

Appendix P

Contingency Measures Documentation

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1 Introduction

Section 172(c)(9) requires that the nonattainment State Implementation Plan (SIP) contain specific measures that would take effect upon a State's failure to attain the ozone standard in a given area, without further action by the State or the US Environmental Protection Agency (USEPA). Guidance from the USEPA indicates that the measures should equal approximately three percent of the baseline emissions, so that reasonable progress level of reduction could be expected to occur in the year following the failure to attain. The North Carolina Division of Air Quality (NCDAQ) elected to adopt only nitrogen oxides (NO_x) contingency measures since the area is NO_x limited. The baseline NO_x emissions for 2002 are 287 tons per day and the amount of reductions needed for the contingency measures is 8.6 tons per day (Table 1). The contingency plan consists of Federal and State measures.

Table 1. 2002 Baseline NO_x Emissions for North Carolina Counties

County	Point	Area	Non-Road	Highway Mobile	Total
Cabarrus	2.6	0.8	5.4	17.2	26.0
Gaston	34.8	1.3	4.9	20.0	61.0
Iredell (partial)	8.5	0.3	1.4	5.6	15.8
Lincoln	0.3	0.5	1.9	6.1	8.8
Mecklenburg	2.1	7	32.1	78.7	119.9
Rowan	11	0.8	4.1	19.7	35.6
Union	0.2	1	7.7	11.3	20.2
Total	59.5	11.7	57.5	158.6	287.3

2 Federal Measures

The Federal measures result from the fleet turnover of the light and heavy-duty engine standards from the on-road mobile sector, and the non-road engine standards. These measures are already adopted and the fleet turnover will occur without further action by either the State or the USEPA.

The emission reductions due to on-road mobile sources were estimated using the emission estimates for the transportation conformity motor vehicle emission budgets (MVEBs) for the attainment year 2009 and estimating the emissions for 2010. The USEPA's MOBILE6.2 model was used to estimate the emissions for both years. Detailed documentation on how on-road mobile source emissions are estimated can be found in Appendix F.3.

Updated 2010 vehicle miles traveled (VMT) and speeds were not available for the nonattainment area. For speeds, the 2009 speeds used in the MVEBs were used since the speeds are not expected to change dramatically in one year. For the VMT, the NCDAQ used a previous data set that contained both 2009 and 2010 VMT and estimated the percent growth between these two years. This percent growth was used to grow the updated 2009 VMT data to 2010. For Iredell County, only the VMT projected for the nonattainment portion of the County was used to estimate 2009 and 2010 emissions.

For the non-road mobile sources, the USEPA's NONROAD2005c model was used to estimate the emissions for 2009 and 2010. Since the NONROAD model only produces whole county emissions, to estimate the emissions for the nonattainment portion of Iredell County, the percent population in the two nonattainment townships (32.6%) compared to the whole county was used to apportion the emissions.

Section 5 of this appendix contains:

- The MOBILE6.2 input and output files for the 2010 runs
- VMT used to estimate the 2009 and 2010 on-road mobile emissions
- The NONROAD2005c model option files

For 2009 mobile emissions, the input and output files can be found in Appendix F.3. The table below summarizes the expected emission reductions due to Federal measures.

Table 2. Estimated Emission Reductions Expected from Federal Measures

County	2009 NOx (tons/day)	2010 NOx (tons/day)	Difference (tons/day)
On-road Mobile			
Cabarrus	8.57	7.86	-0.71
Gaston	9.48	8.33	-1.15
Iredell*	5.10	4.66	-0.44
Lincoln	3.65	3.36	-0.29
Mecklenburg	32.27	29.68	-2.59
Rowan	8.45	7.74	-0.71
Union	5.57	5.18	-0.39
On-road Mobile Totals	73.09	66.81	-6.28
Non-road Mobile			
Cabarrus	2.50	2.39	-0.11
Gaston	2.36	2.22	-0.14
Iredell*	0.90	0.85	-0.05
Lincoln	0.96	0.91	-0.05
Mecklenburg	19.16	18.44	-0.72
Rowan	1.64	1.54	-0.10
Union	4.63	4.44	-0.19
Non-road Mobile Totals	32.15	30.79	-1.36
Totals	105.24	97.60	-7.64

3 State Measure

The State measure is lowering the NO_x Reasonable Available Control Technology (RACT) applicability level from 100 tons per year potential emissions to 50 tons per year potential emissions. The NCDAQ revised sections 2D.0902, .0909, .1402 and .1403 to include the contingency measure and took these sections to public hearing on March 14, 2007. The NCDAQ anticipates that the Environmental Management Commission will adopt these amended sections at its May 10, 2007 meeting, and will become effective on July 1, 2007. As soon as it becomes effective, the NCDAQ will submit the amended sections to the USEPA. The draft rule is included in Appendix M.

4 Conclusions

The Federal measures due to fleet turnover will result in approximately 7.6 tons/day NO_x emissions reduction, or about 2.7% of the baseline emissions. There is no easy way to estimate the amount of reductions that would be achieved by lowering the NO_x RACT requirements to 50 tons per year since the facilities subject to the regulation would have to submit a RACT determination. The NCDAQ believes that the 2.7 % reductions in NO_x emissions from the Federal measures and the lowered applicability limit for NO_x RACT are sufficient to meet the contingency measure requirements of Section 172(c)(9).

5 Data Files Used in Developing Estimates

5.1 2010 MOBILE6.2 Input Files

MG10.IN

MOBILE6 INPUT FILE :

> Meck/Gaston I/M for 2010 using 2009 TDM Average Daily speeds
> with DAQ generated vehicle Mix

POLLUTANTS : NOX HC
SPREADSHEET : Meck/Gaston NOX VOC
RUN DATA :

***** RUN SECTION *****
FUEL RVP : 7.8
REG DIST : mekage04.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

> OBDII

I/M PROGRAM : 1 2003 2050 1 TRC OBD I/M
I/M MODEL YEARS : 1 1996 2050
I/M VEHICLES : 1 22222 11111111 1
I/M STRINGENCY : 1 10.0
I/M COMPLIANCE : 1 95.0
I/M WAIVER RATES : 1 5.0 5.0

I/M PROGRAM : 2 2003 2050 1 TRC EVAP OBD
I/M MODEL YEARS : 2 1996 2050
I/M VEHICLES : 2 22222 11111111 1
I/M STRINGENCY : 2 10.0
I/M COMPLIANCE : 2 95.0
I/M WAIVER RATES : 2 5.0 5.0

ANTI-TAMP PROG :
91 74 50 22222 22222222 2 11 095. 22212222

***** SCENARIO SECTION *****
SCENARIO RECORD : Rural principle arterial-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS :
0.3434 0.0864 0.2873 0.0885 0.0407 0.0453 0.0044 0.0037
0.0028 0.0101 0.0132 0.0144 0.0510 0.0023 0.0012 0.0053

AVERAGE SPEED : 22 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural minor arterial-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS :
0.3614 0.0908 0.3024 0.0932 0.0428 0.0430 0.0042 0.0036


```

0.0026    0.0096    0.0063    0.0069    0.0244    0.0022    0.0011    0.0055

AVERAGE SPEED      : 18 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS       :
0.3658    0.0920    0.3060    0.0943    0.0433    0.0426    0.0042    0.0034
0.0027    0.0095    0.0046    0.0050    0.0178    0.0022    0.0010    0.0056

AVERAGE SPEED      : 32 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS       :
0.3630    0.0912    0.3036    0.0936    0.0430    0.0449    0.0043    0.0037
0.0028    0.0101    0.0052    0.0056    0.0201    0.0023    0.0011    0.0055

AVERAGE SPEED      : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS       :
0.3622    0.0912    0.3035    0.0936    0.0430    0.0453    0.0044    0.0037
0.0029    0.0102    0.0052    0.0057    0.0201    0.0024    0.0011    0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS       :
0.3302    0.0830    0.2762    0.0851    0.0391    0.0582    0.0057    0.0048
0.0036    0.0130    0.0154    0.0167    0.0595    0.0030    0.0015    0.0050

AVERAGE SPEED      : 41 Non-Ramp 100.0 0.0 0.0 0.0

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RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Urban freeway-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban freeway mix and speeds

VMT FRACTIONS :
0.3591 0.0903 0.3005 0.0926 0.0426 0.0351 0.0034 0.0029
0.0022 0.0078 0.0093 0.0101 0.0359 0.0018 0.0009 0.0055

AVERAGE SPEED : 49 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Urban principle arterial-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS :
0.3787 0.0952 0.3169 0.0977 0.0449 0.0292 0.0029 0.0024
0.0018 0.0066 0.0026 0.0029 0.0103 0.0014 0.0008 0.0057

AVERAGE SPEED : 25 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Urban minor arterial-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS :
0.3765 0.0947 0.3152 0.0971 0.0447 0.0334 0.0032 0.0027
0.0021 0.0075 0.0024 0.0026 0.0094 0.0018 0.0009 0.0058

AVERAGE SPEED : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Urban collector-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban collector mix and speeds

VMT FRACTIONS :
0.3773 0.0948 0.3156 0.0972 0.0447 0.0348 0.0034 0.0028
0.0021 0.0077 0.0019 0.0021 0.0073 0.0017 0.0009 0.0057

AVERAGE SPEED : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

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BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS        :
0.3772    0.0948    0.3156    0.0973    0.0447    0.0347    0.0034    0.0028
0.0021    0.0077    0.0019    0.0021    0.0073    0.0018    0.0009    0.0057

AVERAGE SPEED       : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural Interstate - Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural interstate mix and speeds

VMT FRACTIONS        :
0.2750    0.0692    0.2302    0.0710    0.0326    0.1020    0.0099    0.0084
0.0063    0.0228    0.0269    0.0293    0.1044    0.0052    0.0026    0.0042

AVERAGE SPEED       : 42 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural principle arterial- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS        :
0.3434    0.0864    0.2873    0.0885    0.0407    0.0453    0.0044    0.0037
0.0028    0.0101    0.0132    0.0144    0.0510    0.0023    0.0012    0.0053

AVERAGE SPEED       : 66 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor arterial- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS        :
0.3614    0.0908    0.3024    0.0932    0.0428    0.0430    0.0042    0.0036
0.0026    0.0096    0.0063    0.0069    0.0244    0.0022    0.0011    0.0055

AVERAGE SPEED       : 36 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30

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***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS      :
0.3658    0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027    0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 43 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS      :
0.3630    0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028    0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 41 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS      :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS      :
0.3302    0.0830  0.2762  0.0851  0.0391  0.0582  0.0057  0.0048
0.0036    0.0130  0.0154  0.0167  0.0595  0.0030  0.0015  0.0050

AVERAGE SPEED      : 44 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban freeway- Gaston County
CALENDAR YEAR        : 2010

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EVALUATION MONTH      : 7

> Urban freeway mix and speeds

VMT FRACTIONS        :
0.3591    0.0903  0.3005  0.0926  0.0426  0.0351  0.0034  0.0029
0.0022    0.0078  0.0093  0.0101  0.0359  0.0018  0.0009  0.0055

AVERAGE SPEED        : 66 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30
***** SCENARIO SECTION *****
SCENARIO RECORD       : Urban principle arterial- Gaston County
CALENDAR YEAR         : 2010
EVALUATION MONTH      : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS        :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED        : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30
***** SCENARIO SECTION *****
SCENARIO RECORD       : Urban minor arterial- Gaston County
CALENDAR YEAR         : 2010
EVALUATION MONTH      : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS        :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED        : 29 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30
***** SCENARIO SECTION *****
SCENARIO RECORD       : Urban collector- Gaston County
CALENDAR YEAR         : 2010
EVALUATION MONTH      : 7

> Urban collector mix and speeds

VMT FRACTIONS        :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED        : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30
***** SCENARIO SECTION *****
SCENARIO RECORD       : Urban local- Gaston County
CALENDAR YEAR         : 2010
EVALUATION MONTH      : 7

> Urban local mix and speeds

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VMT FRACTIONS      :
0.3772      0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021      0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30

END OF RUN           :

```

MG10N.IN

MOBILE6 INPUT FILE :

> Meck/Gaston Non I/M for 2010 using 2009 TDM Average Daily speeds
> with DAQ generated vehicle Mix

POLLUTANTS : NOX HC
SPREADSHEET : Meck/Gaston NOX VOC
RUN DATA :

***** RUN SECTION *****

FUEL RVP : 7.8
REG DIST : mekage04.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

ANTI-TAMP PROG :
91 74 50 22222 22222222 2 11 095. 22212222

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural principle arterial-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS :
0.3434 0.0864 0.2873 0.0885 0.0407 0.0453 0.0044 0.0037
0.0028 0.0101 0.0132 0.0144 0.0510 0.0023 0.0012 0.0053

AVERAGE SPEED : 22 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural minor arterial-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS :
0.3614 0.0908 0.3024 0.0932 0.0428 0.0430 0.0042 0.0036
0.0026 0.0096 0.0063 0.0069 0.0244 0.0022 0.0011 0.0055

AVERAGE SPEED : 18 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural major collector-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural major collector mix and speeds

VMT FRACTIONS :
0.3658 0.0920 0.3060 0.0943 0.0433 0.0426 0.0042 0.0034
0.0027 0.0095 0.0046 0.0050 0.0178 0.0022 0.0010 0.0056

AVERAGE SPEED : 32 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural minor collector-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural minor collector mix and speeds

VMT FRACTIONS :
0.3630 0.0912 0.3036 0.0936 0.0430 0.0449 0.0043 0.0037
0.0028 0.0101 0.0052 0.0056 0.0201 0.0023 0.0011 0.0055

AVERAGE SPEED : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural local-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural local mix and speeds

VMT FRACTIONS :
0.3622 0.0912 0.3035 0.0936 0.0430 0.0453 0.0044 0.0037
0.0029 0.0102 0.0052 0.0057 0.0201 0.0024 0.0011 0.0055

AVERAGE SPEED : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Urban interstate-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban interstate mix and speeds

VMT FRACTIONS :
0.3302 0.0830 0.2762 0.0851 0.0391 0.0582 0.0057 0.0048
0.0036 0.0130 0.0154 0.0167 0.0595 0.0030 0.0015 0.0050

AVERAGE SPEED : 41 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Urban freeway-Meck County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban freeway mix and speeds

VMT FRACTIONS :
0.3591 0.0903 0.3005 0.0926 0.0426 0.0351 0.0034 0.0029
0.0022 0.0078 0.0093 0.0101 0.0359 0.0018 0.0009 0.0055

AVERAGE SPEED : 49 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.


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BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS        :
0.3787    0.0952    0.3169    0.0977    0.0449    0.0292    0.0029    0.0024
0.0018    0.0066    0.0026    0.0029    0.0103    0.0014    0.0008    0.0057

AVERAGE SPEED        : 25 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS        :
0.3765    0.0947    0.3152    0.0971    0.0447    0.0334    0.0032    0.0027
0.0021    0.0075    0.0024    0.0026    0.0094    0.0018    0.0009    0.0058

AVERAGE SPEED        : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS        :
0.3773    0.0948    0.3156    0.0972    0.0447    0.0348    0.0034    0.0028
0.0021    0.0077    0.0019    0.0021    0.0073    0.0017    0.0009    0.0057

AVERAGE SPEED        : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local-Meck County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS        :
0.3772    0.0948    0.3156    0.0973    0.0447    0.0347    0.0034    0.0028
0.0021    0.0077    0.0019    0.0021    0.0073    0.0018    0.0009    0.0057

AVERAGE SPEED        : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30

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***** SCENARIO SECTION *****
SCENARIO RECORD : Rural Interstate - Gaston County
CALENDAR YEAR   : 2010
EVALUATION MONTH : 7

> Rural interstate mix and speeds

VMT FRACTIONS :
0.2750 0.0692 0.2302 0.0710 0.0326 0.1020 0.0099 0.0084
0.0063 0.0228 0.0269 0.0293 0.1044 0.0052 0.0026 0.0042

AVERAGE SPEED : 42 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                   53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural principle arterial- Gaston County
CALENDAR YEAR   : 2010
EVALUATION MONTH : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS :
0.3434 0.0864 0.2873 0.0885 0.0407 0.0453 0.0044 0.0037
0.0028 0.0101 0.0132 0.0144 0.0510 0.0023 0.0012 0.0053

AVERAGE SPEED : 66 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                   53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural minor arterial- Gaston County
CALENDAR YEAR   : 2010
EVALUATION MONTH : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS :
0.3614 0.0908 0.3024 0.0932 0.0428 0.0430 0.0042 0.0036
0.0026 0.0096 0.0063 0.0069 0.0244 0.0022 0.0011 0.0055

AVERAGE SPEED : 36 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                   53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural major collector- Gaston County
CALENDAR YEAR   : 2010
EVALUATION MONTH : 7

> Rural major collector mix and speeds

VMT FRACTIONS :
0.3658 0.0920 0.3060 0.0943 0.0433 0.0426 0.0042 0.0034
0.0027 0.0095 0.0046 0.0050 0.0178 0.0022 0.0010 0.0056

AVERAGE SPEED : 43 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                   53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural minor collector- Gaston County
CALENDAR YEAR   : 2010

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EVALUATION MONTH      : 7

> Rural minor collector mix and speeds

VMT FRACTIONS          :
0.3630    0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028    0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED          : 41 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY       : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES         : 30
***** SCENARIO SECTION *****
SCENARIO RECORD          : Rural local- Gaston County
CALENDAR YEAR            : 2010
EVALUATION MONTH        : 7

