

Appendix II D

Carbon Monoxide Emission Factors

This Appendix lists the input settings used to calculate Carbon Monoxide emissions using Mobile 6 software and the resulting output data. Input and output files are listed for all horizon analysis years and the 2006 base year.

2006 Mobile 6 Input Settings

```
POLLUTANTS      : CO
REPORT FILE     : output\06r2l_at.TX1
DATABASE OUTPUT :
WITH FIELDNAMES :
* DAILY OUTPUT  :
* AGGREGATED OUTPUT :
EMISSIONS TABLE : output\06r2l_at.wek REPLACE
RUN DATA      :
> Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
> OBD2 test, fuel runs, 35 mph, use 2002 registration data,
> 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
> 2007 base year, Arterial
EXPRESS HC AS TOG :
EXPAND EVAPORATIVE :
EXPAND EXHAUST   :
* MIN/MAX TEMPERATURE: 36 64
HOURLY TEMPERATURES: 42.0 44.0 49.0 51.0 55.0 58.0 64.0 66.0 66.0 66.0 62.0 58.0
55.0 53.0 51.0 50.0 48.0 47.0 45.0 44.0 44.0 43.0 42.0 42.0
VMT FRACTIONS    :
0.5067 0.0770 0.2562 0.0790 0.0363 0.0111 0.0011 0.0009
0.0006 0.0024 0.0029 0.0032 0.0113 0.0028 0.0013 0.0072
REG DIST        : ..\lv_files\lv_reg02.rdt
VMT BY HOUR     : ..\lv_files\Hvmt_lv.wek
START DIST      : ..\unlv\sdist.lv
STARTS PER DAY  : ..\unlv\stperday.lv
WE DA TRI LEN DI : ..\unlv\wedatrip.lv
NGV FRACTION    : ..\lv_files\ngvfr05.lv
OXYGENATED FUELS : .001 .999 0.027 0.035 1
ANTI-TAMP PROG  :
83 81 50 22222 22222222 2 11 090. 22212112
NO REFUELING    :

> Exhaust I/M program #1
I/M PROGRAM      : 1 1983 2050 1 TRC 2500/IDLE
I/M MODEL YEARS  : 1 1968 1995
I/M VEHICLES     : 1 22222 22222222 2
I/M STRINGENCY   : 1 22
I/M COMPLIANCE   : 1 90
I/M WAIVER RATES : 1 0.1 0.1
I/M EFFECTIVENESS : 1.00 1.00 1.00
I/M GRACE PERIOD : 1 2
I/M CREDIT FILE  : ..\tech12.d
> Exhaust I/M program #2
I/M PROGRAM      : 2 1983 2050 1 TRC OBD I/M
I/M MODEL YEARS  : 2 1996 2050
I/M VEHICLES     : 2 22222 22222222 2
I/M STRINGENCY   : 2 22
I/M COMPLIANCE   : 2 90
I/M WAIVER RATES : 2 0.1 0.1
I/M GRACE PERIOD : 2 2
> Evap I/M program #3
I/M PROGRAM      : 3 1983 2050 1 TRC EVAP OBD
I/M MODEL YEARS  : 3 1996 2050
I/M VEHICLES     : 3 22222 11111111 1
I/M COMPLIANCE   : 3 90
I/M WAIVER RATES : 3 0.1 0.1
I/M GRACE PERIOD : 3 2

SCENARIO RECORD :
> *****
> Control Scenario #1 for 2007 : Arterial 2.5 mph
```

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> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 2.5 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #2 for 2007 : Arterial 5.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 5.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #3 for 2007 : Arterial 10.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 10.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #4 for 2007 : Arterial 15.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 15.0 Arterial

FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #5 for 2007 : Arterial 20.0 mph
> *****

CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 20.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #6 for 2007 : Arterial 25.0 mph
> *****

CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 25.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #7 for 2007 : Arterial 30.0 mph
> *****

CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 30.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****

