P_HDGV_5
1	AM_Peak	Art	0.6000559	0.0571203	0.1901524	0.0487006	0.0223948	0.0070223	0.0026451	0.0011816	0.0004431
2	AM_Peak	Col	0.5125538	0.0650741	0.2166304	0.0599935	0.0275878	0.0103887	0.0039132	0.001748	0.0006555
3	AM_Peak	Fway	0.6352967	0.0534859	0.1780535	0.0437415	0.0201144	0.0060579	0.0022818	0.0010193	0.0003822
4	Mid_Day	Art	0.5644513	0.0541212	0.1801686	0.0461761	0.0212339	0.0114971	0.0043307	0.0019345	0.0007254
5	Mid_Day	Col	0.4945987	0.0625153	0.2081122	0.0576758	0.0265221	0.0146856	0.0055317	0.002471	0.0009266
6	Mid_Day	Fway	0.6038589	0.0508678	0.1693381	0.0416541	0.0191545	0.0099159	0.0037351	0.0016685	0.0006257
7	Ovr_Nite	Art	0.6011462	0.0576729	0.1919919	0.0490807	0.0225696	0.0049616	0.0018689	0.0008348	0.0003131
8	Ovr_Nite	Col	0.5326158	0.068134	0.226817	0.0627392	0.0288504	0.0075658	0.0028498	0.001273	0.0004774
9	Ovr_Nite	Fway	0.6232186	0.0523762	0.1743596	0.0428262	0.0196935	0.0046875	0.0017657	0.0007887	0.0002958
10	PM_Peak	Art	0.6022049	0.0578257	0.1925008	0.0493491	0.022693	0.0068572	0.0025829	0.0011538	0.0004327
11	PM_Peak	Col	0.5262985	0.067097	0.2233648	0.0618176	0.0284266	0.0087327	0.0032894	0.0014694	0.000551
12	PM_Peak	Fway	0.6361146	0.0537108	0.1788024	0.0440703	0.0202656	0.0057848	0.002179	0.0009733	0.000365

Obs	P_HDGV_6	P_HDGV_7	P_HDGV8a	P_HDGV8b	P_LDDV	P_LDDT12	P_HDDV2b	P_HDDV_3	P_HDDV_4	P_HDDV_5
1	0.0012353	0.0004297	0.0004162	0.0000537	0.0005349	0.0000055	0.0108002	0.0042597	0.0025491	0.0016771
2	0.0018275	0.0006356	0.0006158	0.0000795	0.000457	0.0000063	0.0166986	0.0065861	0.0039413	0.0025929
3	0.0010656	0.0003707	0.0003591	0.0000463	0.0005662	0.0000052	0.0082526	0.0032549	0.0019478	0.0012815
4	0.0020224	0.0007035	0.0006815	0.0000879	0.0005032	0.0000052	0.017481	0.0068947	0.0041259	0.0027144
5	0.0025833	0.0008985	0.0008705	0.0001123	0.000441	0.0000061	0.0237474	0.0093662	0.005605	0.0036875
6	0.0017443	0.0006067	0.0005878	0.0000758	0.0005383	0.0000049	0.0134429	0.005302	0.0031729	0.0020874
7	0.0008728	0.0003036	0.0002941	0.0000379	0.0005358	0.0000056	0.0076652	0.0030232	0.0018092	0.0011903
8	0.0013309	0.0004629	0.0004484	0.0000579	0.0004749	0.0000066	0.0123572	0.0048738	0.0029166	0.0019188
9	0.0008246	0.0002868	0.0002778	0.0000359	0.0005555	0.0000051	0.0064051	0.0025262	0.0015118	0.0009946
10	0.0012062	0.0004196	0.0004064	0.0000524	0.0005368	0.0000056	0.0105147	0.0041471	0.0024817	0.0016327
11	0.0015361	0.0005343	0.0005176	0.0000668	0.0004692	0.0000065	0.0144316	0.005692	0.0034062	0.0022409
12	0.0010176	0.0003539	0.0003429	0.0000442	0.000567	0.0000052	0.0078742	0.0031057	0.0018585	0.0012227