> Rural local mix and speeds

VMT FRACTIONS          :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED          : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY       : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES         : 30
***** SCENARIO SECTION *****
SCENARIO RECORD          : Urban interstate- Gaston County
CALENDAR YEAR            : 2010
EVALUATION MONTH        : 7

> Urban interstate mix and speeds

VMT FRACTIONS          :
0.3302    0.0830  0.2762  0.0851  0.0391  0.0582  0.0057  0.0048
0.0036    0.0130  0.0154  0.0167  0.0595  0.0030  0.0015  0.0050

AVERAGE SPEED          : 44 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY       : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES         : 30
***** SCENARIO SECTION *****
SCENARIO RECORD          : Urban freeway- Gaston County
CALENDAR YEAR            : 2010
EVALUATION MONTH        : 7

> Urban freeway mix and speeds

VMT FRACTIONS          :
0.3591    0.0903  0.3005  0.0926  0.0426  0.0351  0.0034  0.0029
0.0022    0.0078  0.0093  0.0101  0.0359  0.0018  0.0009  0.0055

AVERAGE SPEED          : 66 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY       : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                        53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES         : 30
***** SCENARIO SECTION *****
SCENARIO RECORD          : Urban principle arterial- Gaston County
CALENDAR YEAR            : 2010
EVALUATION MONTH        : 7

> Urban principle arterial mix and speeds

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VMT FRACTIONS      :
0.3787      0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018      0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED      : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765      0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021      0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED      : 29 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773      0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021      0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED      : 26 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Gaston County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3772      0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021      0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

END OF RUN          :

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RIL10.IN

MOBILE6 INPUT FILE :

> Rowan/Iredell/Lincoln I/M for 2010 using 2009 TDM Average Daily speeds
> with DAQ generated vehicle Mix

POLLUTANTS : NOX HC
SPREADSHEET : Rowan/Iredell/Lincoln NOX VOC
RUN DATA :

***** RUN SECTION *****

FUEL RVP : 9.0
REG DIST : ncage04.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

> OBDII

I/M PROGRAM : 1 2004 2050 1 TRC OBD I/M
I/M MODEL YEARS : 1 1996 2050
I/M VEHICLES : 1 22222 11111111 1
I/M STRINGENCY : 1 10.0
I/M COMPLIANCE : 1 95.0
I/M WAIVER RATES : 1 5.0 5.0

I/M PROGRAM : 2 2004 2050 1 TRC EVAP OBD
I/M MODEL YEARS : 2 1996 2050
I/M VEHICLES : 2 22222 11111111 1
I/M STRINGENCY : 2 10.0
I/M COMPLIANCE : 2 95.0
I/M WAIVER RATES : 2 5.0 5.0

ANTI-TAMP PROG :
91 74 50 22222 22222222 2 11 095. 22212222

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural principle arterial- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS :
0.3434 0.0864 0.2873 0.0885 0.0407 0.0453 0.0044 0.0037
0.0028 0.0101 0.0132 0.0144 0.0510 0.0023 0.0012 0.0053

AVERAGE SPEED : 45 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural minor arterial- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS :
0.3614 0.0908 0.3024 0.0932 0.0428 0.0430 0.0042 0.0036
0.0026 0.0096 0.0063 0.0069 0.0244 0.0022 0.0011 0.0055

```

AVERAGE SPEED      : 49 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS       :
0.3658    0.0920    0.3060    0.0943    0.0433    0.0426    0.0042    0.0034
0.0027    0.0095    0.0046    0.0050    0.0178    0.0022    0.0010    0.0056

AVERAGE SPEED      : 50 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS       :
0.3630    0.0912    0.3036    0.0936    0.0430    0.0449    0.0043    0.0037
0.0028    0.0101    0.0052    0.0056    0.0201    0.0023    0.0011    0.0055

AVERAGE SPEED      : 50 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS       :
0.3622    0.0912    0.3035    0.0936    0.0430    0.0453    0.0044    0.0037
0.0029    0.0102    0.0052    0.0057    0.0201    0.0024    0.0011    0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS       :
0.3302    0.0830    0.2762    0.0851    0.0391    0.0582    0.0057    0.0048
0.0036    0.0130    0.0154    0.0167    0.0595    0.0030    0.0015    0.0050

```

AVERAGE SPEED : 57 Non-Ramp 100.0 0.0 0.0 0.0
RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****
SCENARIO RECORD : Urban principle arterial- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS :
0.3787 0.0952 0.3169 0.0977 0.0449 0.0292 0.0029 0.0024
0.0018 0.0066 0.0026 0.0029 0.0103 0.0014 0.0008 0.0057

AVERAGE SPEED : 38 Arterial 0.0 100.0 0.0 0.0
RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****
SCENARIO RECORD : Urban minor arterial- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS :
0.3765 0.0947 0.3152 0.0971 0.0447 0.0334 0.0032 0.0027
0.0021 0.0075 0.0024 0.0026 0.0094 0.0018 0.0009 0.0058

AVERAGE SPEED : 39 Arterial 0.0 100.0 0.0 0.0
RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****
SCENARIO RECORD : Urban collector- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban collector mix and speeds

VMT FRACTIONS :
0.3773 0.0948 0.3156 0.0972 0.0447 0.0348 0.0034 0.0028
0.0021 0.0077 0.0019 0.0021 0.0073 0.0017 0.0009 0.0057

AVERAGE SPEED : 36 Arterial 0.0 100.0 0.0 0.0
RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****
SCENARIO RECORD : Urban local- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Urban local mix and speeds

VMT FRACTIONS :
0.3772 0.0948 0.3156 0.0973 0.0447 0.0347 0.0034 0.0028

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0.0021    0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural Interstate - Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural interstate mix and speeds

VMT FRACTIONS       :
0.2750    0.0692  0.2302  0.0710  0.0326  0.1020  0.0099  0.0084
0.0063    0.0228  0.0269  0.0293  0.1044  0.0052  0.0026  0.0042

AVERAGE SPEED      : 38 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural principle arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS       :
0.3434    0.0864  0.2873  0.0885  0.0407  0.0453  0.0044  0.0037
0.0028    0.0101  0.0132  0.0144  0.0510  0.0023  0.0012  0.0053

AVERAGE SPEED      : 54 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS       :
0.3614    0.0908  0.3024  0.0932  0.0428  0.0430  0.0042  0.0036
0.0026    0.0096  0.0063  0.0069  0.0244  0.0022  0.0011  0.0055

AVERAGE SPEED      : 11 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS       :

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0.3658    0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027    0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS       :
0.3630    0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028    0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS       :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 20 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS       :
0.3302    0.0830  0.2762  0.0851  0.0391  0.0582  0.0057  0.0048
0.0036    0.0130  0.0154  0.0167  0.0595  0.0030  0.0015  0.0050

AVERAGE SPEED      : 55 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

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VMT FRACTIONS      :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED      : 18 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED      : 22 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED      : 23 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3772    0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED      : 18 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural principle arterial- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural other principle arterial mix and speeds

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VMT FRACTIONS      :
0.3434      0.0864  0.2873  0.0885  0.0407  0.0453  0.0044  0.0037
0.0028      0.0101  0.0132  0.0144  0.0510  0.0023  0.0012  0.0053

AVERAGE SPEED      : 59 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor arterial- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS      :
0.3614      0.0908  0.3024  0.0932  0.0428  0.0430  0.0042  0.0036
0.0026      0.0096  0.0063  0.0069  0.0244  0.0022  0.0011  0.0055

AVERAGE SPEED      : 37 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS      :
0.3658      0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027      0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 51 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS      :
0.3630      0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028      0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 45 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

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> Rural local mix and speeds

VMT FRACTIONS      :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS      :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED      : 41 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED      : 23 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED      : 22 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

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> Urban local mix and speeds

VMT FRACTIONS :
0.3772 0.0948 0.3156 0.0973 0.0447 0.0347 0.0034 0.0028
0.0021 0.0077 0.0019 0.0021 0.0073 0.0018 0.0009 0.0057

AVERAGE SPEED : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

END OF RUN :

RIL10N.IN

MOBILE6 INPUT FILE :

> Rowan/Iredell/Lincoln Non I/M for 2010 using 2009 TDM Average Daily speeds
> with DAQ generated vehicle Mix

POLLUTANTS : NOX HC
SPREADSHEET : Rowan/Iredell/Lincoln NOX VOC
RUN DATA :

***** RUN SECTION *****

FUEL RVP : 9.0
REG DIST : ncage04.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

ANTI-TAMP PROG :
91 74 50 22222 22222222 2 11 095. 22212222

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural principle arterial- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS :
0.3434 0.0864 0.2873 0.0885 0.0407 0.0453 0.0044 0.0037
0.0028 0.0101 0.0132 0.0144 0.0510 0.0023 0.0012 0.0053

AVERAGE SPEED : 45 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural minor arterial- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS :
0.3614 0.0908 0.3024 0.0932 0.0428 0.0430 0.0042 0.0036
0.0026 0.0096 0.0063 0.0069 0.0244 0.0022 0.0011 0.0055

AVERAGE SPEED : 49 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

***** SCENARIO SECTION *****

SCENARIO RECORD : Rural major collector- Rowan County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural major collector mix and speeds

VMT FRACTIONS :

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0.3658    0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027    0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 50 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS       :
0.3630    0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028    0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 50 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS       :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS       :
0.3302    0.0830  0.2762  0.0851  0.0391  0.0582  0.0057  0.0048
0.0036    0.0130  0.0154  0.0167  0.0595  0.0030  0.0015  0.0050

AVERAGE SPEED      : 57 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

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VMT FRACTIONS      :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED      : 38 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED      : 39 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED      : 36 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Rowan County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3772    0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural Interstate - Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural interstate mix and speeds

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VMT FRACTIONS      :
0.2750    0.0692  0.2302  0.0710  0.0326  0.1020  0.0099  0.0084
0.0063    0.0228  0.0269  0.0293  0.1044  0.0052  0.0026  0.0042

AVERAGE SPEED      : 38 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural principle arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS      :
0.3434    0.0864  0.2873  0.0885  0.0407  0.0453  0.0044  0.0037
0.0028    0.0101  0.0132  0.0144  0.0510  0.0023  0.0012  0.0053

AVERAGE SPEED      : 54 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS      :
0.3614    0.0908  0.3024  0.0932  0.0428  0.0430  0.0042  0.0036
0.0026    0.0096  0.0063  0.0069  0.0244  0.0022  0.0011  0.0055

AVERAGE SPEED      : 11 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS      :
0.3658    0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027    0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

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> Rural minor collector mix and speeds

VMT FRACTIONS      :
0.3630    0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028    0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 24 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS      :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 20 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS      :
0.3302    0.0830  0.2762  0.0851  0.0391  0.0582  0.0057  0.0048
0.0036    0.0130  0.0154  0.0167  0.0595  0.0030  0.0015  0.0050

AVERAGE SPEED      : 55 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS      :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED      : 18 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

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> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED      : 22 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED      : 23 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Iredell County(Pt)
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3772    0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED      : 18 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural principle arterial- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS      :
0.3434    0.0864  0.2873  0.0885  0.0407  0.0453  0.0044  0.0037
0.0028    0.0101  0.0132  0.0144  0.0510  0.0023  0.0012  0.0053

AVERAGE SPEED      : 59 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor arterial- Lincoln County
CALENDAR YEAR        : 2010

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EVALUATION MONTH      : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS        :
0.3614      0.0908  0.3024  0.0932  0.0428  0.0430  0.0042  0.0036
0.0026      0.0096  0.0063  0.0069  0.0244  0.0022  0.0011  0.0055

AVERAGE SPEED        : 37 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30

***** SCENARIO SECTION *****
SCENARIO RECORD       : Rural major collector- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS        :
0.3658      0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027      0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED        : 51 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30

***** SCENARIO SECTION *****
SCENARIO RECORD       : Rural minor collector- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS        :
0.3630      0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028      0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED        : 45 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30

***** SCENARIO SECTION *****
SCENARIO RECORD       : Rural local- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS        :
0.3622      0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029      0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED        : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES       : 30

***** SCENARIO SECTION *****
SCENARIO RECORD       : Urban principle arterial- Lincoln County

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CALENDAR YEAR      : 2010
EVALUATION MONTH   : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS      :
0.3787    0.0952    0.3169    0.0977    0.0449    0.0292    0.0029    0.0024
0.0018    0.0066    0.0026    0.0029    0.0103    0.0014    0.0008    0.0057

AVERAGE SPEED      : 41 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765    0.0947    0.3152    0.0971    0.0447    0.0334    0.0032    0.0027
0.0021    0.0075    0.0024    0.0026    0.0094    0.0018    0.0009    0.0058

AVERAGE SPEED      : 23 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773    0.0948    0.3156    0.0972    0.0447    0.0348    0.0034    0.0028
0.0021    0.0077    0.0019    0.0021    0.0073    0.0017    0.0009    0.0057

AVERAGE SPEED      : 22 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Lincoln County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS      :
0.3772    0.0948    0.3156    0.0973    0.0447    0.0347    0.0034    0.0028
0.0021    0.0077    0.0019    0.0021    0.0073    0.0018    0.0009    0.0057

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

END OF RUN          :

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UC10.IN

MOBILE6 INPUT FILE :

> Cabarrus/Union I/M for 2010 using 2009 TDM Average Daily speeds
> with DAQ generated vehicle Mix

POLLUTANTS : NOX HC
SPREADSHEET : Cabarrus/Union NOX VOC
RUN DATA :
***** RUN SECTION *****
FUEL RVP : 9.0
REG DIST : ncage04.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

> OBDII

I/M PROGRAM : 1 2003 2050 1 TRC OBD I/M
I/M MODEL YEARS : 1 1996 2050
I/M VEHICLES : 1 22222 11111111 1
I/M STRINGENCY : 1 10.0
I/M COMPLIANCE : 1 95.0
I/M WAIVER RATES : 1 5.0 5.0

I/M PROGRAM : 2 2003 2050 1 TRC EVAP OBD
I/M MODEL YEARS : 2 1996 2050
I/M VEHICLES : 2 22222 11111111 1
I/M STRINGENCY : 2 10.0
I/M COMPLIANCE : 2 95.0
I/M WAIVER RATES : 2 5.0 5.0

ANTI-TAMP PROG :
91 74 50 22222 22222222 2 11 095. 22212222
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural principle arterial- Cabarrus County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS :
0.3434 0.0864 0.2873 0.0885 0.0407 0.0453 0.0044 0.0037
0.0028 0.0101 0.0132 0.0144 0.0510 0.0023 0.0012 0.0053

AVERAGE SPEED : 46 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural minor arterial- Cabarrus County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS :
0.3614 0.0908 0.3024 0.0932 0.0428 0.0430 0.0042 0.0036
0.0026 0.0096 0.0063 0.0069 0.0244 0.0022 0.0011 0.0055

AVERAGE SPEED : 41 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30

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***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS      :
0.3658      0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027      0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 38 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS      :
0.3630      0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028      0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 34 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS      :
0.3622      0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029      0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS      :
0.3302      0.0830  0.2762  0.0851  0.0391  0.0582  0.0057  0.0048
0.0036      0.0130  0.0154  0.0167  0.0595  0.0030  0.0015  0.0050

AVERAGE SPEED      : 35 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****

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SCENARIO RECORD      : Urban principle arterial- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS       :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED       : 28 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS       :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED       : 29 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS       :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED       : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS       :
0.3772    0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED       : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural principle arterial- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

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> Rural other principle arterial mix and speeds

VMT FRACTIONS      :
0.3434    0.0864  0.2873  0.0885  0.0407  0.0453  0.0044  0.0037
0.0028    0.0101  0.0132  0.0144  0.0510  0.0023  0.0012  0.0053

AVERAGE SPEED      : 46 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor arterial- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS      :
0.3614    0.0908  0.3024  0.0932  0.0428  0.0430  0.0042  0.0036
0.0026    0.0096  0.0063  0.0069  0.0244  0.0022  0.0011  0.0055

AVERAGE SPEED      : 43 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS      :
0.3658    0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027    0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 45 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS      :
0.3630    0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028    0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 44 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

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VMT FRACTIONS      :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban freeway- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban freeway mix and speeds

VMT FRACTIONS      :
0.3591    0.0903  0.3005  0.0926  0.0426  0.0351  0.0034  0.0029
0.0022    0.0078  0.0093  0.0101  0.0359  0.0018  0.0009  0.0055

AVERAGE SPEED      : 36 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS      :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED      : 33 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED      : 32 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

```

```

AVERAGE SPEED      : 36 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS       :
0.3772    0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30