> Control Scenario #8 for 2007 : Arterial 35.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 35.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #9 for 2007 : Arterial 40.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 40.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #10 for 2007 : Arterial 45.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 45.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #11 for 2007 : Arterial 50.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv

AVERAGE SPEED : 50.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #12 for 2007 : Arterial 55.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 55.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #13 for 2007 : Arterial 60.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 60.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #14 for 2007 : Arterial 65.0 mph
> *****
CALENDAR YEAR : 2007
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 65.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

2006 Mobile 6 Output Data

- * Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
- * OBD2 test, fuel runs, 35 mph, use 2002 registration data,
- * 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
- * 2007 base year, Arterial
- *

M615 Comment:

User supplied VMT mix.

- * Reading Registration Distributions from the following external
- * data file: ..\LV_FILES\LV_REG02.RDT

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 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)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.998 MYR sum not = 1. (will normalize)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

- * Reading Hourly VMT distribution from the following external

* data file: ..\LV_FILES\HVMT_LV.WEK

- * Reading hourly start distribution from the following external

* data file: ..\UNLV\SDIST.LV

- * Reading start Starts/day distribution from the following external

* data file: ..\UNLV\STPERDAY.LV

- * Reading non-default WEEKDAY RUNNING LOSS HOURLY TRIP LENGTH FRACTIONS

* from the following external data file: ..\UNLV\WEDATRIP.LV

- * Reading NGV IMPLEMENTATION SCHEDULE from the following external

* data file: ..\LV_FILES\NGVFR05.LV

Reading User Supplied NGV phase-in fractions

M603 Comment:

User has disabled the calculation of REFUELING emissions.

- * Exhaust I/M program #1
- * Exhaust I/M program #2
- * Evap I/M program #3

* File 1, Run 1, Scenario 1.

* #####
 * *****
 * Control Scenario #1 for 2007 : Arterial 2.5 mph
 * *****

- * Reading start SOAK distribution from the following external
- * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 2.5
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

- *** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
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All Veh

GVWR:	<6000	>6000	(All)						
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VMT Distribution:	0.5061	0.3331	0.1136		0.0103	0.0006	0.0018	0.0273	0.0072	1.0000
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Composite Emission Factors (g/mi):

Composite CO :	22.37	22.04	22.86	22.25	42.02	3.690	2.207	10.886	83.56	22.598
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Exhaust emissions (g/mi):

CO Start:	4.42	4.70	4.24	4.58	0.514	0.251	4.051			
CO Running:	17.95	17.35	18.61	17.67	3.176	1.956	79.509			
CO Total Exhaust:	22.37	22.04	22.86	22.25	42.02	3.690	2.207	10.886	83.56	22.598

* File 1, Run 1, Scenario 2.

* #####
 * *****
 * Control Scenario #2 for 2007 : Arterial 5.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..UNLV\SOAKDST.LV

User supplied hot soak activity: ..UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 5.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001

Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027

Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									

GVWR:	<6000	>6000	(All)						
-------	-------	-------	-------	--	--	--	--	--	--

VMT Distribution:	0.5061	0.3331	0.1136	0.0103	0.0006	0.0018	0.0273	0.0072	1.0000
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Composite Emission Factors (g/mi):

Composite CO : 14.02 14.13 14.13 14.13 33.58 3.107 1.848 8.886 49.85 14.357

 Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 9.60 9.43 9.88 9.54 2.592 1.597 45.803
 CO Total Exhaust: 14.02 14.13 14.13 14.13 33.58 3.107 1.848 8.886 49.85 14.357

* File 1, Run 1, Scenario 3.

* #####
 * *****

* Control Scenario #3 for 2007 : Arterial 10.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 10.0
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

 VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 10.30 10.54 10.25 10.46 22.34 2.302 1.352 6.127 26.06 10.474

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 Exhaust emissions (g/mi):

CO Start:	4.42	4.70	4.24	4.58	0.514	0.251	4.051			
CO Running:	5.87	5.84	6.01	5.88	1.788	1.101	22.004			
CO Total Exhaust:	10.30	10.54	10.25	10.46	22.34	2.302	1.352	6.127	26.06	10.474

* File 1, Run 1, Scenario 4.