Obs	P_HDDV_6	P_HDDV_7	P_HDDV8a	P_HDDV8b	P_MC	P_HDGB	P_HDDBT	P_HDDBS	P_LDDT34
1	0.0054337	0.0030522	0.0057691	0.0269742	0.001	0.0002735	0.0015771	0.0030054	0.0012373
2	0.0084011	0.0047192	0.0089197	0.0344003	0.001	0.0005162	0.0029764	0.005672	0.0014096
3	0.0041519	0.0023323	0.0044082	0.0251984	0.001	0.0002347	0.0013535	0.0025793	0.0011586
4	0.0087948	0.0049403	0.0093377	0.0528904	0.001	0.000113	0.0006515	0.0012414	0.0011724
5	0.0119474	0.0067112	0.0126849	0.0427769	0.001	0.0001785	0.0010291	0.0019611	0.0013542
6	0.0067632	0.0037991	0.0071807	0.0493417	0.001	0.000137	0.0007898	0.001505	0.0011019
7	0.0038564	0.0021663	0.0040945	0.0396809	0.001	0.0001	0.0005765	0.0010987	0.0012493
8	0.006217	0.0034923	0.0066007	0.0230403	0.001	0.0001128	0.0006507	0.00124	0.0014759
9	0.0032224	0.0018101	0.0034213	0.0532013	0.001	0.0001563	0.0009013	0.0017176	0.0011346
10	0.00529	0.0029715	0.0056165	0.0234749	0.001	0.000191	0.0011013	0.0020987	0.0012526
11	0.0072606	0.0040785	0.0077088	0.0200883	0.001	0.0004766	0.0027483	0.0052372	0.0014534
12	0.0039616	0.0022253	0.0042061	0.0252993	0.001	0.0001964	0.0011323	0.0021578	0.0011635

**TABLE 53: HGA 2015 Weekday VMT Mix by Time Period and Roadway Functional Classification Group input to IMPSUM62**

Obs	TP	FC	P_LDGV	P_LDGT1	P_LDGT2	P_LDGT3	P_LDGT4	P_HDGV2b	P_HDGV_3	P_HDGV_4	P_HDGV_5
1	AM_Peak	Art	0.6000514	0.0571187	0.1901481	0.048701	0.0223944	0.0070223	0.0026451	0.0011816	0.0004431
2	AM_Peak	Col	0.5125499	0.0650722	0.2166254	0.059994	0.0275874	0.0103887	0.0039132	0.001748	0.0006555
3	AM_Peak	Fway	0.6352919	0.0534843	0.1780494	0.0437419	0.0201141	0.0060579	0.0022818	0.0010193	0.0003822
4	Mid_Day	Art	0.5644471	0.0541197	0.1801644	0.0461765	0.0212336	0.0114971	0.0043307	0.0019345	0.0007254
5	Mid_Day	Col	0.4945949	0.0625135	0.2081074	0.0576763	0.0265216	0.0146856	0.0055317	0.002471	0.0009266
6	Mid_Day	Fway	0.6038544	0.0508664	0.1693343	0.0416544	0.0191542	0.0099159	0.0037351	0.0016685	0.0006257
7	Ovr_Nite	Art	0.6011417	0.0576712	0.1919875	0.0490811	0.0225692	0.0049616	0.0018689	0.0008348	0.0003131
8	Ovr_Nite	Col	0.5326118	0.0681321	0.2268117	0.0627397	0.0288499	0.0075658	0.0028498	0.001273	0.0004774
9	Ovr_Nite	Fway	0.6232139	0.0523747	0.1743556	0.0428265	0.0196931	0.0046875	0.0017657	0.0007887	0.0002958
10	PM_Peak	Art	0.6022004	0.0578241	0.1924963	0.0493495	0.0226926	0.0068572	0.0025829	0.0011538	0.0004327
11	PM_Peak	Col	0.5262946	0.0670951	0.2233597	0.0618181	0.0284261	0.0087327	0.0032894	0.0014694	0.000551
12	PM_Peak	Fway	0.6361098	0.0537093	0.1787982	0.0440707	0.0202652	0.0057848	0.002179	0.0009733	0.000365

  