END OF RUN          :

```

UC10N.IN

MOBILE6 INPUT FILE :

> Cabarrus/Union Non I/M for 2010 using 2009 TDM Average Daily speeds
> with DAQ generated vehicle Mix

POLLUTANTS : NOX HC
SPREADSHEET : Cabarrus/Union NOX VOC
RUN DATA :
***** RUN SECTION *****
FUEL RVP : 9.0
REG DIST : ncage04.prn

HOURLY TEMPERATURES: 71.0 73.8 77.0 80.3 82.5 85.4 87.3 88.5 89.1 88.5 89.6 89.2
86.3 82.6 77.8 77.5 76.2 75.9 75.0 74.0 73.2 82.3 71.6 71.0

ANTI-TAMP PROG :
91 74 50 22222 22222222 2 11 095. 22212222
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural principle arterial- Cabarrus County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS :
0.3434 0.0864 0.2873 0.0885 0.0407 0.0453 0.0044 0.0037
0.0028 0.0101 0.0132 0.0144 0.0510 0.0023 0.0012 0.0053

AVERAGE SPEED : 46 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural minor arterial- Cabarrus County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS :
0.3614 0.0908 0.3024 0.0932 0.0428 0.0430 0.0042 0.0036
0.0026 0.0096 0.0063 0.0069 0.0244 0.0022 0.0011 0.0055

AVERAGE SPEED : 41 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES : 30
***** SCENARIO SECTION *****
SCENARIO RECORD : Rural major collector- Cabarrus County
CALENDAR YEAR : 2010
EVALUATION MONTH : 7

> Rural major collector mix and speeds

VMT FRACTIONS :
0.3658 0.0920 0.3060 0.0943 0.0433 0.0426 0.0042 0.0034
0.0027 0.0095 0.0046 0.0050 0.0178 0.0022 0.0010 0.0056

AVERAGE SPEED : 38 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

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BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS        :
0.3630    0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028    0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED        : 34 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS        :
0.3622    0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029    0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED        : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban interstate- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban interstate mix and speeds

VMT FRACTIONS        :
0.3302    0.0830  0.2762  0.0851  0.0391  0.0582  0.0057  0.0048
0.0036    0.0130  0.0154  0.0167  0.0595  0.0030  0.0015  0.0050

AVERAGE SPEED        : 35 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS        :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED        : 28 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY     : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

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BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS        :
0.3765      0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021      0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED       : 29 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS        :
0.3773      0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021      0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED       : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Cabarrus County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS        :
0.3772      0.0948  0.3156  0.0973  0.0447  0.0347  0.0034  0.0028
0.0021      0.0077  0.0019  0.0021  0.0073  0.0018  0.0009  0.0057

AVERAGE SPEED       : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural principle arterial- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural other principle arterial mix and speeds

VMT FRACTIONS        :
0.3434      0.0864  0.2873  0.0885  0.0407  0.0453  0.0044  0.0037
0.0028      0.0101  0.0132  0.0144  0.0510  0.0023  0.0012  0.0053

AVERAGE SPEED       : 46 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY    : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                      53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES      : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor arterial- Union County

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CALENDAR YEAR      : 2010
EVALUATION MONTH   : 7

> Rural minor arterial mix and speeds

VMT FRACTIONS      :
0.3614      0.0908  0.3024  0.0932  0.0428  0.0430  0.0042  0.0036
0.0026      0.0096  0.0063  0.0069  0.0244  0.0022  0.0011  0.0055

AVERAGE SPEED      : 43 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural major collector- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural major collector mix and speeds

VMT FRACTIONS      :
0.3658      0.0920  0.3060  0.0943  0.0433  0.0426  0.0042  0.0034
0.0027      0.0095  0.0046  0.0050  0.0178  0.0022  0.0010  0.0056

AVERAGE SPEED      : 45 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural minor collector- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural minor collector mix and speeds

VMT FRACTIONS      :
0.3630      0.0912  0.3036  0.0936  0.0430  0.0449  0.0043  0.0037
0.0028      0.0101  0.0052  0.0056  0.0201  0.0023  0.0011  0.0055

AVERAGE SPEED      : 44 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Rural local- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Rural local mix and speeds

VMT FRACTIONS      :
0.3622      0.0912  0.3035  0.0936  0.0430  0.0453  0.0044  0.0037
0.0029      0.0102  0.0052  0.0057  0.0201  0.0024  0.0011  0.0055

AVERAGE SPEED      : 30 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                     53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban freeway- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

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> Urban freeway mix and speeds

VMT FRACTIONS      :
0.3591    0.0903  0.3005  0.0926  0.0426  0.0351  0.0034  0.0029
0.0022    0.0078  0.0093  0.0101  0.0359  0.0018  0.0009  0.0055

AVERAGE SPEED      : 36 Non-Ramp 100.0 0.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban principle arterial- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban principle arterial mix and speeds

VMT FRACTIONS      :
0.3787    0.0952  0.3169  0.0977  0.0449  0.0292  0.0029  0.0024
0.0018    0.0066  0.0026  0.0029  0.0103  0.0014  0.0008  0.0057

AVERAGE SPEED      : 33 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban minor arterial- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban minor arterial mix and speeds

VMT FRACTIONS      :
0.3765    0.0947  0.3152  0.0971  0.0447  0.0334  0.0032  0.0027
0.0021    0.0075  0.0024  0.0026  0.0094  0.0018  0.0009  0.0058

AVERAGE SPEED      : 32 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban collector- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban collector mix and speeds

VMT FRACTIONS      :
0.3773    0.0948  0.3156  0.0972  0.0447  0.0348  0.0034  0.0028
0.0021    0.0077  0.0019  0.0021  0.0073  0.0017  0.0009  0.0057

AVERAGE SPEED      : 36 Arterial 0.0 100.0 0.0 0.0

RELATIVE HUMIDITY   : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.
                    53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.

BAROMETRIC PRES     : 30
***** SCENARIO SECTION *****
SCENARIO RECORD      : Urban local- Union County
CALENDAR YEAR        : 2010
EVALUATION MONTH     : 7

> Urban local mix and speeds

VMT FRACTIONS      :

```


0.3772	0.0948	0.3156	0.0973	0.0447	0.0347	0.0034	0.0028
0.0021	0.0077	0.0019	0.0021	0.0073	0.0018	0.0009	0.0057
AVERAGE SPEED : 30 Arterial 0.0 100.0 0.0 0.0							
RELATIVE HUMIDITY : 91. 86. 78. 71. 65. 59. 53. 50. 48. 51. 47. 47.							
53. 61. 70. 71. 76. 77. 79. 83. 85. 87. 88. 91.							
BAROMETRIC PRES : 30							
END OF RUN :							

[illegible]

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3619	0.3947	0.1346		0.0406	0.0003	0.0020	0.0604	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.492	0.859	0.649	0.805	0.702	0.157	0.301	0.310	2.81	0.668
Composite NOX:	0.337	0.568	0.558	0.565	1.670	0.279	0.422	3.898	1.01	0.731

```
* #####
* Urban interstate-Meck County
* File 1, Run 1, Scenario 6.
* #####
* Urban interstate mix and speeds
* M615 Comment:
```

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 41.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3299	0.3592	0.1224		0.0528	0.0003	0.0018	0.1286	0.0050	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.453	0.809	0.610	0.759	0.608	0.134	0.254	0.265	2.56	0.594
Composite NOX:	0.330	0.567	0.556	0.564	1.826	0.287	0.435	4.791	1.08	1.094

```
* #####
* Urban freeway-Meck County
* File 1, Run 1, Scenario 7.
* #####
* Urban freeway mix and speeds
* M615 Comment:
```

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 49.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban principle arterial-Meck County
* File 1, Run 1, Scenario 8.
* #####
* Urban principle arterial mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 25.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Contingency Measures Documentation	50
The Charlotte-Gastonia-Rock Hill, NC-SC 8-Hour Ozone	Appendix P
North Carolina Attainment Demonstration	June 15, 2007

Exhaust I/M Program: Yes
 Evap I/M Program: Yes
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3770	0.4104	0.1398		0.0309	0.0003	0.0021	0.0338	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.529	0.907	0.688	0.851	0.794	0.178	0.343	0.335	3.03	0.722
Composite NOX:	0.362	0.597	0.587	0.594	1.587	0.295	0.447	3.734	0.95	0.645

* #
 * Urban local-Meck County
 * File 1, Run 1, Scenario 11.
 * #
 * Urban local mix and speeds
 M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 7.8 psi
 Weathered RVP: 7.5 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
 Evap I/M Program: Yes
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3769	0.4104	0.1399		0.0308	0.0003	0.0021	0.0339	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.492	0.859	0.649	0.805	0.698	0.157	0.301	0.279	2.81	0.676
Composite NOX:	0.337	0.568	0.558	0.565	1.667	0.279	0.422	3.530	1.01	0.616

* #
 * Rural Interstate - Gaston County
 * File 1, Run 1, Scenario 12.
 * #
 * Rural interstate mix and speeds
 M615 Comment:

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 42.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the freeway roadway type for
 all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.2748	0.2994	0.1021		0.0926	0.0002	0.0015	0.2252	0.0042	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.450	0.806	0.608	0.756	0.602	0.132	0.252	0.260	2.55	0.553
Composite NOX:	0.331	0.569	0.558	0.566	1.840	0.291	0.440	4.850	1.09	1.586

```

* #####
* Rural principle arterial- Gaston County
* File 1, Run 1, Scenario 13.
* #####
* Rural other principle arterial mix and speeds
M615 Comment:
    User supplied VMT mix.
M 96 Warning:
    66.0      speed reduced to 65 mph maximum
M581 Warning:
    The user supplied freeway average speed of 65.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the freeway roadway type for
    all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b

```

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VMT Distribution:	0.3431	0.3737	0.1273		0.0412	0.0003	0.0019	0.1072	0.0053	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.414	0.753	0.568	0.706	0.542	0.119	0.226	0.218	3.17	0.558
Composite NOX:	0.358	0.620	0.607	0.617	2.151	0.538	0.816	8.914	1.52	1.486

Exhaust I/M Program: Yes

Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3655	0.3980	0.1356		0.0381	0.0003	0.0020	0.0549	0.0056	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.448	0.804	0.605	0.753	0.590	0.131	0.249	0.228	2.54	0.615
Composite NOX:	0.332	0.571	0.560	0.568	1.847	0.294	0.446	4.085	1.09	0.726

* #
* Rural minor collector- Gaston County
* File 1, Run 1, Scenario 16.
* #
* Rural minor collector mix and speeds
M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 41.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 7.8 psi
Weathered RVP: 7.5 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3627	0.3948	0.1346		0.0402	0.0003	0.0020	0.0599	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.453	0.809	0.610	0.759	0.602	0.134	0.254	0.239	2.56	0.619
Composite NOX:	0.330	0.567	0.556	0.564	1.819	0.287	0.435	4.023	1.08	0.739

* #
* Rural local- Gaston County
* File 1, Run 1, Scenario 17.
* #
* Rural local mix and speeds
M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3784	0.4121	0.1405		0.0261	0.0003	0.0021	0.0348	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.515	0.888	0.672	0.833	0.759	0.170	0.327	0.337	2.95	0.704
Composite NOX:	0.353	0.586	0.576	0.583	1.616	0.288	0.437	3.910	0.97	0.641

* #

* Urban minor arterial- Gaston County

* File 1, Run 1, Scenario 21.

* #

* Urban minor arterial mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 29.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 7.8 psi
Weathered RVP: 7.5 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3762	0.4099	0.1397		0.0298	0.0003	0.0021	0.0362	0.0058	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.497	0.865	0.654	0.811	0.713	0.160	0.307	0.299	2.84	0.682
Composite NOX:	0.341	0.572	0.562	0.569	1.657	0.281	0.425	3.706	1.00	0.631

* #

* Urban collector- Gaston County

* File 1, Run 1, Scenario 22.

* #

* Urban collector mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 26.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban local- Gaston County
* File 1, Run 1, Scenario 23.
* #####
* Urban local mix and speeds
* M615 Comment:
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm

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Appendix P
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Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3611	0.3932	0.1340		0.0386	0.0003	0.0020	0.0653	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.688	1.139	0.880	1.073	0.963	0.208	0.402	0.478	3.35	0.902
Composite NOX:	0.488	0.771	0.739	0.763	1.513	0.327	0.495	4.746	0.89	0.953

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3655	0.3980	0.1356		0.0381	0.0003	0.0020	0.0549	0.0056	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.553	0.952	0.726	0.895	0.677	0.152	0.290	0.291	2.75	0.737
Composite NOX:	0.406	0.676	0.646	0.669	1.699	0.278	0.421	3.847	1.03	0.788

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Appendix P
June 15, 2007

* File 2, Run 1, Scenario 4.
 * #####
 * Rural minor collector mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 26.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 7.8 psi
 Weathered RVP: 7.5 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3627	0.3948	0.1346		0.0402	0.0003	0.0020	0.0599	0.0055	1.0000

Composite Emission Factors (g/ml):										
Composite VOC:	0.590	1.002	0.767	0.943	0.761	0.170	0.327	0.350	2.95	0.781
Composite NOX:	0.430	0.703	0.672	0.695	1.618	0.288	0.437	4.038	0.97	0.837

* #####
 * Rural local-Meck County
 * File 2, Run 1, Scenario 5.

* #####
 * Rural local mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 7.8 psi
 Weathered RVP: 7.5 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Composite Emission Factors (g/mi):										
Composite VOC:	0.564	0.968	0.739	0.910	0.702	0.157	0.301	0.310	2.81	0.749
Composite NOX:	0.412	0.682	0.652	0.674	1.670	0.279	0.422	3.898	1.01	0.815

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Composite Emission Factors (g/mi):										
Composite VOC:	0.518	0.907	0.691	0.852	0.608	0.134	0.254	0.265	2.56	0.661
Composite NOX:	0.402	0.679	0.649	0.672	1.826	0.287	0.435	4.791	1.08	1.175

Calendar Year: 2010
Month: July
Altitude: Low

Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 7.8 psi
 Weathered RVP: 7.5 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3588	0.3908	0.1332		0.0319	0.0003	0.0020	0.0775	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.496	0.880	0.669	0.826	0.569	0.125	0.236	0.234	2.50	0.661
Composite NOX:	0.411	0.697	0.665	0.689	1.934	0.325	0.492	5.393	1.15	0.996

* #
 * Urban principle arterial-Meck County
 * File 2, Run 1, Scenario 8.
 * #
 * Urban principle arterial mix and speeds
 M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 25.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 7.8 psi
 Weathered RVP: 7.5 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3784	0.4121	0.1405		0.0261	0.0003	0.0021	0.0348	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.598	1.013	0.775	0.952	0.777	0.174	0.335	0.349	2.99	0.803
Composite NOX:	0.435	0.709	0.678	0.701	1.600	0.291	0.441	3.949	0.96	0.738

* #
 * Urban minor arterial-Meck County
 * File 2, Run 1, Scenario 9.
 * #
 * Urban minor arterial mix and speeds

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 26.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3762	0.4099	0.1397		0.0298	0.0003	0.0021	0.0362	0.0058	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.590	1.002	0.767	0.943	0.759	0.170	0.327	0.328	2.95	0.792
Composite NOX:	0.430	0.703	0.672	0.695	1.616	0.288	0.437	3.806	0.97	0.736

[illegible]

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 24.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

```

-----
VMT Distribution:0.3770  0.4104  0.1398                0.0309  0.0003  0.0021  0.0338  0.0057  1.0000
-----

```

```

Composite Emission Factors (g/mi):
Composite VOC:   0.606  1.025  0.786  0.964  0.794  0.178  0.343  0.335  3.03  0.813
Composite NOX:  0.441  0.716  0.685  0.708  1.587  0.295  0.447  3.734  0.95  0.737
-----

```

```

* # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local-Meck County
* File 2, Run 1, Scenario 11.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Urban local mix and speeds
M615 Comment:

```

```

    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 30.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.

```

```

M 48 Warning:
    there are no sales for vehicle class HDGV8b

```

```

    Calendar Year: 2010
    Month: July
    Altitude: Low
    Minimum Temperature: 71.0 (F)
    Maximum Temperature: 89.6 (F)
    Minimum Rel. Hum.: 47.0 (%)
    Maximum Rel. Hum.: 91.0 (%)
    Barometric Pressure: 30.00 (inches Hg)
    Nominal Fuel RVP: 7.8 psi
    Weathered RVP: 7.5 psi
    Fuel Sulfur Content: 30. ppm

```

```

    Exhaust I/M Program: No
    Evap I/M Program: No
    ATP Program: Yes
    Reformulated Gas: No

```

```

Vehicle Type:  LDGV  LDGT12  LDGT34  LDGT  HDGV  LDDV  LDDT  HDDV  MC  All Veh
GVWR:         <6000  >6000  (All)
-----

```

```

VMT Distribution:0.3769  0.4104  0.1399                0.0308  0.0003  0.0021  0.0339  0.0057  1.0000
-----

```

```

Composite Emission Factors (g/mi):
Composite VOC:   0.564  0.968  0.739  0.910  0.698  0.157  0.301  0.279  2.81  0.761
Composite NOX:  0.412  0.682  0.652  0.674  1.667  0.279  0.422  3.530  1.01  0.704
-----

```

```

* # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Rural Interstate - Gaston County
* File 2, Run 1, Scenario 12.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Rural interstate mix and speeds
M615 Comment:

```

```

    User supplied VMT mix.
M581 Warning:
    The user supplied freeway average speed of 42.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the freeway roadway type for
    all hours of the day and all vehicle types.