* #####
 * *****

* Control Scenario #4 for 2007 : Arterial 15.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 15.0
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

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

 VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Composite Emission Factors (g/mi):
 Composite CO : 9.28 9.52 9.20 9.44 15.70 1.804 1.046 4.422 18.34 9.327

 Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 4.85 4.82 4.95 4.85 1.290 0.795 14.292
 CO Total Exhaust: 9.28 9.52 9.20 9.44 15.70 1.804 1.046 4.422 18.34 9.327

* File 1, Run 1, Scenario 5.

* #####
 * *****

* Control Scenario #5 for 2007 : Arterial 20.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

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

 VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Composite Emission Factors (g/mi):

Regional Transportation Commission of Southern Nevada

Composite CO : 8.76 9.01 8.67 8.92 11.66 1.489 0.851 3.339 14.79 8.741

 Exhaust emissions (g/mi):

CO Start:	4.42	4.70	4.24	4.58	0.514	0.251	4.051		
CO Running:	4.34	4.31	4.42	4.34	0.974	0.600	10.742		
CO Total Exhaust:	8.76	9.01	8.67	8.92	11.66	1.489	0.851	3.339	14.79 8.741

* File 1, Run 1, Scenario 6.

* #####
 * *****

* Control Scenario #6 for 2007 : Arterial 25.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

 VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

 Composite Emission Factors (g/mi):
 Composite CO : 8.50 8.74 8.39 8.65 9.15 1.284 0.725 2.639 12.62 8.424

Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 4.07 4.05 4.14 4.07 0.770 0.474 8.565
 CO Total Exhaust: 8.50 8.74 8.39 8.65 9.15 1.284 0.725 2.639 12.62 8.424

* File 1, Run 1, Scenario 7.
 * #####
 * #####
 * Control Scenario #7 for 2007 : Arterial 30.0 mph
 * #####

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2007
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

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

 VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Regional Transportation Commission of Southern Nevada

Composite Emission Factors (g/mi):

Composite CO : 8.40 8.64 8.28 8.55 7.59 1.151 0.643 2.183 11.04 8.289

 Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 3.97 3.95 4.04 3.97 0.637 0.392 6.991
 CO Total Exhaust: 8.40 8.64 8.28 8.55 7.59 1.151 0.643 2.183 11.04 8.289

* File 1, Run 1, Scenario 8.

* #####
 * *****

* Control Scenario #8 for 2007 : Arterial 35.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 35.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 8.47 8.71 8.34 8.62 6.65 1.066 0.591 1.890 9.88 8.328

Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
CO Running: 4.04 4.02 4.10 4.04 0.551 0.340 5.824
CO Total Exhaust: 8.47 8.71 8.34 8.62 6.65 1.066 0.591 1.890 9.88 8.328

* File 1, Run 1, Scenario 9.

* #####
* *****

* Control Scenario #9 for 2007 : Arterial 40.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 40.0
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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Regional Transportation Commission of Southern Nevada

 Composite Emission Factors (g/mi):

Composite CO : 8.79 9.03 8.66 8.93 6.15 1.014 0.559 1.712 9.06 8.615

 Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 4.36 4.33 4.41 4.35 0.500 0.308 5.013
 CO Total Exhaust: 8.79 9.03 8.66 8.93 6.15 1.014 0.559 1.712 9.06 8.615

* File 1, Run 1, Scenario 10.