Obs	P_HDGV_6	P_HDGV_7	P_HDGV8a	P_HDGV8b	P_LDDV	P_LDDT12	P_HDDV2b	P_HDDV_3	P_HDDV_4	P_HDDV_5
1	0.0012353	0.0004297	0.0004162	0.0000537	0.0005394	0	0.0108002	0.0042597	0.0025491	0.0016771
2	0.0018275	0.0006356	0.0006158	0.0000795	0.0004609	0	0.0166986	0.0065861	0.0039413	0.0025929
3	0.0010656	0.0003707	0.0003591	0.0000463	0.000571	0	0.0082526	0.0032549	0.0019478	0.0012815
4	0.0020224	0.0007035	0.0006815	0.0000879	0.0005074	0	0.017481	0.0068947	0.0041259	0.0027144
5	0.0025833	0.0008985	0.0008705	0.0001123	0.0004447	0	0.0237474	0.0093662	0.005605	0.0036875
6	0.0017443	0.0006067	0.0005878	0.0000758	0.0005428	0	0.0134429	0.005302	0.0031729	0.0020874
7	0.0008728	0.0003036	0.0002941	0.0000379	0.0005404	0	0.0076652	0.0030232	0.0018092	0.0011903
8	0.0013309	0.0004629	0.0004484	0.0000579	0.0004789	0	0.0123572	0.0048738	0.0029166	0.0019188
9	0.0008246	0.0002868	0.0002778	0.0000359	0.0005602	0	0.0064051	0.0025262	0.0015118	0.0009946
10	0.0012062	0.0004196	0.0004064	0.0000524	0.0005413	0	0.0105147	0.0041471	0.0024817	0.0016327
11	0.0015361	0.0005343	0.0005176	0.0000668	0.0004732	0	0.0144316	0.005692	0.0034062	0.0022409
12	0.0010176	0.0003539	0.0003429	0.0000442	0.0005717	0	0.0078742	0.0031057	0.0018585	0.0012227

Obs	P_HDDV_6	P_HDDV_7	P_HDDV8a	P_HDDV8b	P_MC	P_HDGB	P_HDDBT	P_HDDBS	P_LDDT34
1	0.0054337	0.0030522	0.0057691	0.0269742	0.001	0.0001626	0.0015757	0.0031177	0.0012489
2	0.0084011	0.0047192	0.0089197	0.0344003	0.001	0.0003069	0.0029738	0.0058839	0.0014228
3	0.0041519	0.0023323	0.0044082	0.0251984	0.001	0.0001395	0.0013523	0.0026756	0.0011694
4	0.0087948	0.0049403	0.0093377	0.0528904	0.001	0.0000672	0.0006509	0.0012878	0.0011833
5	0.0119474	0.0067112	0.0126849	0.0427769	0.001	0.0001061	0.0010282	0.0020344	0.0013668
6	0.0067632	0.0037991	0.0071807	0.0493417	0.001	0.0000814	0.0007891	0.0015613	0.0011122
7	0.0038564	0.0021663	0.0040945	0.0396809	0.001	0.0000594	0.000576	0.0011397	0.0012609
8	0.006217	0.0034923	0.0066007	0.0230403	0.001	0.0000671	0.0006501	0.0012863	0.0014897
9	0.0032224	0.0018101	0.0034213	0.0532013	0.001	0.0000929	0.0009005	0.0017818	0.0011451
10	0.00529	0.0029715	0.0056165	0.0234749	0.001	0.0001135	0.0011004	0.0021772	0.0012643
11	0.0072606	0.0040785	0.0077088	0.0200883	0.001	0.0002833	0.0027459	0.0054329	0.001467
12	0.0039616	0.0022253	0.0042061	0.0252993	0.001	0.0001167	0.0011313	0.0022384	0.0011743



**TABLE 54: HGA 2025 Weekday VMT Mix by Time Period and Roadway Functional Classification Group input to IMPSUM62**

Obs	TP	FC	P_LDGV	P_LDGT1	P_LDGT2	P_LDGT3	P_LDGT4	P_HDGV2b	P_HDGV_3	P_HDGV_4	P_HDGV_5
1	AM_Peak	Art	0.6000494	0.0571188	0.1901473	0.0486998	0.0223956	0.0070223	0.0026451	0.0011816	0.0004431
2	AM_Peak	Col	0.5125482	0.0650724	0.2166245	0.0599926	0.0275888	0.0103887	0.0039132	0.001748	0.0006555
3	AM_Peak	Fway	0.6352898	0.0534845	0.1780486	0.0437409	0.0201151	0.0060579	0.0022818	0.0010193	0.0003822
4	Mid_Day	Art	0.5644452	0.0541198	0.1801636	0.0461754	0.0212347	0.0114971	0.0043307	0.0019345	0.0007254
5	Mid_Day	Col	0.4945933	0.0625137	0.2081065	0.0576749	0.026523	0.0146856	0.0055317	0.002471	0.0009266
6	Mid_Day	Fway	0.6038524	0.0508666	0.1693335	0.0416534	0.0191552	0.0099159	0.0037351	0.0016685	0.0006257
7	Ovr_Nite	Art	0.6011397	0.0576714	0.1919867	0.0490799	0.0225704	0.0049616	0.0018689	0.0008348	0.0003131
8	Ovr_Nite	Col	0.53261	0.0681323	0.2268108	0.0627382	0.0288514	0.0075658	0.0028498	0.001273	0.0004774
9	Ovr_Nite	Fway	0.6232119	0.0523749	0.1743548	0.0428255	0.0196942	0.0046875	0.0017657	0.0007887	0.0002958
10	PM_Peak	Art	0.6021984	0.0578242	0.1924955	0.0493483	0.0226938	0.0068572	0.0025829	0.0011538	0.0004327
11	PM_Peak	Col	0.5262928	0.0670953	0.2233587	0.0618166	0.0284276	0.0087327	0.0032894	0.0014694	0.000551
12	PM_Peak	Fway	0.6361077	0.0537095	0.1787975	0.0440696	0.0202663	0.0057848	0.002179	0.0009733	0.000365