```

```

M 48 Warning:
    there are no sales for vehicle class HDGV8b

```

```

    Calendar Year: 2010
    Month: July
    Altitude: Low
    Minimum Temperature: 71.0 (F)
    Maximum Temperature: 89.6 (F)
    Minimum Rel. Hum.: 47.0 (%)

```

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.2748	0.2994	0.1021		0.0926	0.0002	0.0015	0.2252	0.0042	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.515	0.904	0.688	0.849	0.602	0.132	0.252	0.260	2.55	0.608
Composite NOX:	0.403	0.682	0.651	0.674	1.840	0.291	0.440	4.850	1.09	1.649

```
* #####
* Rural principle arterial- Gaston County
* File 2, Run 1, Scenario 13.
* #####
* Rural other principle arterial mix and speeds
M615 Comment:
    User supplied VMT mix.
M 96 Warning:
    66.0      speed reduced to 65 mph maximum
M581 Warning:
    The user supplied freeway average speed of 65.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the freeway roadway type for
    all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3431	0.3737	0.1273		0.0412	0.0003	0.0019	0.1072	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.468	0.834	0.634	0.783	0.542	0.119	0.226	0.218	3.17	0.616
Composite NOX:	0.431	0.736	0.701	0.727	2.151	0.538	0.816	8.914	1.52	1.566

```
* #####
* Rural minor arterial- Gaston County
* File 2, Run 1, Scenario 14.
* #####
* Rural minor arterial mix and speeds
* M615 Comment:
```


Composite Emission Factors (g/mi):										
Composite VOC:	0.512	0.900	0.685	0.846	0.590	0.131	0.249	0.228	2.54	0.688
Composite NOX:	0.405	0.684	0.653	0.676	1.847	0.294	0.446	4.085	1.09	0.810

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Composite Emission Factors (g/mi):										
Composite VOC:	0.518	0.907	0.691	0.852	0.602	0.134	0.254	0.239	2.56	0.692
Composite NOX:	0.402	0.679	0.649	0.672	1.819	0.287	0.435	4.023	1.08	0.823

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban interstate- Gaston County
* File 2, Run 1, Scenario 18.
* #####
* Urban interstate mix and speeds
* M615 Comment:
```

```

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 7.8 psi
Weathered RVP: 7.5 psi
Fuel Sulfur Content: 30. ppm

```

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban freeway- Gaston County
* File 2, Run 1, Scenario 19.
* #####
* Urban freeway mix and speeds
* M615 Comment:
```

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M581 Warning:

The user supplied freeway average speed of 65.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 7.8 psi
Weathered RVP: 7.5 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3588	0.3908	0.1332		0.0319	0.0003	0.0020	0.0775	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.468	0.834	0.634	0.783	0.541	0.119	0.226	0.216	3.17	0.630
Composite NOX:	0.431	0.736	0.701	0.727	2.150	0.538	0.816	8.822	1.52	1.298

* #

* Urban principle arterial- Gaston County

* File 2, Run 1, Scenario 20.

* #

* Urban principle arterial mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 26.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 7.8 psi
Weathered RVP: 7.5 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3784	0.4121	0.1405		0.0261	0.0003	0.0021	0.0348	0.0057	1.0000

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3770	0.4104	0.1398		0.0309	0.0003	0.0021	0.0338	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.590	1.002	0.767	0.943	0.757	0.170	0.327	0.314	2.95	0.793
Composite NOX:	0.430	0.703	0.672	0.695	1.614	0.288	0.437	3.646	0.97	0.724

```
* #####
* Urban local- Gaston County
* File 2, Run 1, Scenario 23.
* #####
* Urban local mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 30.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	7.8 psi
Weathered RVP:	7.5 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3769	0.4104	0.1399		0.0308	0.0003	0.0021	0.0339	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.564	0.968	0.739	0.910	0.698	0.157	0.301	0.279	2.81	0.761
Composite NOX:	0.412	0.682	0.652	0.674	1.667	0.279	0.422	3.530	1.01	0.704

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Composite Emission Factors (g/mi):										
Composite VOC:	0.716	1.207	1.224	1.211	1.173	0.175	0.386	0.293	2.97	0.949
Composite NOX:	0.453	0.712	0.853	0.748	2.580	0.410	0.685	6.571	1.11	1.346

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Composite Emission Factors (g/ml):										
Composite VOC:	0.699	1.187	1.201	1.191	1.129	0.170	0.375	0.256	2.95	0.958
Composite NOX:	0.458	0.722	0.863	0.758	2.643	0.442	0.740	5.911	1.16	1.059

```

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)

```

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VMT Distribution:0.3655 0.3980 0.1356 0.0386 0.0003 0.0020 0.0544 0.0056 1.0000

Composite Emission Factors (g/mi):

Composite VOC:	0.695	1.183	1.196	1.186	1.118	0.168	0.373	0.243	2.95	0.961
Composite NOX:	0.459	0.724	0.866	0.760	2.657	0.450	0.752	5.748	1.17	0.997

* #

* Rural minor collector- Rowan County

* File 1, Run 1, Scenario 4.

* #

* Rural minor collector mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 50.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year: 2010

Month: July

Altitude: Low

Minimum Temperature: 71.0 (F)

Maximum Temperature: 89.6 (F)

Minimum Rel. Hum.: 47.0 (%)

Maximum Rel. Hum.: 91.0 (%)

Barometric Pressure: 30.00 (inches Hg)

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 8.6 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VMT Distribution:0.3627 0.3948 0.1346 0.0407 0.0003 0.0020 0.0594 0.0055 1.0000

Composite Emission Factors (g/mi):

Composite VOC:	0.695	1.183	1.196	1.186	1.119	0.168	0.373	0.245	2.95	0.957
Composite NOX:	0.459	0.724	0.866	0.760	2.658	0.450	0.752	5.809	1.17	1.030

* #

* Rural local- Rowan County

* File 1, Run 1, Scenario 5.

* #

* Rural local mix and speeds

M615 Comment:

Composite Emission Factors (g/mi):										
Composite VOC:	0.673	1.150	1.159	1.152	1.089	0.164	0.362	0.257	3.09	0.884
Composite NOX:	0.469	0.742	0.885	0.778	2.803	0.548	0.918	8.505	1.34	1.776

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Composite Emission Factors (g/mi):										
Composite VOC:	0.748	1.242	1.263	1.247	1.237	0.188	0.416	0.288	3.06	1.033
Composite NOX:	0.445	0.697	0.838	0.733	2.435	0.383	0.640	4.756	1.08	0.809

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban collector- Rowan County
* File 1, Run 1, Scenario 9.
* #####
* Urban collector mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 36.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban local- Rowan County
* File 1, Run 1, Scenario 10.
* #####
* Urban local mix and speeds
  M615 Comment:
      User supplied VMT mix.
  M583 Warning:
      The user supplied arterial average speed of 30.0
```

will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.803	1.308	1.337	1.316	1.376	0.212	0.471	0.329	3.26	1.100
Composite NOX:	0.458	0.704	0.848	0.741	2.282	0.380	0.636	4.381	1.03	0.805

* #
* Rural Interstate - Iredell County(Pt)
* File 1, Run 1, Scenario 11.
* #
* Rural interstate mix and speeds
M615 Comment:

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 38.0
will be used for all hours of the day. 100% of VMT
has been assigned to the freeway roadway type for
all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.2748	0.2994	0.1021		0.0937	0.0002	0.0015	0.2241	0.0042	1.0000
Composite Emission Factors (g/mi):										

Composite VOC:	0.748	1.242	1.263	1.247	1.250	0.188	0.416	0.330	3.06	0.911
Composite NOX:	0.445	0.697	0.838	0.733	2.450	0.383	0.640	6.103	1.08	2.019

* #
 * Rural principle arterial- Iredell County(Pt)
 * File 1, Run 1, Scenario 12.
 * #
 * Rural other principle arterial mix and speeds

M615 Comment:
 User supplied VMT mix.
 M581 Warning:
 The user supplied freeway average speed of 54.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the freeway roadway type for
 all hours of the day and all vehicle types.

M 48 Warning:
 there are no sales for vehicle class HDGV8b

 Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

 Exhaust I/M Program: Yes
 Evap I/M Program: Yes
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3431	0.3737	0.1273		0.0417	0.0003	0.0019	0.1067	0.0053	1.0000

Composite Emission Factors (g/mi):

Composite VOC:	0.682	1.163	1.174	1.166	1.105	0.165	0.366	0.264	2.95	0.908
Composite NOX:	0.465	0.734	0.877	0.771	2.749	0.499	0.835	7.883	1.27	1.510

* #
 * Rural minor arterial- Iredell County(Pt)
 * File 1, Run 1, Scenario 13.
 * #
 * Rural minor arterial mix and speeds

M615 Comment:
 User supplied VMT mix.
 M583 Warning:
 The user supplied arterial average speed of 11.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:
 there are no sales for vehicle class HDGV8b

 Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

[illegible][illegible]

```
there are no sales for vehicle class HDGV8b
```

```

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

```

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3627	0.3948	0.1346		0.0407	0.0003	0.0020	0.0594	0.0055	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.866	1.387	1.422	1.396	1.556	0.239	0.532	0.439	3.49	1.163
Composite NOX:	0.490	0.739	0.889	0.777	2.180	0.402	0.672	5.182	0.97	0.993

* #

* Rural local- Iredell County(Pt)

* File 1, Run 1, Scenario 16.

* ##

* Rural local mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 20.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3619	0.3947	0.1346		0.0411	0.0003	0.0020	0.0599	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.930	1.469	1.514	1.480	1.730	0.264	0.589	0.507	3.69	1.243
Composite NOX:	0.522	0.773	0.931	0.813	2.104	0.428	0.716	5.522	0.92	1.043

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3770	0.4104	0.1399		0.0313	0.0003	0.0021	0.0334	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.880	1.404	1.442	1.414	1.586	0.245	0.545	0.408	3.53	1.194
Composite NOX:	0.497	0.746	0.898	0.785	2.156	0.408	0.682	4.697	0.96	0.851

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.987	1.540	1.590	1.553	1.847	0.278	0.619	0.491	3.82	1.324
Composite NOX:	0.542	0.795	0.958	0.837	2.067	0.445	0.744	5.152	0.90	0.909

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```

* File 1, Run 1, Scenario 22.
* #####
* Rural other principle arterial mix and speeds
M615 Comment:
    User supplied VMT mix.
M581 Warning:
    The user supplied freeway average speed of 59.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the freeway roadway type for
    all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b

    Calendar Year: 2010
    Month: July
    Altitude: Low
    Minimum Temperature: 71.0 (F)
    Maximum Temperature: 89.6 (F)
    Minimum Rel. Hum.: 47.0 (%)
    Maximum Rel. Hum.: 91.0 (%)
    Barometric Pressure: 30.00 (inches Hg)
    Nominal Fuel RVP: 9.0 psi
    Weathered RVP: 8.6 psi
    Fuel Sulfur Content: 30. ppm

    Exhaust I/M Program: Yes
    Evap I/M Program: Yes
    ATP Program: Yes
    Reformulated Gas: No

Vehicle Type:  LDGV  LDGT12  LDGT34  LDGT  HDGV  LDDV  LDDT  HDDV  MC  All Veh
GVWR:  <6000  >6000  (All)
-----
VMT Distribution: 0.3431  0.3737  0.1273  0.0417  0.0003  0.0019  0.1067  0.0053  1.0000
-----
Composite Emission Factors (g/ml):
Composite VOC:  0.668  1.142  1.150  1.144  1.083  0.163  0.360  0.258  3.23  0.893
Composite NOX:  0.472  0.747  0.890  0.784  2.842  0.584  0.977  9.122  1.39  1.656
-----

* #####
* Rural minor arterial- Lincoln County
* File 1, Run 1, Scenario 23.
* #####
* Rural minor arterial mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 37.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b

    Calendar Year: 2010
    Month: July
    Altitude: Low
    Minimum Temperature: 71.0 (F)
    Maximum Temperature: 89.6 (F)
    Minimum Rel. Hum.: 47.0 (%)
    Maximum Rel. Hum.: 91.0 (%)
    Barometric Pressure: 30.00 (inches Hg)
    Nominal Fuel RVP: 9.0 psi
    Weathered RVP: 8.6 psi
    Fuel Sulfur Content: 30. ppm

    Exhaust I/M Program: Yes
    Evap I/M Program: Yes
    ATP Program: Yes
    Reformulated Gas: No

```


Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Rural local- Lincoln County
* File 1, Run 1, Scenario 26.
* #####
* Rural local mix and speeds
M615 Comment:
        User supplied VMT mix.
M583 Warning:
        The user supplied arterial average speed of 30.0
        will be used for all hours of the day. 100% of VMT
        has been assigned to the arterial/collector roadway
        type for all hours of the day and all vehicle types.
M 48 Warning:
        there are no sales for vehicle class HDGV8b
```

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban principle arterial- Lincoln County
* File 1, Run 1, Scenario 27.
* #####
* Urban principle arterial mix and speeds
```

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 41.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3784	0.4121	0.1405		0.0264	0.0003	0.0021	0.0345	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.733	1.226	1.245	1.231	1.199	0.181	0.402	0.271	3.01	1.017
Composite NOX:	0.448	0.703	0.844	0.739	2.489	0.392	0.655	4.866	1.09	0.819

* #

* Urban minor arterial- Lincoln County

* File 1, Run 1, Scenario 28.

* #

* Urban minor arterial mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 23.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

Composite Emission Factors (g/mi):										
Composite VOC:	0.880	1.404	1.442	1.414	1.591	0.245	0.544	0.426	3.53	1.193
Composite NOX:	0.497	0.746	0.899	0.785	2.161	0.408	0.682	4.922	0.96	0.867

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

VMT Distribution:0.3770 0.4104 0.1399 0.0313 0.0003 0.0021 0.0334 0.0057 1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.895	1.424	1.464	1.434	1.627	0.251	0.558	0.423	3.58	1.213
Composite NOX:	0.505	0.754	0.908	0.793	2.138	0.414	0.692	4.771	0.94	0.860

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)

Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
 Evap I/M Program: Yes
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VMT Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Composite Emission Factors (g/mi):										
Composite VOC:	0.803	1.308	1.337	1.316	1.376	0.212	0.471	0.329	3.26	1.100
Composite NOX:	0.458	0.704	0.848	0.741	2.282	0.380	0.636	4.381	1.03	0.805
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----


```
*****
* MOBILE6.2.03 (24-Sep-2003) *
* Input file: RIL10N.IN (file 2, run 1). *
*****
```

```
* Reading Registration Distributions from the following external
* data file: NCAGE04.PRN
```

```
M 49 Warning:
      1.00      MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
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      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.999     MYR sum not = 1. (will normalize)
M 49 Warning:
      1.00      MYR sum not = 1. (will normalize)
```

```
* #####
```

```
* Rural principle arterial- Rowan County
```

```
* File 2, Run 1, Scenario 1.
```

```
* #####
```

```
* Rural other principle arterial mix and speeds
```

```
M615 Comment:
```

```
      User supplied VMT mix.
```

```
M581 Warning:
```

```
      The user supplied freeway average speed of 45.0
      will be used for all hours of the day. 100% of VMT
      has been assigned to the freeway roadway type for
      all hours of the day and all vehicle types.
```

```
M 48 Warning:
```

```
      there are no sales for vehicle class HDGV8b
```

```
      Calendar Year: 2010
      Month: July
      Altitude: Low
      Minimum Temperature: 71.0 (F)
      Maximum Temperature: 89.6 (F)
      Minimum Rel. Hum.: 47.0 (%)
      Maximum Rel. Hum.: 91.0 (%)
      Barometric Pressure: 30.00 (inches Hg)
      Nominal Fuel RVP: 9.0 psi
      Weathered RVP: 8.6 psi
      Fuel Sulfur Content: 30. ppm
```

```
      Exhaust I/M Program: No
      Evap I/M Program: No
      ATP Program: Yes
      Reformulated Gas: No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Composite Emission Factors (g/mi):										
Composite VOC:	0.797	1.317	1.330	1.321	1.173	0.175	0.386	0.293	2.97	1.032
Composite NOX:	0.537	0.833	0.968	0.867	2.580	0.410	0.685	6.571	1.11	1.435

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

VMT Distribution:0.3611 0.3932 0.1340 0.0390 0.0003 0.0020 0.0649 0.0055 1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.778	1.294	1.304	1.296	1.129	0.170	0.375	0.256	2.95	1.042
Composite NOX:	0.542	0.843	0.978	0.877	2.643	0.442	0.740	5.911	1.16	1.153

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)

Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3655	0.3980	0.1356		0.0386	0.0003	0.0020	0.0544	0.0056	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.773	1.288	1.298	1.291	1.118	0.168	0.373	0.243	2.95	1.045
Composite NOX:	0.544	0.845	0.980	0.880	2.657	0.450	0.752	5.748	1.17	1.092

* #
 * Rural minor collector- Rowan County
 * File 2, Run 1, Scenario 4.
 * #
 * Rural minor collector mix and speeds

M615 Comment:
 User supplied VMT mix.
 M583 Warning:
 The user supplied arterial average speed of 50.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:
 there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3627	0.3948	0.1346		0.0407	0.0003	0.0020	0.0594	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.773	1.288	1.298	1.291	1.119	0.168	0.373	0.245	2.95	1.041
Composite NOX:	0.544	0.845	0.980	0.880	2.658	0.450	0.752	5.809	1.17	1.124

* #
 * Rural local- Rowan County
 * File 2, Run 1, Scenario 5.
 * #
 * Rural local mix and speeds

M615 Comment:
 User supplied VMT mix.
 M583 Warning:
 The user supplied arterial average speed of 30.0

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3619	0.3947	0.1346		0.0411	0.0003	0.0020	0.0599	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.897	1.436	1.461	1.442	1.383	0.212	0.471	0.365	3.26	1.186
Composite NOX:	0.545	0.826	0.964	0.861	2.289	0.380	0.636	4.891	1.03	1.047

[illegible]

M615 Comment:

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 57.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3299	0.3592	0.1224		0.0535	0.0003	0.0018	0.1279	0.0050	1.0000
Composite Emission Factors (g/mi):										

there are no sales for vehicle class HDGV8b

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Rural Interstate - Tredell County(Pt)
* File 2, Run 1, Scenario 11.
* #####
* Rural interstate mix and speeds
* M615 Comment:
```