* #####
 * *****

* Control Scenario #10 for 2007 : Arterial 45.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 45.0
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

 VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Composite Emission Factors (g/mi):
 Composite CO : 9.11 9.34 8.97 9.25 6.01 0.988 0.543 1.623 8.55 8.910

Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 4.68 4.65 4.72 4.67 0.474 0.292 4.501
 CO Total Exhaust: 9.11 9.34 8.97 9.25 6.01 0.988 0.543 1.623 8.55 8.910

* File 1, Run 1, Scenario 11.
 * #####
 * *****
 * Control Scenario #11 for 2007 : Arterial 50.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

Regional Transportation Commission of Southern Nevada

VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

 Composite Emission Factors (g/mi):

Composite CO : 9.43 9.66 9.28 9.56 6.21 0.984 0.541 1.611 8.34 9.213

 Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 5.00 4.96 5.04 4.98 0.470 0.289 4.292
 CO Total Exhaust: 9.43 9.66 9.28 9.56 6.21 0.984 0.541 1.611 8.34 9.213

* File 1, Run 1, Scenario 12.

* #####
 * *****

* Control Scenario #12 for 2007 : Arterial 55.0 mph

* *****

* Reading start SOAK distribution from the following external

* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 55.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.5061	0.3331	0.1136		0.0103	0.0006	0.0018	0.0273	0.0072	1.0000

Composite Emission Factors (g/mi):										
Composite CO :	9.75	9.97	9.59	9.88	6.78	1.002	0.552	1.673	8.34	9.523

Exhaust emissions (g/mi):										
CO Start:	4.42	4.70	4.24	4.58		0.514	0.251		4.051	
CO Running:	5.33	5.28	5.35	5.29		0.488	0.301		4.292	
CO Total Exhaust:	9.75	9.97	9.59	9.88	6.78	1.002	0.552	1.673	8.34	9.523

* File 1, Run 1, Scenario 13.
 * #####
 * *****
 * Control Scenario #13 for 2007 : Arterial 60.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..UNLV\SOAKDST.LV

User supplied hot soak activity: ..UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 60.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

Regional Transportation Commission of Southern Nevada

 VMT Distribution: 0.5061 0.3331 0.1136 0.0103 0.0006 0.0018 0.0273 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 10.07 10.29 9.91 10.19 7.82 1.045 0.578 1.818 13.51 9.877

Exhaust emissions (g/mi):

CO Start: 4.42 4.70 4.24 4.58 0.514 0.251 4.051
 CO Running: 5.65 5.59 5.66 5.61 0.530 0.327 9.461
 CO Total Exhaust: 10.07 10.29 9.91 10.19 7.82 1.045 0.578 1.818 13.51 9.877

* File 1, Run 1, Scenario 14.

* #####
 * *****

* Control Scenario #14 for 2007 : Arterial 65.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 65.0
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2007

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	
All Veh										
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.5061	0.3331	0.1136	0.0103	0.0006	0.0018	0.0273	0.0072	1.0000	

Composite Emission Factors (g/mi):										
Composite CO :	10.39	10.60	10.22	10.51	9.52	1.118	0.623	2.068	18.68	10.242

Exhaust emissions (g/mi):										
CO Start:	4.42	4.70	4.24	4.58	0.514	0.251	4.051			
CO Running:	5.97	5.91	5.97	5.92	0.603	0.372	14.629			
CO Total Exhaust:	10.39	10.60	10.22	10.51	9.52	1.118	0.623	2.068	18.68	10.242

2010 Mobile 6 Input Settings

POLLUTANTS : CO
REPORT FILE : output\10r2l_at.TX1
DATABASE OUTPUT :
WITH FIELDNAMES :
* DAILY OUTPUT :
* AGGREGATED OUTPUT :
EMISSIONS TABLE : output\10r2l_at.wek REPLACE
RUN DATA :
> Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
> OBD2 test, fuel runs, 35 mph, use 2002 registration data,
> 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
> 2011 base year, Arterial
EXPRESS HC AS TOG :
EXPAND EVAPORATIVE :
EXPAND EXHAUST :
* MIN/MAX TEMPERATURE: 36 64
HOURLY TEMPERATURES: 42.0 44.0 49.0 51.0 55.0 58.0 64.0 66.0 66.0 66.0 62.0 58.0
55.0 53.0 51.0 50.0 48.0 47.0 45.0 44.0 44.0 43.0 42.0 42.0
VMT FRACTIONS :
0.5067 0.0770 0.2562 0.0790 0.0363 0.0111 0.0011 0.0009
0.0006 0.0024 0.0029 0.0032 0.0113 0.0028 0.0013 0.0072
REG DIST : ..\lv_files\lv_reg02.rdt
VMT BY HOUR : ..\lv_files\Hvmt_lv.wek
START DIST : ..\unlv\sdist.lv
STARTS PER DAY : ..\unlv\stperday.lv
WE DA TRI LEN DI : ..\unlv\wedatrip.lv
NGV FRACTION : ..\lv_files\ngvfr10.lv
OXYGENATED FUELS : .001 .999 0.027 0.035 1
ANTI-TAMP PROG :
83 81 50 22222 22222222 2 11 090. 22212112
NO REFUELING :