  

Obs	P_HDGV_6	P_HDGV_7	P_HDGV8a	P_HDGV8b	P_LDDV	P_LDDT12	P_HDDV2b	P_HDDV_3	P_HDDV_4	P_HDDV_5
1	0.0012353	0.0004297	0.0004162	0.0000537	0.0005414	0	0.0108002	0.0042597	0.0025491	0.0016771
2	0.0018275	0.0006356	0.0006158	0.0000795	0.0004626	0	0.0166986	0.0065861	0.0039413	0.0025929
3	0.0010656	0.0003707	0.0003591	0.0000463	0.0005731	0	0.0082526	0.0032549	0.0019478	0.0012815
4	0.0020224	0.0007035	0.0006815	0.0000879	0.0005093	0	0.017481	0.0068947	0.0041259	0.0027144
5	0.0025833	0.0008985	0.0008705	0.0001123	0.0004464	0	0.0237474	0.0093662	0.005605	0.0036875
6	0.0017443	0.0006067	0.0005878	0.0000758	0.0005448	0	0.0134429	0.005302	0.0031729	0.0020874
7	0.0008728	0.0003036	0.0002941	0.0000379	0.0005424	0	0.0076652	0.0030232	0.0018092	0.0011903
8	0.0013309	0.0004629	0.0004484	0.0000579	0.0004806	0	0.0123572	0.0048738	0.0029166	0.0019188
9	0.0008246	0.0002868	0.0002778	0.0000359	0.0005622	0	0.0064051	0.0025262	0.0015118	0.0009946
10	0.0012062	0.0004196	0.0004064	0.0000524	0.0005433	0	0.0105147	0.0041471	0.0024817	0.0016327
11	0.0015361	0.0005343	0.0005176	0.0000668	0.0004749	0	0.0144316	0.005692	0.0034062	0.0022409
12	0.0010176	0.0003539	0.0003429	0.0000442	0.0005738	0	0.0078742	0.0031057	0.0018585	0.0012227

Obs	P_HDDV_6	P_HDDV_7	P_HDDV8a	P_HDDV8b	P_MC	P_HDGB	P_HDDBT	P_HDDBS	P_LDDT34
1	0.0054337	0.0030522	0.0057691	0.0269742	0.001	0.000136	0.0015796	0.0031404	0.0012495
2	0.0084011	0.0047192	0.0089197	0.0344003	0.001	0.0002567	0.0029811	0.0059268	0.0014235
3	0.0041519	0.0023323	0.0044082	0.0251984	0.001	0.0001167	0.0013556	0.0026951	0.00117
4	0.0087948	0.0049403	0.0093377	0.0528904	0.001	0.0000562	0.0006525	0.0012972	0.0011839
5	0.0119474	0.0067112	0.0126849	0.0427769	0.001	0.0000888	0.0010307	0.0020492	0.0013675
6	0.0067632	0.0037991	0.0071807	0.0493417	0.001	0.0000681	0.000791	0.0015727	0.0011127
7	0.0038564	0.0021663	0.0040945	0.0396809	0.001	0.0000497	0.0005774	0.001148	0.0012616
8	0.006217	0.0034923	0.0066007	0.0230403	0.001	0.0000561	0.0006517	0.0012957	0.0014904
9	0.0032224	0.0018101	0.0034213	0.0532013	0.001	0.0000777	0.0009027	0.0017948	0.0011457
10	0.00529	0.0029715	0.0056165	0.0234749	0.001	0.000095	0.0011031	0.002193	0.0012649
11	0.0072606	0.0040785	0.0077088	0.0200883	0.001	0.000237	0.0027526	0.0054725	0.0014677
12	0.0039616	0.0022253	0.0042061	0.0252993	0.001	0.0000977	0.0011341	0.0022547	0.0011749