M581 Warning:

The user supplied freeway average speed of 38.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for all hours of the day and all vehicle types.

there are no sales for vehicle class HDGV8b

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Contingency Measures Documentation

The Charlotte-Gastonia-Rock Hill, NC-SC 8-Hour Ozone

North Carolina Attainment Demonstration

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3627	0.3948	0.1346		0.0407	0.0003	0.0020	0.0594	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.968	1.525	1.557	1.533	1.556	0.239	0.532	0.439	3.49	1.272
Composite NOX:	0.582	0.866	1.010	0.903	2.180	0.402	0.672	5.182	0.97	1.093

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3619	0.3947	0.1346		0.0411	0.0003	0.0020	0.0599	0.0055	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	1.041	1.620	1.661	1.631	1.730	0.264	0.589	0.507	3.69	1.363
Composite NOX:	0.619	0.905	1.056	0.944	2.104	0.428	0.716	5.522	0.92	1.147

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Appendix P
June 15, 2007


```
* #####
* Urban minor arterial- Iredell County(Pt)
* File 2, Run 1, Scenario 19.
* #####
* Urban minor arterial mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 22.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban collector- Iredell County(Pt)
* File 2, Run 1, Scenario 20.
* #####
* Urban collector mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 23.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban local- Iredell County(Pt)
* File 2, Run 1, Scenario 21.
* #####
* Urban local mix and speeds
M615 Comment:
        User supplied VMT mix.
M583 Warning:
        The user supplied arterial average speed of 18.0
        will be used for all hours of the day. 100% of VMT
        has been assigned to the arterial/collector roadway
        type for all hours of the day and all vehicle types.
M 48 Warning:
        there are no sales for vehicle class HDGV8b
```

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Rural principle arterial- Lincoln County
* File 2, Run 1, Scenario 22.
* #####
* Rural other principle arterial mix and speeds
```

```

User supplied VMT mix.
M581 Warning:
  The user supplied freeway average speed of 59.0
  will be used for all hours of the day. 100% of VMT
  has been assigned to the freeway roadway type for
  all hours of the day and all vehicle types.
M 48 Warning:
  there are no sales for vehicle class HDGV8b

```

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VMT Distribution:	0.3431	0.3737	0.1273		0.0417	0.0003	0.0019	0.1067	0.0053	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.740	1.240	1.244	1.241	1.083	0.163	0.360	0.258	3.23	0.966
Composite NOX:	0.557	0.870	1.006	0.904	2.842	0.584	0.977	9.122	1.39	1.745

```
M615 Comment:
      User supplied VMT mix.
M583 Warning:
      The user supplied arterial average speed of 37.0
      will be used for all hours of the day. 100% of VMT
      has been assigned to the arterial/collector roadway
      type for all hours of the day and all vehicle types.
M 48 Warning:
      there are no sales for vehicle class HDGV8b
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

Composite Emission Factors (g/mi):										
Composite VOC:	0.839	1.365	1.383	1.369	1.255	0.190	0.422	0.315	3.08	1.112
Composite NOX:	0.529	0.816	0.951	0.850	2.422	0.381	0.637	5.080	1.08	1.071

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

VMT Distribution:0.3655 0.3980 0.1356 0.0386 0.0003 0.0020 0.0544 0.0056 1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.769	1.282	1.291	1.284	1.111	0.168	0.371	0.241	2.95	1.040
Composite NOX:	0.545	0.848	0.983	0.883	2.677	0.463	0.774	5.919	1.20	1.104

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3627	0.3948	0.1346		0.0407	0.0003	0.0020	0.0594	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.797	1.317	1.330	1.321	1.161	0.175	0.386	0.262	2.97	1.068
Composite NOX:	0.537	0.833	0.968	0.867	2.565	0.410	0.685	5.285	1.11	1.080

```
* #####
* Rural local- Lincoln County
* File 2, Run 1, Scenario 26.
* #####
* Rural local mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 30.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3619	0.3947	0.1346		0.0411	0.0003	0.0020	0.0599	0.0055	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.897	1.436	1.461	1.442	1.383	0.212	0.471	0.365	3.26	1.186
Composite NOX:	0.545	0.826	0.964	0.861	2.289	0.380	0.636	4.891	1.03	1.047

```
* #####
* Urban principle arterial- Lincoln County
* File 2, Run 1, Scenario 27.
* #####
* Urban principle arterial mix and speeds
M615 Comment:
      User supplied VMT mix.
M583 Warning:
```


The user supplied arterial average speed of 41.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3784	0.4121	0.1405		0.0264	0.0003	0.0021	0.0345	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.817	1.340	1.355	1.343	1.199	0.181	0.402	0.271	3.01	1.111
Composite NOX:	0.532	0.823	0.958	0.858	2.489	0.392	0.655	4.866	1.09	0.917

* #
 * Urban minor arterial- Lincoln County
 * File 2, Run 1, Scenario 28.
 * #
 * Urban minor arterial mix and speeds
 M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 23.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3762	0.4099	0.1398		0.0301	0.0003	0.0021	0.0359	0.0058	1.0000

Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VMT Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Composite Emission Factors (g/mi):										
Composite VOC:	0.897	1.436	1.461	1.442	1.376	0.212	0.471	0.329	3.26	1.205
Composite NOX:	0.545	0.826	0.964	0.861	2.282	0.380	0.636	4.381	1.03	0.905
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

```

*****
* MOBILE6.2.03 (24-Sep-2003) *
* Input file: UC10.IN (file 1, run 1). *
*****

* Reading Registration Distributions from the following external
* data file: NCAGE04.PRN
M 49 Warning:
    1.00      MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
    0.999     MYR sum not = 1. (will normalize)
M 49 Warning:
    1.00      MYR sum not = 1. (will normalize)

* OBDII

* # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Rural principle arterial- Cabarrus County
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
* Rural other principle arterial mix and speeds
M615 Comment:
    User supplied VMT mix.
M581 Warning:
    The user supplied freeway average speed of 46.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the freeway roadway type for
    all hours of the day and all vehicle types.
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
M 48 Warning:
    there are no sales for vehicle class HDGV8b

    Calendar Year: 2010
    Month: July
    Altitude: Low
    Minimum Temperature: 71.0 (F)
    Maximum Temperature: 89.6 (F)
    Minimum Rel. Hum.: 47.0 (%)
    Maximum Rel. Hum.: 91.0 (%)
    Barometric Pressure: 30.00 (inches Hg)
    Nominal Fuel RVP: 9.0 psi
    Weathered RVP: 8.6 psi
    Fuel Sulfur Content: 30. ppm

    Exhaust I/M Program: Yes
    Evap I/M Program: Yes
    ATP Program: Yes
    Reformulated Gas: No

```

Composite Emission Factors (g/mi):										
Composite VOC:	0.711	1.202	1.218	1.206	1.164	0.173	0.383	0.289	2.96	0.944
Composite NOX:	0.454	0.715	0.856	0.751	2.600	0.418	0.700	6.698	1.12	1.362

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Rural major collector- Cabarrus County
* File 1, Run 1, Scenario 3.
* #####
* Rural major collector mix and speeds
M615 Comment:
        User supplied VMT mix.
M583 Warning:
        The user supplied arterial average speed of 38.0
        will be used for all hours of the day. 100% of VMT
        has been assigned to the arterial/collector roadway
        type for all hours of the day and all vehicle types.
M 48 Warning:
        there are no sales for vehicle class HDGV8b
```

Contingency Measures Documentation

The Charlotte-Gastonia-Rock Hill, NC-SC 8-Hour Ozone

North Carolina Attainment Demonstration

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3655	0.3980	0.1356		0.0386	0.0003	0.0020	0.0544	0.0056	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.748	1.242	1.263	1.247	1.239	0.188	0.416	0.296	3.06	1.021
Composite NOX:	0.445	0.697	0.838	0.733	2.438	0.383	0.640	4.879	1.08	0.921

```
* #####
* Rural minor collector- Cabarrus County
* File 1, Run 1, Scenario 4.
* #####
* Rural minor collector mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 34.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3627	0.3948	0.1346		0.0407	0.0003	0.0020	0.0594	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.771	1.269	1.292	1.275	1.301	0.199	0.440	0.328	3.15	1.045
Composite NOX:	0.445	0.694	0.836	0.730	2.364	0.378	0.631	4.860	1.06	0.944

```
* #####
* Rural local- Cabarrus County
* File 1, Run 1, Scenario 5.
* #####
* Rural local mix and speeds
* M615 Comment:
```


Composite Emission Factors (g/mi):										
Composite VOC:	0.764	1.260	1.283	1.266	1.295	0.196	0.434	0.353	3.12	0.993
Composite NOX:	0.443	0.692	0.834	0.728	2.392	0.377	0.630	6.014	1.06	1.400

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

VMT Distribution:0.3784 0.4121 0.1405 0.0264 0.0003 0.0021 0.0345 0.0057 1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.821	1.330	1.361	1.338	1.428	0.220	0.489	0.373	3.33	1.121
Composite NOX:	0.467	0.714	0.860	0.751	2.251	0.386	0.646	4.797	1.01	0.824

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VTM Distribution:	0.3762	0.4099	0.1398		0.0301	0.0003	0.0021	0.0359	0.0058	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.812	1.319	1.349	1.326	1.403	0.216	0.480	0.352	3.30	1.110
Composite NOX:	0.462	0.709	0.854	0.746	2.269	0.383	0.641	4.616	1.02	0.825

```
* #####
* Urban collector- Cabarrus County
* File 1, Run 1, Scenario 9.
* #####
* Urban collector mix and speeds
```

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VTM Distribution:	0.3770	0.4104	0.1399		0.0313	0.0003	0.0021	0.0334	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.803	1.308	1.337	1.316	1.374	0.212	0.471	0.328	3.26	1.100
Composite NOX:	0.458	0.704	0.848	0.741	2.281	0.380	0.636	4.371	1.03	0.805

```
* #####
* Urban local- Cabarrus County
* File 1, Run 1, Scenario 10.
* #####
* Urban local mix and speeds
```

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.803	1.308	1.337	1.316	1.376	0.212	0.471	0.329	3.26	1.100
Composite NOX:	0.458	0.704	0.848	0.741	2.282	0.380	0.636	4.381	1.03	0.805

* #

* Rural principle arterial- Union County

* File 1, Run 1, Scenario 11.

* #

* Rural other principle arterial mix and speeds

M615 Comment:

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 46.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VMT Distribution:	0.3431	0.3737	0.1273		0.0417	0.0003	0.0019	0.1067	0.0053	1.0000

Composite Emission Factors (g/mi):										

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3655	0.3980	0.1356		0.0386	0.0003	0.0020	0.0544	0.0056	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.716	1.207	1.224	1.211	1.160	0.175	0.386	0.260	2.97	0.984
Composite NOX:	0.453	0.712	0.853	0.748	2.564	0.410	0.685	5.229	1.11	0.956

* #

* Rural minor collector- Union County

* File 1, Run 1, Scenario 14.

* #

* Rural minor collector mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 44.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3627	0.3948	0.1346		0.0407	0.0003	0.0020	0.0594	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.720	1.212	1.229	1.216	1.171	0.176	0.390	0.267	2.98	0.985
Composite NOX:	0.451	0.710	0.851	0.746	2.548	0.406	0.678	5.229	1.11	0.980

* #

* Rural local- Union County

* File 1, Run 1, Scenario 15.

* #

* Rural local mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

```
there are no sales for vehicle class HDGV8b
```

```

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

```

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3619	0.3947	0.1346		0.0411	0.0003	0.0020	0.0599	0.0055	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.803	1.308	1.337	1.316	1.383	0.212	0.471	0.365	3.26	1.085
Composite NOX:	0.458	0.704	0.848	0.741	2.289	0.380	0.636	4.891	1.03	0.952

```
* #####  
* Urban freeway- Union County  
* File 1, Run 1, Scenario 16.  
* #####  
* Urban freeway mix and speeds  
M615 Comment:
```

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 36.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VMT Distribution:	0.3588	0.3908	0.1333		0.0323	0.0003	0.0020	0.0771	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.758	1.254	1.276	1.259	1.280	0.193	0.428	0.345	3.10	1.018
Composite NOX:	0.443	0.693	0.835	0.730	2.413	0.379	0.634	6.046	1.07	1.093

* Urban principle arterial mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 33.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	Yes
Evap I/M Program:	Yes
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VTM Distribution:	0.3784	0.4121	0.1405		0.0264	0.0003	0.0021	0.0345	0.0057	1.0000

Composite Emission Factors (g/ml):										
Composite VOC:	0.778	1.278	1.303	1.284	1.317	0.202	0.447	0.324	3.17	1.069
Composite NOX:	0.448	0.696	0.839	0.732	2.343	0.378	0.632	4.695	1.05	0.806

* Urban minor arterial- Union County

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 32.0 will be used for all hours of the day. 100% of VMT has been assigned to the arterial/collector roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3762	0.4099	0.1398		0.0301	0.0003	0.0021	0.0359	0.0058	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.786	1.287	1.313	1.294	1.336	0.205	0.455	0.324	3.20	1.078
Composite NOX:	0.451	0.699	0.842	0.735	2.326	0.379	0.634	4.563	1.04	0.815

* #
* Urban collector- Union County
* File 1, Run 1, Scenario 19.
* #
* Urban collector mix and speeds
M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 36.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3770	0.4104	0.1399		0.0313	0.0003	0.0021	0.0334	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.758	1.254	1.276	1.259	1.261	0.193	0.428	0.281	3.10	1.046
Composite NOX:	0.443	0.694	0.835	0.730	2.394	0.379	0.634	4.356	1.07	0.797

* #
* Urban local- Union County
* File 1, Run 1, Scenario 20.
* #
* Urban local mix and speeds
M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
 Evap I/M Program: Yes
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VTM Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Composite Emission Factors (g/mi):										
Composite VOC:	0.803	1.308	1.337	1.316	1.376	0.212	0.471	0.329	3.26	1.100
Composite NOX:	0.458	0.704	0.848	0.741	2.282	0.380	0.636	4.381	1.03	0.805
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----


```
*****
* MOBILE6.2.03 (24-Sep-2003) *
* Input file: UC10N.IN (file 1, run 1). *
*****
```

```
* Reading Registration Distributions from the following external
* data file: NCAGE04.PRN
```

```
M 49 Warning:
      1.00      MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
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M 49 Warning:
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M 49 Warning:
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M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.998     MYR sum not = 1. (will normalize)
M 49 Warning:
      0.999     MYR sum not = 1. (will normalize)
M 49 Warning:
      1.00      MYR sum not = 1. (will normalize)
```

```
* #####
* Rural principle arterial- Cabarrus County
* File 1, Run 1, Scenario 1.
* #####
* Rural other principle arterial mix and speeds
```

```
M615 Comment:
      User supplied VMT mix.
M581 Warning:
      The user supplied freeway average speed of 46.0
      will be used for all hours of the day. 100% of VMT
      has been assigned to the freeway roadway type for
      all hours of the day and all vehicle types.
M 48 Warning:
      there are no sales for vehicle class HDGV8b
```

```
      Calendar Year: 2010
      Month: July
      Altitude: Low
      Minimum Temperature: 71.0 (F)
      Maximum Temperature: 89.6 (F)
      Minimum Rel. Hum.: 47.0 (%)
      Maximum Rel. Hum.: 91.0 (%)
      Barometric Pressure: 30.00 (inches Hg)
      Nominal Fuel RVP: 9.0 psi
      Weathered RVP: 8.6 psi
      Fuel Sulfur Content: 30. ppm

      Exhaust I/M Program: No
      Evap I/M Program: No
      ATP Program: Yes
      Reformulated Gas: No
```

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Composite Emission Factors (g/mi):										
Composite VOC:	0.792	1.311	1.323	1.314	1.164	0.173	0.383	0.289	2.96	1.026
Composite NOX:	0.539	0.836	0.970	0.870	2.600	0.418	0.700	6.698	1.12	1.451

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Composite Emission Factors (g/mi):										
Composite VOC:	0.817	1.340	1.355	1.343	1.204	0.181	0.402	0.290	3.01	1.087
Composite NOX:	0.532	0.823	0.958	0.858	2.495	0.392	0.655	5.222	1.09	1.088

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Rural minor collector- Cabarrus County
* File 1, Run 1, Scenario 4.
* #####
* Rural minor collector mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 34.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Rural local- Cabarrus County
* File 1, Run 1, Scenario 5.
* #####
* Rural local mix and speeds
  M615 Comment:
        User supplied VMT mix.
  M583 Warning:
        The user supplied arterial average speed of 30.0
```

will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3619	0.3947	0.1346		0.0411	0.0003	0.0020	0.0599	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.897	1.436	1.461	1.442	1.383	0.212	0.471	0.365	3.26	1.186
Composite NOX:	0.545	0.826	0.964	0.861	2.289	0.380	0.636	4.891	1.03	1.047

* #
* Urban interstate- Cabarrus County
* File 1, Run 1, Scenario 6.
* #
* Urban interstate mix and speeds

M615 Comment:
User supplied VMT mix.

M581 Warning:
The user supplied freeway average speed of 35.0
will be used for all hours of the day. 100% of VMT
has been assigned to the freeway roadway type for
all hours of the day and all vehicle types.