> Exhaust I/M program #1
I/M PROGRAM : 1 1983 2050 1 TRC 2500/IDLE
I/M MODEL YEARS : 1 1968 1995
I/M VEHICLES : 1 22222 22222222 2
I/M STRINGENCY : 1 22
I/M COMPLIANCE : 1 90
I/M WAIVER RATES : 1 0.1 0.1
I/M EFFECTIVENESS : 1.00 1.00 1.00
I/M GRACE PERIOD : 1 2
I/M CREDIT FILE : ..\tech12.d
> Exhaust I/M program #2
I/M PROGRAM : 2 1983 2050 1 TRC OBD I/M
I/M MODEL YEARS : 2 1996 2050
I/M VEHICLES : 2 22222 22222222 2
I/M STRINGENCY : 2 22
I/M COMPLIANCE : 2 90
I/M WAIVER RATES : 2 0.1 0.1
I/M GRACE PERIOD : 2 2
> Evap I/M program #3
I/M PROGRAM : 3 1983 2050 1 TRC EVAP OBD
I/M MODEL YEARS : 3 1996 2050
I/M VEHICLES : 3 22222 11111111 1
I/M COMPLIANCE : 3 90
I/M WAIVER RATES : 3 0.1 0.1
I/M GRACE PERIOD : 3 2

SCENARIO RECORD :

```

> *****
> Control Scenario #1 for 2011 : Arterial 2.5 mph
> *****
CALENDAR YEAR      : 2011
EVALUATION MONTH  : 1
SOAK DISTRIBUTION  : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED     : 2.5 Arterial
FUEL RVP           : 9
SEASON            : 2
FUEL PROGRAM       : 4
  30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
  30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
  80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
  80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

```

```

SCENARIO RECORD   :
> *****
> Control Scenario #2 for 2011 : Arterial 5.0 mph
> *****
CALENDAR YEAR      : 2011
EVALUATION MONTH  : 1
SOAK DISTRIBUTION  : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED     : 5.0 Arterial
FUEL RVP           : 9
SEASON            : 2
FUEL PROGRAM       : 4
  30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
  30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
  80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
  80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

```

```

SCENARIO RECORD   :
> *****
> Control Scenario #3 for 2011 : Arterial 10.0 mph
> *****
CALENDAR YEAR      : 2011
EVALUATION MONTH  : 1
SOAK DISTRIBUTION  : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED     : 10.0 Arterial
FUEL RVP           : 9
SEASON            : 2
FUEL PROGRAM       : 4
  30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
  30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
  80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
  80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

```

```

SCENARIO RECORD   :
> *****
> Control Scenario #4 for 2011 : Arterial 15.0 mph
> *****
CALENDAR YEAR      : 2011
EVALUATION MONTH  : 1
SOAK DISTRIBUTION  : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED     : 15.0 Arterial
FUEL RVP           : 9

```

SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #5 for 2011 : Arterial 20.0 mph
> *****

CALENDAR YEAR : 2011
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 20.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #6 for 2011 : Arterial 25.0 mph
> *****

CALENDAR YEAR : 2011
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 25.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #7 for 2011 : Arterial 30.0 mph
> *****