M 48 Warning:
there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3299	0.3592	0.1224		0.0535	0.0003	0.0018	0.1279	0.0050	1.0000
Composite Emission Factors (g/mi):										

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3762	0.4099	0.1398		0.0301	0.0003	0.0021	0.0359	0.0058	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.907	1.448	1.474	1.455	1.403	0.216	0.480	0.352	3.30	1.216
Composite NOX:	0.550	0.832	0.970	0.867	2.269	0.383	0.641	4.616	1.02	0.925

* #

* Urban collector- Cabarrus County

* File 1, Run 1, Scenario 9.

* #

* Urban collector mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3770	0.4104	0.1399		0.0313	0.0003	0.0021	0.0334	0.0057	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.897	1.436	1.461	1.442	1.374	0.212	0.471	0.328	3.26	1.205
Composite NOX:	0.545	0.826	0.964	0.861	2.281	0.380	0.636	4.371	1.03	0.904

* #

* Urban local- Cabarrus County

* File 1, Run 1, Scenario 10.

* #

* Urban local mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.897	1.436	1.461	1.442	1.376	0.212	0.471	0.329	3.26	1.205
Composite NOX:	0.545	0.826	0.964	0.861	2.282	0.380	0.636	4.381	1.03	0.905

```
* #####
* Rural principle arterial- Union County
* File 1, Run 1, Scenario 11.
* #####
* Rural other principle arterial mix and speeds
M615 Comment:
```

User supplied VMT mix.

M581 Warning:

The user supplied freeway average speed of 46.0 will be used for all hours of the day. 100% of VMT has been assigned to the freeway roadway type for all hours of the day and all vehicle types.

M 48 Warning:

```
there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm

Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type: GVWR:	LDGV <6000	LDGT12 >6000	LDGT34 (All)	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VTM Distribution:	0.3431	0.3737	0.1273		0.0417	0.0003	0.0019	0.1067	0.0053	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.792	1.311	1.323	1.314	1.164	0.173	0.383	0.289	2.96	1.026
Composite NOX:	0.539	0.836	0.970	0.870	2.600	0.418	0.700	6.698	1.12	1.451

Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3655	0.3980	0.1356		0.0386	0.0003	0.0020	0.0544	0.0056	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.797	1.317	1.330	1.321	1.160	0.175	0.386	0.260	2.97	1.072
Composite NOX:	0.537	0.833	0.968	0.867	2.564	0.410	0.685	5.229	1.11	1.050

* #
* Rural minor collector- Union County
* File 1, Run 1, Scenario 14.
* #
* Rural minor collector mix and speeds
M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 44.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
Month: July
Altitude: Low
Minimum Temperature: 71.0 (F)
Maximum Temperature: 89.6 (F)
Minimum Rel. Hum.: 47.0 (%)
Maximum Rel. Hum.: 91.0 (%)
Barometric Pressure: 30.00 (inches Hg)
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 8.6 psi
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
Evap I/M Program: No
ATP Program: Yes
Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							

VTM Distribution:	0.3627	0.3948	0.1346		0.0407	0.0003	0.0020	0.0594	0.0055	1.0000

Composite Emission Factors (g/mi):										
Composite VOC:	0.802	1.322	1.336	1.326	1.171	0.176	0.390	0.267	2.98	1.073
Composite NOX:	0.536	0.831	0.965	0.865	2.548	0.406	0.678	5.229	1.11	1.074

* #
* Rural local- Union County
* File 1, Run 1, Scenario 15.
* #
* Rural local mix and speeds
M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 30.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3619	0.3947	0.1346		0.0411	0.0003	0.0020	0.0599	0.0055	1.0000
Composite Emission Factors (g/mi):										
Composite VOC:	0.897	1.436	1.461	1.442	1.383	0.212	0.471	0.365	3.26	1.186
Composite NOX:	0.545	0.826	0.964	0.861	2.289	0.380	0.636	4.891	1.03	1.047

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VTM Distribution:	0.3588	0.3908	0.1333		0.0323	0.0003	0.0020	0.0771	0.0055	1.0000
Composite Emission Factors (g/ml):										
Composite VOC:	0.846	1.372	1.390	1.377	1.280	0.193	0.428	0.345	3.10	1.111
Composite NOX:	0.529	0.814	0.950	0.849	2.413	0.379	0.634	6.046	1.07	1.186

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Appendix P
June 15, 2007

* File 1, Run 1, Scenario 17.
 * #####
 * Urban principle arterial mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 33.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3784	0.4121	0.1405		0.0264	0.0003	0.0021	0.0345	0.0057	1.0000

Composite Emission Factors (g/ml):										
Composite VOC:	0.869	1.400	1.421	1.405	1.317	0.202	0.447	0.324	3.17	1.170
Composite NOX:	0.534	0.818	0.954	0.852	2.343	0.378	0.632	4.695	1.05	0.904

* #####
 * Urban minor arterial- Union County
 * File 1, Run 1, Scenario 18.

* #####
 * Urban minor arterial mix and speeds

M615 Comment:

User supplied VMT mix.

M583 Warning:

The user supplied arterial average speed of 32.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway
 type for all hours of the day and all vehicle types.

M 48 Warning:

there are no sales for vehicle class HDGV8b

Calendar Year: 2010
 Month: July
 Altitude: Low
 Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

```
* #####
* Urban collector- Union County
* File 1, Run 1, Scenario 19.
* #####
* Urban collector mix and speeds
M615 Comment:
      User supplied VMT mix.
M583 Warning:
      The user supplied arterial average speed of 36.0
      will be used for all hours of the day. 100% of VMT
      has been assigned to the arterial/collector roadway
      type for all hours of the day and all vehicle types.
M 48 Warning:
      there are no sales for vehicle class HDGV8b
```

Calendar Year:	2010
Month:	July
Altitude:	Low
Minimum Temperature:	71.0 (F)
Maximum Temperature:	89.6 (F)
Minimum Rel. Hum.:	47.0 (%)
Maximum Rel. Hum.:	91.0 (%)
Barometric Pressure:	30.00 (inches Hg)
Nominal Fuel RVP:	9.0 psi
Weathered RVP:	8.6 psi
Fuel Sulfur Content:	30. ppm
Exhaust I/M Program:	No
Evap I/M Program:	No
ATP Program:	Yes
Reformulated Gas:	No

```
* #####
* Urban local- Union County
* File 1, Run 1, Scenario 20.
* #####
* Urban local mix and speeds
M615 Comment:
    User supplied VMT mix.
M583 Warning:
    The user supplied arterial average speed of 30.0
    will be used for all hours of the day. 100% of VMT
    has been assigned to the arterial/collector roadway
    type for all hours of the day and all vehicle types.
M 48 Warning:
    there are no sales for vehicle class HDGV8b
```

Minimum Temperature: 71.0 (F)
 Maximum Temperature: 89.6 (F)
 Minimum Rel. Hum.: 47.0 (%)
 Maximum Rel. Hum.: 91.0 (%)
 Barometric Pressure: 30.00 (inches Hg)
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 8.6 psi
 Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: No
 Evap I/M Program: No
 ATP Program: Yes
 Reformulated Gas: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VTM Distribution:	0.3769	0.4104	0.1400		0.0312	0.0003	0.0021	0.0335	0.0057	1.0000
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Composite Emission Factors (g/mi):										
Composite VOC:	0.897	1.436	1.461	1.442	1.376	0.212	0.471	0.329	3.26	1.205
Composite NOX:	0.545	0.826	0.964	0.861	2.282	0.380	0.636	4.381	1.03	0.905
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

5.3 VMT Used in Calculations

County/Road Type	2009	2010
Cabarrus County		
Urban Interstate	1,602,005	1,610,428
Urban Frwy/Exprwy	0	0
Urban Principal Art.	1,120,379	1,147,022
Urban Minor Art.	944,990	969,314
Urban Collector	748,220	774,257
Urban Local	527,392	539,423
Rural Interstate	0	0
Rural Principal Art.	277,914	286,071
Rural Minor Art.	286,075	290,790
Rural Major Collect.	577,434	596,978
Rural Minor Collect.	433,748	454,138
Rural Local	393,054	409,171
Gaston County		
Urban Interstate	2,723,477	2,743,715
Urban Frwy/Exprwy	120,248	121,555
Urban Principal Art.	1,510,449	1,546,147
Urban Minor Art.	1,183,697	1,211,498
Urban Collector	325,861	334,913
Urban Local	554,000	560,595
Rural Interstate	149,103	150,356
Rural Principal Art.	365,159	368,177
Rural Minor Art.	413,253	421,984
Rural Major Collect.	468,575	484,058
Rural Minor Collect.	310,588	326,561
Rural Local	333,699	340,909
Iredell County (partial)		
Urban Interstate	9,000	9,000
Urban Frwy/Exprwy	0	0
Urban Principal Art.	96,000	99,000
Urban Minor Art.	184,000	192,000
Urban Collector	66,000	69,000
Urban Local	209,000	216,000
Rural Interstate	1,143,000	1,168,000
Rural Principal Art.	6,000	6,000
Rural Minor Art.	210,000	215,000
Rural Major Collect.	258,000	267,000
Rural Minor Collect.	193,000	200,000
Rural Local	513,000	536,000

County/Road Type	2009	2010
Lincoln County		
Urban Interstate	0	0
Urban Frwy/Exprwy	0	0
Urban Principal Art.	103,693	103,693
Urban Minor Art.	46,769	46,769
Urban Collector	29,300	29,300
Urban Local	104,771	105,706
Rural Interstate	0	0
Rural Principal Art.	565,584	593,200
Rural Minor Art.	633,517	636,717
Rural Major Collect.	251,698	259,752
Rural Minor Collect.	426,038	438,916
Rural Local	525,446	542,442
Mecklenburg County		
Urban Interstate	8,917,313	8,988,791
Urban Frwy/Exprwy	5,378,225	5,725,955
Urban Principal Art.	4,367,496	4,447,915
Urban Minor Art.	5,086,069	5,143,369
Urban Collector	3,420,326	3,473,012
Urban Local	4,145,000	4,222,137
Rural Interstate	0	0
Rural Principal Art.	168,247	180,441
Rural Minor Art.	126,654	130,730
Rural Major Collect.	13,251	13,655
Rural Minor Collect.	165,599	171,364
Rural Local	276,955	288,485
Rowan County		
Urban Interstate	1,770,281	1,815,933
Urban Frwy/Exprwy	0	0
Urban Principal Art.	477,996	488,789
Urban Minor Art.	833,736	850,374
Urban Collector	518,445	535,332
Urban Local	379,745	385,434
Rural Interstate	0	0
Rural Principal Art.	138,430	143,091
Rural Minor Art.	118,512	122,397
Rural Major Collect.	644,672	661,765
Rural Minor Collect.	475,454	490,364
Rural Local	474,587	483,948

County/Road Type	2009	2010
Union County		
Urban Interstate	0	0
Urban Frwy/Exprwy	131,888	131,888
Urban Principal Art.	612,816	628,858
Urban Minor Art.	779,316	798,266
Urban Collector	228,372	235,622
Urban Local	502,801	512,857
Rural Interstate	0	0
Rural Principal Art.	372,635	379,878
Rural Minor Art.	139,296	141,829
Rural Major Collect.	941,745	970,489
Rural Minor Collect.	313,708	327,029
Rural Local	844,106	876,526

5.4 NONROAD2005c Option Files

Input file created by MACTEC on 5/1/2006 4:07:41 PM

This is the options file for the NONROAD program.
The data is sperated into "packets" bases on common
information. Each packet is specified by an
identifier and a terminator. Any notes or descriptions
can be placed between the data packets.

9/2005 epa: Add growth & tech years to OPTIONS packet
and Counties & Retrofit files to RUNFILES packet.

PERIOD PACKET

This is the packet that defines the period for
which emissions are to be estimated. The order of the
records matter. The selection of certain parameters
will cause some of the record that follow to be ignored.
The order of the records is as follows:

- 1 - Char 10 - Period type for this simulation.
Valid responses are: ANNUAL, SEASONAL, and MONTHLY
- 2 - Char 10 - Type of inventory produced.
Valid responses are: TYPICAL DAY and PERIOD TOTAL
- 3 - Integer - year of episode (4 digit year)
- 4 - Char 10 - Month of episode (use complete name of month)
- 5 - Char 10 - Type of day
Valid responses are: WEEKDAY and WEEKEND

/PERIOD/

Period type : Seasonal
Summation type : Typical Day
Year of episode : 2009
Season of year : Summer
Month of year :
Weekday or weekend : Weekday
Year of growth calc:
Year of tech sel :
/END/

OPTIONS PACKET

This is the packet that defines some of the user
options that drive the model. Most parameters are
used to make episode specific emission factor
adjustments. The order of the records is fixed.
The order is as follows.

- 1 - Char 80 - First title on reports
- 2 - Char 80 - Second title on reports
- 3 - Real 10 - Fuel RVP of gasoline for this simulation
- 4 - Real 10 - Oxygen weight percent of gasoline for simulation
- 5 - Real 10 - Percent sulfur for gasoline
- 6 - Real 10 - Percent sulfur for diesel
- 7 - Real 10 - Percent sulfur for LPG/CNG
- 8 - Real 10 - Minimum daily temperature (deg. F)
- 9 - Real 10 - maximum daily temperature (deg. F)
- 10 - Real 10 - Representative average daily temperature (deg. F)
- 11 - Char 10 - Flag to determine if region is high altitude
Valid responses are: HIGH and LOW
- 12 - Char 10 - Flag to determine if RFG adjustments are made
Valid responses are: YES and NO

/OPTIONS/

Title 1 : NC County Temp 75; Summer

```

Title 2      :
Fuel RVP for gas : 7.8
Oxygen Weight % : 0.0
Gas sulfur %    : 0.0030
Diesel sulfur %  : 0.0348
Marine Dsl sulfur %: 0.0408
CNG/LPG sulfur % : 0.003
Minimum temper (F) : 67
Maximum temper (F) : 89.67
Average temper (F) : 78.33
Altitude of region : LOW
/END/

```

REGION PACKET

This is the packet that defines the region for which emissions are to be estimated.

The first record tells the type of region and allocation to perform.

Valid responses are:

```

US TOTAL    - emissions are for entire USA without state
               breakout.

50STATE     - emissions are for all 50 states
               and Washington D.C., by state.

STATE       - emissions are for a select group of states
               and are state-level estimates

COUNTY     - emissions are for a select group of counties
               and are county level estimates.  If necessary,
               allocation from state to county will be performed.

SUBCOUNTY  - emissions are for the specified sub counties
               and are subcounty level estimates.  If necessary,
               county to subcounty allocation will be performed.

```

The remaining records define the regions to be included.
The type of data which must be specified depends on the region level.

```

US TOTAL    - Nothing needs to be specified.  The FIPS
               code 00000 is used automatically.

50STATE     - Nothing needs to be specified.  The FIPS
               code 00000 is used automatically.

STATE       - state FIPS codes

COUNTY     - state or county FIPS codes.  State FIPS
               code means include all counties in the
               state.

SUBCOUNTY  - county FIPS code and subregion code.

```

```

/REGION/
Region Level : COUNTY
CABARRUS, NC : 37025
GASTON, NC   : 37071
MECKLENBURG, NC : 37119
UNION, NC    : 37179
/END/

```

SOURCE CATEGORY PACKET

This packet is used to tell the model which source categories are to be processed. It is optional. If used, only those source categories list will appear in the output data file. If the packet is not found, the model will process all source categories in the population files.

```
-----
/SOURCE CATEGORY/
                :2260000000
                :2265000000
                :2267000000
                :2268000000
                :2270000000
                :2282000000
                :2285000000
/END/
```

```
Diesel Only -
                :2270000000
                :2282020000
                :2285002015
```

```
Spark Ignition Only -
                :2260000000
                :2265000000
                :2267000000
                :2268000000
                :2282005010
                :2282005015
                :2282010005
                :2285004015
                :2285006015
```

```
-----
This is the packet that lists the names of output files
and some of the input data files read by the model. If
a drive:\path\ is not given, the location of the
NONROAD.EXE file itself is assumed. You will probably
want to change the names of the Output and Message files
to match that of the OPTion file, e.g., MICH-97.OPT,
MICH-97.OUT, MICH-97.MSG, and if used MICH-97.AMS.
-----
```

```
/RUNFILES/
ALLOC XREF      : c:\nonroad\data\allocate\allocate.xrf
ACTIVITY        : c:\nonroad\data\activity\activity.dat
EXH TECHNOLOGY  : c:\nonroad\data\tech\tech-exh.dat
EVP TECHNOLOGY  : c:\nonroad\data\tech\tech-evp.dat
SEASONALITY     : c:\nonroad\data\season\season.dat
REGIONS         : c:\nonroad\data\season\season.dat
MESSAGE         : c:\nonroad\outputs\NC09Xc23.msg
OUTPUT DATA    : c:\nonroad\outputs\NC09Xc23.out
EPS2 AMS        : c:\nonroad\outputs\NC09Xc23.eps
US COUNTIES FIPS : c:\nonroad\data\allocate\fips.dat
RETROFIT        :
/END/
```

```
-----
This is the packet that defines the equipment population
files read by the model.
-----
```

```
/POP FILES/
POPULATION FILE : c:\nonroad\data\pop\NC.pop
/END/
```

```
-----
This is the packet that defines the growth files
files read by the model.
-----
```

```
/GROWTH FILES/
National defaults : c:\nonroad\data\growth\nation.grw
/END/
```

```

/ALLOC FILES/
Air Transportation : c:\nonroad\data\allocate\NC_airtr.alo
Contruction empl. : c:\nonroad\data\allocate\NC_const.alo
Harvested acres : c:\nonroad\data\allocate\NC_farms.alo
Golf course estab. : c:\nonroad\data\allocate\NC_golf.alo
Wholesale establis. : c:\nonroad\data\allocate\NC_holsl.alo
Family housing : c:\nonroad\data\allocate\NC_house.alo
Logging empl. : c:\nonroad\data\allocate\NC_loggn.alo
Landscape empl. : c:\nonroad\data\allocate\NC_lscap.alo
Coal mining empl. : c:\nonroad\data\allocate\NC_coal.alo
Manufacturing empl.: c:\nonroad\data\allocate\NC_mnfg.alo
Oil & Gas employees: c:\nonroad\data\allocate\NC_oil.alo
Census population : c:\nonroad\data\allocate\NC_pop.alo
RV Park establish. : c:\nonroad\data\allocate\NC_rvprk.alo
Snowmobiles : c:\nonroad\data\allocate\NC_snowm.alo
Snowblowers res. : c:\nonroad\data\allocate\NC_sbr.alo
Snowblowers comm. : c:\nonroad\data\allocate\NC_sbc.alo
Rec marine inbrd : c:\nonroad\data\allocate\NC_wib.alo
Rec marine outbrd : c:\nonroad\data\allocate\NC_wob.alo
Locomotive NOx : c:\nonroad\data\allocate\NC_rail.alo
/END/

```

This is the packet that defines the emssions factors
files read by the model.

```

/EMFAC FILES/
THC exhaust : c:\nonroad\data\emsfac\exhthc.emf
CO exhaust : c:\nonroad\data\emsfac\exhco.emf
NOX exhaust : c:\nonroad\data\emsfac\exhnox.emf
PM exhaust : c:\nonroad\data\emsfac\exhpm.emf
BSFC : c:\nonroad\data\emsfac\bsfc.emf
Crankcase : c:\nonroad\data\emsfac\crank.emf
Spillage : c:\nonroad\data\emsfac\spillage.emf
Diurnal : c:\nonroad\data\emsfac\evdiu.emf
TANK PERM : c:\nonroad\data\emsfac\evtank.emf
NON-RM HOSE PERM : c:\nonroad\data\emsfac\evhose.emf
RM FILL NECK PERM : c:\nonroad\data\emsfac\evneck.emf
RM SUPPLY/RETURN : c:\nonroad\data\emsfac\evsupret.emf
RM VENT PERM : c:\nonroad\data\emsfac\evvent.emf
HOT SOAKS : c:\nonroad\data\emsfac\evhotsk.emf
RUNINGLOSS : c:\nonroad\data\emsfac\evrunls.emf
/END/

```

This is the packet that defines the deterioration factors
files read by the model.

```

/DETERIORATE FILES/
THC exhaust : c:\nonroad\data\detfac\exhthc.det
CO exhaust : c:\nonroad\data\detfac\exhco.det
NOX exhaust : c:\nonroad\data\detfac\exhnox.det
PM exhaust : c:\nonroad\data\detfac\exhpm.det
Diurnal : c:\nonroad\data\detfac\evdiu.det
/END/

```

Optional Packets - Add initial slash "/" to activate

```

/STAGE II/
Control Factor : 0.0
/END/
Enter percent control: 95 = 95% control = 0.05 x uncontrolled
Default should be zero control.

```

```

MODELYEAR OUT/
by-model-year out : c:\nonroad\outputs\NC09Xc23.bmy
/END/

```

SI REPORT/

SI report file-CSV :C:\NONROAD\OUTPUTS\NRPOLLUT.CSV
/END/

PM Base Sulfur

cols 1-10: dsl tech type;

11-20: base sulfur wt%; or '1.0' means no-adjust (cert= in-use)

21-30: sulfate conversion rate

/PM BASE SULFUR/

T2	0.2000	0.02247
----	--------	---------

T3	0.2000	0.02247
----	--------	---------

T3B	0.0500	0.02247
-----	--------	---------

T4A	0.0500	0.02247
-----	--------	---------

T4B	0.0015	0.02247
-----	--------	---------

T4	0.0015	0.30
----	--------	------

T4N	0.0015	0.30
-----	--------	------

/END/

Input file created by MACTEC on 5/1/2006 4:07:41 PM

This is the options file for the NONROAD program.
The data is sperated into "packets" bases on common
information. Each packet is specified by an
identifier and a terminator. Any notes or descriptions
can be placed between the data packets.

9/2005 epa: Add growth & tech years to OPTIONS packet
and Counties & Retrofit files to RUNFILES packet.

PERIOD PACKET

This is the packet that defines the period for
which emissions are to be estimated. The order of the
records matter. The selection of certain parameters
will cause some of the record that follow to be ignored.
The order of the records is as follows:

- 1 - Char 10 - Period type for this simulation.
Valid responses are: ANNUAL, SEASONAL, and MONTHLY
- 2 - Char 10 - Type of inventory produced.
Valid responses are: TYPICAL DAY and PERIOD TOTAL
- 3 - Integer - year of episode (4 digit year)
- 4 - Char 10 - Month of episode (use complete name of month)
- 5 - Char 10 - Type of day
Valid responses are: WEEKDAY and WEEKEND

/PERIOD/
Period type : Seasonal
Summation type : Typical Day
Year of episode : 2009
Season of year : Summer
Month of year :
Weekday or weekend : Weekday
Year of growth calc:
Year of tech sel :
/END/

OPTIONS PACKET

This is the packet that defines some of the user
options that drive the model. Most parameters are
used to make episode specific emission factor
adjustments. The order of the records is fixed.
The order is as follows.

- 1 - Char 80 - First title on reports
- 2 - Char 80 - Second title on reports
- 3 - Real 10 - Fuel RVP of gasoline for this simulation
- 4 - Real 10 - Oxygen weight percent of gasoline for simulation
- 5 - Real 10 - Percent sulfur for gasoline
- 6 - Real 10 - Percent sulfur for diesel
- 7 - Real 10 - Percent sulfur for LPG/CNG
- 8 - Real 10 - Minimum daily temperature (deg. F)
- 9 - Real 10 - maximum daily temperature (deg. F)
- 10 - Real 10 - Representative average daily temperature (deg. F)
- 11 - Char 10 - Flag to determine if region is high altitude
Valid responses are: HIGH and LOW
- 12 - Char 10 - Flag to determine if RFG adjustments are made
Valid responses are: YES and NO

/OPTIONS/
Title 1 : NC County Temp 77; Summer
Title 2 :
Fuel RVP for gas : 7.8
Oxygen Weight % : 0.0

Gas sulfur % : 0.0030
Diesel sulfur % : 0.0348
Marine Dsl sulfur %: 0.0408
CNG/LPG sulfur % : 0.003
Minimum temper (F) : 66.67
Maximum temper (F) : 87.33
Average temper (F) : 77
Altitude of region : LOW
/END/

REGION PACKET

This is the packet that defines the region for which emissions are to be estimated.

The first record tells the type of region and allocation to perform.

Valid responses are:

US TOTAL - emissions are for entire USA without state breakout.

50STATE - emissions are for all 50 states and Washington D.C., by state.

STATE - emissions are for a select group of states and are state-level estimates

COUNTY - emissions are for a select group of counties and are county level estimates. If necessary, allocation from state to county will be performed.

SUBCOUNTY - emissions are for the specified sub counties and are subcounty level estimates. If necessary, county to subcounty allocation will be performed.

The remaining records define the regions to be included. The type of data which must be specified depends on the region level.

US TOTAL - Nothing needs to be specified. The FIPS code 00000 is used automatically.

50STATE - Nothing needs to be specified. The FIPS code 00000 is used automatically.

STATE - state FIPS codes

COUNTY - state or county FIPS codes. State FIPS code means include all counties in the state.

SUBCOUNTY - county FIPS code and subregion code.

/REGION/
Region Level : COUNTY
IREDELL, NC : 37097
LINCOLN, NC : 37109
ROWAN, NC : 37159
/END/

SOURCE CATEGORY PACKET

This packet is used to tell the model which source categories are to be processed. It is optional. If used, only those source categories list will appear in the output data file. If the packet is

not found, the model will process all source categories in the population files.

```
-----
/SOURCE CATEGORY/
                :2260000000
                :2265000000
                :2267000000
                :2268000000
                :2270000000
                :2282000000
                :2285000000
/END/
```

```
Diesel Only -
                :2270000000
                :2282020000
                :2285002015
```

```
Spark Ignition Only -
                :2260000000
                :2265000000
                :2267000000
                :2268000000
                :2282005010
                :2282005015
                :2282010005
                :2285004015
                :2285006015
```

```
-----
This is the packet that lists the names of output files
and some of the input data files read by the model.  If
a drive:\path\ is not given, the location of the
NONROAD.EXE file itself is assumed.  You will probably
want to change the names of the Output and Message files
to match that of the OPTion file, e.g., MICH-97.OPT,
MICH-97.OUT, MICH-97.MSG, and if used MICH-97.AMS.
-----
```

```
/RUNFILES/
ALLOC XREF      : c:\nonroad\data\allocate\allocate.xrf
ACTIVITY        : c:\nonroad\data\activity\activity.dat
EXH TECHNOLOGY  : c:\nonroad\data\tech\tech-exh.dat
EVP TECHNOLOGY  : c:\nonroad\data\tech\tech-evp.dat
SEASONALITY     : c:\nonroad\data\season\season.dat
REGIONS         : c:\nonroad\data\season\season.dat
MESSAGE         : c:\nonroad\outputs\CC09Xc25.msg
OUTPUT DATA    : c:\nonroad\outputs\CC09Xc25.out
EPS2 AMS        : c:\nonroad\outputs\CC09Xc25.eps
US COUNTIES FIPS : c:\nonroad\data\allocate\fips.dat
RETROFIT        :
/END/
```

```
-----
This is the packet that defines the equipment population
files read by the model.
-----
```

```
/POP FILES/
POPULATION FILE : c:\nonroad\data\pop\NC.pop
/END/
```

```
-----
This is the packet that defines the growth files
files read by the model.
-----
```

```
/GROWTH FILES/
National defaults : c:\nonroad\data\growth\nation.grw
/END/
```

```
/ALLOC FILES/
Air Transportation : c:\nonroad\data\allocate\NC_airtr.alo
```



```

Contruction empl. : c:\nonroad\data\allocate\NC_const.alo
Harvested acres : c:\nonroad\data\allocate\NC_farms.alo
Golf course estab. : c:\nonroad\data\allocate\NC_golf.alo
Wholesale establis. : c:\nonroad\data\allocate\NC_holsl.alo
Family housing : c:\nonroad\data\allocate\NC_house.alo
Logging empl. : c:\nonroad\data\allocate\NC_loggn.alo
Landscape empl. : c:\nonroad\data\allocate\NC_lscap.alo
Coal mining empl. : c:\nonroad\data\allocate\NC_coal.alo
Manufacturing empl.: c:\nonroad\data\allocate\NC_mnfg.alo
Oil & Gas employees: c:\nonroad\data\allocate\NC_oil.alo
Census population : c:\nonroad\data\allocate\NC_pop.alo
RV Park establish. : c:\nonroad\data\allocate\NC_rvprk.alo
Snowmobiles : c:\nonroad\data\allocate\NC_snowm.alo
Snowblowers res. : c:\nonroad\data\allocate\NC_sbr.alo
Snowblowers comm. : c:\nonroad\data\allocate\NC_sbc.alo
Rec marine inbrd : c:\nonroad\data\allocate\NC_wib.alo
Rec marine outbrd : c:\nonroad\data\allocate\NC_wob.alo
Locomotive NOx : c:\nonroad\data\allocate\NC_rail.alo
/END/

```

This is the packet that defines the emssions factors
files read by the model.

```

/EMFAC FILES/
THC exhaust : c:\nonroad\data\emsfac\exhthc.emf
CO exhaust : c:\nonroad\data\emsfac\exhco.emf
NOX exhaust : c:\nonroad\data\emsfac\exhnox.emf
PM exhaust : c:\nonroad\data\emsfac\exhpm.emf
BSFC : c:\nonroad\data\emsfac\bsfc.emf
Crankcase : c:\nonroad\data\emsfac\crank.emf
Spillage : c:\nonroad\data\emsfac\spillage.emf
Diurnal : c:\nonroad\data\emsfac\evdiu.emf
TANK PERM : c:\nonroad\data\emsfac\evtank.emf
NON-RM HOSE PERM : c:\nonroad\data\emsfac\evhose.emf
RM FILL NECK PERM : c:\nonroad\data\emsfac\evneck.emf
RM SUPPLY/RETURN : c:\nonroad\data\emsfac\evsupret.emf
RM VENT PERM : c:\nonroad\data\emsfac\evvent.emf
HOT SOAKS : c:\nonroad\data\emsfac\evhotsk.emf
RUNINGLOSS : c:\nonroad\data\emsfac\evrunls.emf
/END/

```

This is the packet that defines the deterioration factors
files read by the model.

```

/DETERIORATE FILES/
THC exhaust : c:\nonroad\data\detfac\exhthc.det
CO exhaust : c:\nonroad\data\detfac\exhco.det
NOX exhaust : c:\nonroad\data\detfac\exhnox.det
PM exhaust : c:\nonroad\data\detfac\exhpm.det
Diurnal : c:\nonroad\data\detfac\evdiu.det
/END/

```

Optional Packets - Add initial slash "/" to activate

```

/STAGE II/
Control Factor : 0.0
/END/
Enter percent control: 95 = 95% control = 0.05 x uncontrolled
Default should be zero control.

```

```

MODELYEAR OUT/
by-model-year out : c:\nonroad\outputs\NC09Xc25.bmy
/END/

```

```

SI REPORT/
SI report file-CSV :C:\NONROAD\OUTPUTS\NRPOLLUT.CSV
/END/

```

PM Base Sulfur

```

cols 1-10: dsl tech type;
11-20: base sulfur wt%; or '1.0' means no-adjust (cert= in-use)
21-30: sulfate conversion rate
/PM BASE SULFUR/
T2      0.2000    0.02247
T3      0.2000    0.02247
T3B     0.0500    0.02247
T4A     0.0500    0.02247
T4B     0.0015    0.02247
T4      0.0015    0.30
T4N     0.0015    0.30
/END/

```

Input file created by MACTEC on 5/1/2006 4:07:41 PM

This is the options file for the NONROAD program.
The data is sperated into "packets" bases on common
information. Each packet is specified by an
identifier and a terminator. Any notes or descriptions
can be placed between the data packets.

9/2005 epa: Add growth & tech years to OPTIONS packet
and Counties & Retrofit files to RUNFILES packet.

PERIOD PACKET

This is the packet that defines the period for
which emissions are to be estimated. The order of the
records matter. The selection of certain parameters
will cause some of the record that follow to be ignored.
The order of the records is as follows:

- 1 - Char 10 - Period type for this simulation.
Valid responses are: ANNUAL, SEASONAL, and MONTHLY
- 2 - Char 10 - Type of inventory produced.
Valid responses are: TYPICAL DAY and PERIOD TOTAL
- 3 - Integer - year of episode (4 digit year)
- 4 - Char 10 - Month of episode (use complete name of month)
- 5 - Char 10 - Type of day
Valid responses are: WEEKDAY and WEEKEND

/PERIOD/
Period type : Seasonal
Summation type : Typical Day
Year of episode : 2010
Season of year : Summer
Month of year :
Weekday or weekend : Weekday
Year of growth calc:
Year of tech sel :
/END/

OPTIONS PACKET

This is the packet that defines some of the user
options that drive the model. Most parameters are
used to make episode specific emission factor
adjustments. The order of the records is fixed.
The order is as follows.

- 1 - Char 80 - First title on reports
- 2 - Char 80 - Second title on reports
- 3 - Real 10 - Fuel RVP of gasoline for this simulation
- 4 - Real 10 - Oxygen weight percent of gasoline for simulation
- 5 - Real 10 - Percent sulfur for gasoline
- 6 - Real 10 - Percent sulfur for diesel
- 7 - Real 10 - Percent sulfur for LPG/CNG
- 8 - Real 10 - Minimum daily temperature (deg. F)
- 9 - Real 10 - maximum daily temperature (deg. F)
- 10 - Real 10 - Representative average daily temperature (deg. F)
- 11 - Char 10 - Flag to determine if region is high altitude
Valid responses are: HIGH and LOW
- 12 - Char 10 - Flag to determine if RFG adjustments are made
Valid responses are: YES and NO

/OPTIONS/
Title 1 : NC County Temp 75; Summer
Title 2 :
Fuel RVP for gas : 7.8
Oxygen Weight % : 0.0

```

Gas sulfur %      : 0.0030
Diesel sulfur %   : 0.0348
Marine Dsl sulfur %: 0.0408
CNG/LPG sulfur %  : 0.003
Minimum temper (F) : 67
Maximum temper (F) : 89.67
Average temper (F) : 78.33
Altitude of region : LOW
/END/

```

REGION PACKET

This is the packet that defines the region for which emissions are to be estimated.

The first record tells the type of region and allocation to perform.

Valid responses are:

```

US TOTAL   - emissions are for entire USA without state
              breakout.

50STATE    - emissions are for all 50 states
              and Washington D.C., by state.

STATE      - emissions are for a select group of states
              and are state-level estimates

COUNTY    - emissions are for a select group of counties
              and are county level estimates.  If necessary,
              allocation from state to county will be performed.