CALENDAR YEAR : 2011
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 30.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #8 for 2011 : Arterial 35.0 mph
 > *****
 CALENDAR YEAR : 2011
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
 AVERAGE SPEED : 35.0 Arterial
 FUEL RVP : 9
 SEASON : 2
 FUEL PROGRAM : 4
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #9 for 2011 : Arterial 40.0 mph
 > *****
 CALENDAR YEAR : 2011
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
 AVERAGE SPEED : 40.0 Arterial
 FUEL RVP : 9
 SEASON : 2
 FUEL PROGRAM : 4
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #10 for 2011 : Arterial 45.0 mph
 > *****
 CALENDAR YEAR : 2011
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
 AVERAGE SPEED : 45.0 Arterial
 FUEL RVP : 9
 SEASON : 2
 FUEL PROGRAM : 4
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #11 for 2011 : Arterial 50.0 mph
 > *****
 CALENDAR YEAR : 2011
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
 AVERAGE SPEED : 50.0 Arterial

FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #12 for 2011 : Arterial 55.0 mph
> *****

CALENDAR YEAR : 2011
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 55.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #13 for 2011 : Arterial 60.0 mph
> *****

CALENDAR YEAR : 2011
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 60.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #14 for 2011 : Arterial 65.0 mph
> *****

CALENDAR YEAR : 2011
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 65.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

2010 Mobile 6 Output Data

- * Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
- * OBD2 test, fuel runs, 35 mph, use 2002 registration data,
- * 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
- * 2011 base year, Arterial
- *

M615 Comment:

User supplied VMT mix.

- * Reading Registration Distributions from the following external

* data file: ..\LV_FILES\LV_REG02.RDT

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 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)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.998 MYR sum not = 1. (will normalize)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

- * Reading Hourly VMT distribution from the following external

* data file: ..\LV_FILES\HVMT_LV.WEK

- * Reading hourly start distribution from the following external

* data file: ..\UNLV\SDIST.LV

- * Reading start Starts/day distribution from the following external

* data file: ..\UNLV\STPERDAY.LV

- * Reading non-default WEEKDAY RUNNING LOSS HOURLY TRIP LENGTH FRACTIONS

* from the following external data file: ..\UNLV\WEDATRIP.LV

- * Reading NGV IMPLEMENTATION SCHEDULE from the following external

Regional Transportation Commission of Southern Nevada

* data file: ..\LV_FILES\NGVFR10.LV

Reading User Supplied NGV phase-in fractions

M603 Comment:

User has disabled the calculation of REFUELING emissions.

* Exhaust I/M program #1

* Exhaust I/M program #2

* Evap I/M program #3

* File 1, Run 1, Scenario 1.

* #####

* *****

* Control Scenario #1 for 2011 : Arterial 2.5 mph

* *****

* Reading start SOAK distribution from the following external

* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 2.5 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 17.73 16.82 16.94 16.85 30.46 2.544 1.443 5.506 83.56 17.568

Exhaust emissions (g/mi):

CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
CO Running: 13.82 12.93 13.35 13.04 2.270 1.324 79.509
CO Total Exhaust: 17.73 16.82 16.94 16.85 30.46 2.544 1.443 5.506 83.56 17.568

* File 1, Run 1, Scenario 2.

* #####
* *****

* Control Scenario #2 for 2011 : Arterial 5.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 5.0
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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Regional Transportation Commission of Southern Nevada

 Composite Emission Factors (g/mi):
 Composite CO : 11.45 11.10 10.98 11.07 24.34 2.127 1.200 4.495 49.85 11.474

Exhaust emissions (g/mi):

CO Start:	3.90	3.88	3.59	3.81	0.274	0.119	4.051			
CO Running:	7.54	7.22	7.39	7.26	1.853	1.081	45.803			
CO Total Exhaust:	11.45	11.10	10.98	11.07	24.34	2.127	1.200	4.495	49.85	11.474

* File 1, Run 1, Scenario 3.
 * #####
 * #####
 * Control Scenario #3 for 2011 : Arterial 10.0 mph
 * #####

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
 The user supplied arterial average speed of 10.0
 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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

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

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):
Composite CO : 8.58 8.44 8.22 8.38 16.19 1.552 0.864 3.099 26.06 8.530

Exhaust emissions (g/mi):
CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
CO Running: 4.68 4.55 4.63 4.57 1.278 0.745 22.004
CO Total Exhaust: 8.58 8.44 8.22 8.38 16.19 1.552 0.864 3.099 26.06 8.530

* File 1, Run 1, Scenario 4.
* #####
* *****
* Control Scenario #4 for 2011 : Arterial 15.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
The user supplied arterial average speed of 15.0
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.