SUBCOUNTY - emissions are for the specified sub counties
              and are subcounty level estimates.  If necessary,
              county to subcounty allocation will be performed.

```

The remaining records define the regions to be included.
The type of data which must be specified depends on the region level.

```

US TOTAL   - Nothing needs to be specified.  The FIPS
              code 00000 is used automatically.

50STATE    - Nothing needs to be specified.  The FIPS
              code 00000 is used automatically.

STATE      - state FIPS codes

COUNTY    - state or county FIPS codes.  State FIPS
              code means include all counties in the
              state.

SUBCOUNTY - county FIPS code and subregion code.

```

```

/REGION/
Region Level      : COUNTY
CABARRUS, NC     : 37025
GASTON, NC       : 37071
MECKLENBURG, NC  : 37119
UNION, NC        : 37179
/END/

```

SOURCE CATEGORY PACKET

This packet is used to tell the model which source categories are to be processed. It is optional.
If used, only those source categories list will

appear in the output data file. If the packet is not found, the model will process all source categories in the population files.

```
-----
/SOURCE CATEGORY/
      :2260000000
      :2265000000
      :2267000000
      :2268000000
      :2270000000
      :2282000000
      :2285000000
/END/
```

```
Diesel Only -
      :2270000000
      :2282020000
      :2285002015
```

```
Spark Ignition Only -
      :2260000000
      :2265000000
      :2267000000
      :2268000000
      :2282005010
      :2282005015
      :2282010005
      :2285004015
      :2285006015
```

```
-----
This is the packet that lists the names of output files
and some of the input data files read by the model. If
a drive:\path\ is not given, the location of the
NONROAD.EXE file itself is assumed. You will probably
want to change the names of the Output and Message files
to match that of the OPTion file, e.g., MICH-97.OPT,
MICH-97.OUT, MICH-97.MSG, and if used MICH-97.AMS.
-----
```

```
/RUNFILES/
ALLOC XREF      : c:\nonroad\data\allocate\allocate.xrf
ACTIVITY        : c:\nonroad\data\activity\activity.dat
EXH TECHNOLOGY  : c:\nonroad\data\tech\tech-exh.dat
EVP TECHNOLOGY  : c:\nonroad\data\tech\tech-evp.dat
SEASONALITY     : c:\nonroad\data\season\season.dat
REGIONS         : c:\nonroad\data\season\season.dat
MESSAGE         : c:\nonroad\outputs\NC09Xc23.msg
OUTPUT DATA    : c:\nonroad\outputs\NC09Xc23.out
EPS2 AMS        : c:\nonroad\outputs\NC09Xc23.eps
US COUNTIES FIPS : c:\nonroad\data\allocate\fips.dat
RETROFIT        :
/END/
```

```
-----
This is the packet that defines the equipment population
files read by the model.
-----
```

```
/POP FILES/
POPULATION FILE : c:\nonroad\data\pop\NC.pop
/END/
```

```
-----
This is the packet that defines the growth files
files read by the model.
-----
```

```
/GROWTH FILES/
National defaults : c:\nonroad\data\growth\nation.grw
/END/
```

```
/ALLOC FILES/
```

```

Air Transportation : c:\nonroad\data\allocate\NC_airtr.alo
Contruction empl. : c:\nonroad\data\allocate\NC_const.alo
Harvested acres : c:\nonroad\data\allocate\NC_farms.alo
Golf course estab. : c:\nonroad\data\allocate\NC_golf.alo
Wholesale establis. : c:\nonroad\data\allocate\NC_holsl.alo
Family housing : c:\nonroad\data\allocate\NC_house.alo
Logging empl. : c:\nonroad\data\allocate\NC_loggn.alo
Landscape empl. : c:\nonroad\data\allocate\NC_lscap.alo
Coal mining empl. : c:\nonroad\data\allocate\NC_coal.alo
Manufacturing empl.: c:\nonroad\data\allocate\NC_mnfg.alo
Oil & Gas employees: c:\nonroad\data\allocate\NC_oil.alo
Census population : c:\nonroad\data\allocate\NC_pop.alo
RV Park establish. : c:\nonroad\data\allocate\NC_rvprk.alo
Snowmobiles : c:\nonroad\data\allocate\NC_snowm.alo
Snowblowers res. : c:\nonroad\data\allocate\NC_sbr.alo
Snowblowers comm. : c:\nonroad\data\allocate\NC_sbc.alo
Rec marine inbrd : c:\nonroad\data\allocate\NC_wib.alo
Rec marine outbrd : c:\nonroad\data\allocate\NC_wob.alo
Locomotive NOx : c:\nonroad\data\allocate\NC_rail.alo
/END/

```

```

-----
This is the packet that defines the emssions factors
files read by the model.
-----

```

```

/EMFAC FILES/
THC exhaust : c:\nonroad\data\emsfac\exhthc.emf
CO exhaust : c:\nonroad\data\emsfac\exhco.emf
NOX exhaust : c:\nonroad\data\emsfac\exhnox.emf
PM exhaust : c:\nonroad\data\emsfac\exhpm.emf
BSFC : c:\nonroad\data\emsfac\bsfc.emf
Crankcase : c:\nonroad\data\emsfac\crank.emf
Spillage : c:\nonroad\data\emsfac\spillage.emf
Diurnal : c:\nonroad\data\emsfac\evdiu.emf
TANK PERM : c:\nonroad\data\emsfac\evtank.emf
NON-RM HOSE PERM : c:\nonroad\data\emsfac\evhose.emf
RM FILL NECK PERM : c:\nonroad\data\emsfac\evneck.emf
RM SUPPLY/RETURN : c:\nonroad\data\emsfac\evsupret.emf
RM VENT PERM : c:\nonroad\data\emsfac\evvent.emf
HOT SOAKS : c:\nonroad\data\emsfac\evhotsk.emf
RUNINGLOSS : c:\nonroad\data\emsfac\evrunls.emf
/END/

```

```

-----
This is the packet that defines the deterioration factors
files read by the model.
-----

```

```

/DETERIORATE FILES/
THC exhaust : c:\nonroad\data\detfac\exhthc.det
CO exhaust : c:\nonroad\data\detfac\exhco.det
NOX exhaust : c:\nonroad\data\detfac\exhnox.det
PM exhaust : c:\nonroad\data\detfac\exhpm.det
Diurnal : c:\nonroad\data\detfac\evdiu.det
/END/

```

Optional Packets - Add initial slash "/" to activate

```

/STAGE II/
Control Factor : 0.0
/END/
Enter percent control: 95 = 95% control = 0.05 x uncontrolled
Default should be zero control.

```

```

MODELYEAR OUT/
by-model-year out : c:\nonroad\outputs\NC09Xc23.bmy
/END/

```

```

SI REPORT/
SI report file-CSV :C:\NONROAD\OUTPUTS\NRPOLLUT.CSV
/END/

```

```

PM Base Sulfur
cols 1-10: dsl tech type;
11-20: base sulfur wt%; or '1.0' means no-adjust (cert= in-use)
21-30: sulfate conversion rate
/PM BASE SULFUR/
T2      0.2000    0.02247
T3      0.2000    0.02247
T3B     0.0500    0.02247
T4A     0.0500    0.02247
T4B     0.0015    0.02247
T4      0.0015    0.30
T4N     0.0015    0.30
/END/

```

Input file created by MACTEC on 5/1/2006 4:07:41 PM

This is the options file for the NONROAD program.
The data is sperated into "packets" bases on common
information. Each packet is specified by an
identifier and a terminator. Any notes or descriptions
can be placed between the data packets.

9/2005 epa: Add growth & tech years to OPTIONS packet
and Counties & Retrofit files to RUNFILES packet.

PERIOD PACKET

This is the packet that defines the period for
which emissions are to be estimated. The order of the
records matter. The selection of certain parameters
will cause some of the record that follow to be ignored.
The order of the records is as follows:

- 1 - Char 10 - Period type for this simulation.
Valid responses are: ANNUAL, SEASONAL, and MONTHLY
- 2 - Char 10 - Type of inventory produced.
Valid responses are: TYPICAL DAY and PERIOD TOTAL
- 3 - Integer - year of episode (4 digit year)
- 4 - Char 10 - Month of episode (use complete name of month)
- 5 - Char 10 - Type of day
Valid responses are: WEEKDAY and WEEKEND

/PERIOD/
Period type : Seasonal
Summation type : Typical Day
Year of episode : 2010
Season of year : Summer
Month of year :
Weekday or weekend : Weekday
Year of growth calc:
Year of tech sel :
/END/

OPTIONS PACKET

This is the packet that defines some of the user
options that drive the model. Most parameters are
used to make episode specific emission factor
adjustments. The order of the records is fixed.
The order is as follows.

- 1 - Char 80 - First title on reports
- 2 - Char 80 - Second title on reports
- 3 - Real 10 - Fuel RVP of gasoline for this simulation
- 4 - Real 10 - Oxygen weight percent of gasoline for simulation
- 5 - Real 10 - Percent sulfur for gasoline
- 6 - Real 10 - Percent sulfur for diesel
- 7 - Real 10 - Percent sulfur for LPG/CNG
- 8 - Real 10 - Minimum daily temperature (deg. F)
- 9 - Real 10 - maximum daily temperature (deg. F)
- 10 - Real 10 - Representative average daily temperature (deg. F)
- 11 - Char 10 - Flag to determine if region is high altitude
Valid responses are: HIGH and LOW
- 12 - Char 10 - Flag to determine if RFG adjustments are made
Valid responses are: YES and NO

/OPTIONS/
Title 1 : NC County Temp 77; Summer
Title 2 :
Fuel RVP for gas : 7.8
Oxygen Weight % : 0.0


```

Gas sulfur %      : 0.0030
Diesel sulfur %   : 0.0348
Marine Dsl sulfur %: 0.0408
CNG/LPG sulfur %  : 0.003
Minimum temper (F) : 66.67
Maximum temper (F) : 87.33
Average temper (F) : 77
Altitude of region : LOW
/END/

```

REGION PACKET

This is the packet that defines the region for which emissions are to be estimated.

The first record tells the type of region and allocation to perform.

Valid responses are:

```

US TOTAL  - emissions are for entire USA without state
             breakout.

50STATE   - emissions are for all 50 states
             and Washington D.C., by state.

STATE     - emissions are for a select group of states
             and are state-level estimates

COUNTY   - emissions are for a select group of counties
             and are county level estimates.  If necessary,
             allocation from state to county will be performed.

SUBCOUNTY - emissions are for the specified sub counties
             and are subcounty level estimates.  If necessary,
             county to subcounty allocation will be performed.

```

The remaining records define the regions to be included.
The type of data which must be specified depends on the region level.

```

US TOTAL  - Nothing needs to be specified.  The FIPS
             code 00000 is used automatically.

50STATE   - Nothing needs to be specified.  The FIPS
             code 00000 is used automatically.

STATE     - state FIPS codes

COUNTY   - state or county FIPS codes.  State FIPS
             code means include all counties in the
             state.

SUBCOUNTY - county FIPS code and subregion code.

```

```

/REGION/
Region Level      : COUNTY
IREDELL, NC      : 37097
LINCOLN, NC      : 37109
ROWAN, NC        : 37159
/END/

```

SOURCE CATEGORY PACKET

This packet is used to tell the model which source categories are to be processed. It is optional. If used, only those source categories list will appear in the output data file. If the packet is

not found, the model will process all source categories in the population files.

```
-----
/SOURCE CATEGORY/
                :2260000000
                :2265000000
                :2267000000
                :2268000000
                :2270000000
                :2282000000
                :2285000000
/END/
```

```
Diesel Only -
                :2270000000
                :2282020000
                :2285002015
```

```
Spark Ignition Only -
                :2260000000
                :2265000000
                :2267000000
                :2268000000
                :2282005010
                :2282005015
                :2282010005
                :2285004015
                :2285006015
```

```
-----
This is the packet that lists the names of output files
and some of the input data files read by the model.  If
a drive:\path\ is not given, the location of the
NONROAD.EXE file itself is assumed.  You will probably
want to change the names of the Output and Message files
to match that of the OPTion file, e.g., MICH-97.OPT,
MICH-97.OUT, MICH-97.MSG, and if used MICH-97.AMS.
-----
```

```
/RUNFILES/
ALLOC XREF      : c:\nonroad\data\allocate\allocate.xrf
ACTIVITY        : c:\nonroad\data\activity\activity.dat
EXH TECHNOLOGY  : c:\nonroad\data\tech\tech-exh.dat
EVP TECHNOLOGY  : c:\nonroad\data\tech\tech-evp.dat
SEASONALITY     : c:\nonroad\data\season\season.dat
REGIONS        : c:\nonroad\data\season\season.dat
MESSAGE        : c:\nonroad\outputs\CC10Xc25.msg
OUTPUT DATA    : c:\nonroad\outputs\CC10Xc25.out
EPS2 AMS        : c:\nonroad\outputs\CC10Xc25.eps
US COUNTIES FIPS : c:\nonroad\data\allocate\fips.dat
RETROFIT        :
/END/
```

```
-----
This is the packet that defines the equipment population
files read by the model.
-----
```

```
/POP FILES/
POPULATION FILE : c:\nonroad\data\pop\NC.pop
/END/
```

```
-----
This is the packet that defines the growth files
files read by the model.
-----
```

```
/GROWTH FILES/
National defaults : c:\nonroad\data\growth\nation.grw
/END/
```

```
/ALLOC FILES/
Air Transportation : c:\nonroad\data\allocate\NC_airtr.alo
```

```

Contruccion empl. : c:\nonroad\data\allocate\NC_const.alo
Harvested acres   : c:\nonroad\data\allocate\NC_farms.alo
Golf course estab. : c:\nonroad\data\allocate\NC_golf.alo
Wholesale establis.: c:\nonroad\data\allocate\NC_holsl.alo
Family housing    : c:\nonroad\data\allocate\NC_house.alo
Logging empl.     : c:\nonroad\data\allocate\NC_loggn.alo
Landscape empl.   : c:\nonroad\data\allocate\NC_lscap.alo
Coal mining empl. : c:\nonroad\data\allocate\NC_coal.alo
Manufacturing empl.: c:\nonroad\data\allocate\NC_mnfg.alo
Oil & Gas employees: c:\nonroad\data\allocate\NC_oil.alo
Census population : c:\nonroad\data\allocate\NC_pop.alo
RV Park establish. : c:\nonroad\data\allocate\NC_rvprk.alo
Snowmobiles       : c:\nonroad\data\allocate\NC_snowm.alo
Snowblowers res.  : c:\nonroad\data\allocate\NC_sbr.alo
Snowblowers comm. : c:\nonroad\data\allocate\NC_sbc.alo
Rec marine inbrd   : c:\nonroad\data\allocate\NC_wib.alo
Rec marine outbrd  : c:\nonroad\data\allocate\NC_wob.alo
Locomotive NOx    : c:\nonroad\data\allocate\NC_rail.alo
/END/

```

This is the packet that defines the emssions factors
files read by the model.

```

/EMFAC FILES/
THC exhaust       : c:\nonroad\data\emsfac\exhthc.emf
CO exhaust        : c:\nonroad\data\emsfac\exhco.emf
NOX exhaust       : c:\nonroad\data\emsfac\exhnox.emf
PM exhaust        : c:\nonroad\data\emsfac\exhpm.emf
BSFC              : c:\nonroad\data\emsfac\bsfc.emf
Crankcase         : c:\nonroad\data\emsfac\crank.emf
Spillage          : c:\nonroad\data\emsfac\spillage.emf
Diurnal           : c:\nonroad\data\emsfac\evdiu.emf
TANK PERM         : c:\nonroad\data\emsfac\evtank.emf
NON-RM HOSE PERM  : c:\nonroad\data\emsfac\evhose.emf
RM FILL NECK PERM : c:\nonroad\data\emsfac\evneck.emf
RM SUPPLY/RETURN  : c:\nonroad\data\emsfac\evsupret.emf
RM VENT PERM      : c:\nonroad\data\emsfac\evvent.emf
HOT SOAKS         : c:\nonroad\data\emsfac\evhotsk.emf
RUNINGLOSS        : c:\nonroad\data\emsfac\evrunls.emf
/END/

```

This is the packet that defines the deterioration factors
files read by the model.

```

/DETERIORATE FILES/
THC exhaust       : c:\nonroad\data\detfac\exhthc.det
CO exhaust        : c:\nonroad\data\detfac\exhco.det
NOX exhaust       : c:\nonroad\data\detfac\exhnox.det
PM exhaust        : c:\nonroad\data\detfac\exhpm.det
Diurnal           : c:\nonroad\data\detfac\evdiu.det
/END/

```

Optional Packets - Add initial slash "/" to activate

```

/STAGE II/
Control Factor    : 0.0
/END/
Enter percent control: 95 = 95% control = 0.05 x uncontrolled
Default should be zero control.

```

```

MODELYEAR OUT/
by-model-year out : c:\nonroad\outputs\NC09Xc25.bmy
/END/

```

```

SI REPORT/
SI report file-CSV :C:\NONROAD\OUTPUTS\NRPOLLUT.CSV
/END/

```

PM Base Sulfur

```

cols 1-10: dsl tech type;
11-20: base sulfur wt%; or '1.0' means no-adjust (cert= in-use)
21-30: sulfate conversion rate
/PM BASE SULFUR/
T2      0.2000    0.02247
T3      0.2000    0.02247
T3B     0.0500    0.02247
T4A     0.0500    0.02247
T4B     0.0015    0.02247
T4      0.0015    0.30
T4N     0.0015    0.30
/END/

```