M616 Comment:
User has supplied post-1999 sulfur levels.

*** 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: 2011
Month: Jan.
Altitude: Low
Minimum Temperature: 42.0 (F)
Maximum Temperature: 66.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 9.0 psi
Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
Alcohol Blend RVP Waiver: No

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

Regional Transportation Commission of Southern Nevada

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

 Composite Emission Factors (g/mi):

Composite CO : 7.76 7.64 7.41 7.58 11.38 1.196 0.657 2.237 18.34 7.629

 Exhaust emissions (g/mi):

CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
 CO Running: 3.86 3.76 3.82 3.77 0.922 0.538 14.292
 CO Total Exhaust: 7.76 7.64 7.41 7.58 11.38 1.196 0.657 2.237 18.34 7.629

* File 1, Run 1, Scenario 5.

* #####
 * *****

* Control Scenario #5 for 2011 : Arterial 20.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.5062	0.3332	0.1136		0.0102	0.0005	0.0017	0.0274	0.0072	1.0000

Composite Emission Factors (g/mi):										
Composite CO :	7.35	7.24	7.00	7.18	8.45	0.970	0.525	1.689	14.79	7.172

Exhaust emissions (g/mi):										
CO Start:	3.90	3.88	3.59	3.81	0.274	0.119		4.051		
CO Running:	3.45	3.36	3.42	3.37	0.696	0.406		10.742		
CO Total Exhaust:	7.35	7.24	7.00	7.18	8.45	0.970	0.525	1.689	14.79	7.172

* File 1, Run 1, Scenario 6.
 * #####
 * *****
 * Control Scenario #6 for 2011 : Arterial 25.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..UNLV\SOAKDST.LV

User supplied hot soak activity: ..UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

Regional Transportation Commission of Southern Nevada

 VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 7.13 7.03 6.79 6.97 6.63 0.824 0.440 1.335 12.62 6.920

Exhaust emissions (g/mi):

CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
 CO Running: 3.23 3.14 3.20 3.16 0.550 0.321 8.565
 CO Total Exhaust: 7.13 7.03 6.79 6.97 6.63 0.824 0.440 1.335 12.62 6.920

* File 1, Run 1, Scenario 7.

* #####
 * *****

* Control Scenario #7 for 2011 : Arterial 30.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 7.06 6.96 6.71 6.90 5.50 0.729 0.385 1.104 11.04 6.821

Exhaust emissions (g/mi):

CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
 CO Running: 3.16 3.07 3.12 3.09 0.455 0.266 6.991
 CO Total Exhaust: 7.06 6.96 6.71 6.90 5.50 0.729 0.385 1.104 11.04 6.821

* File 1, Run 1, Scenario 8.

* #####
 * *****

* Control Scenario #8 for 2011 : Arterial 35.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 35.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Regional Transportation Commission of Southern Nevada

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0102	0.0005	0.0017	0.0274	0.0072	1.0000

Composite Emission Factors (g/mi):									
Composite CO :	7.11	7.01	6.76	6.95	4.82	0.668	0.349	0.956	9.88 6.853

Exhaust emissions (g/mi):									
CO Start:	3.90	3.88	3.59	3.81	0.274	0.119	4.051		
CO Running:	3.21	3.13	3.18	3.14	0.394	0.230	5.824		
CO Total Exhaust:	7.11	7.01	6.76	6.95	4.82	0.668	0.349	0.956	9.88 6.853

* File 1, Run 1, Scenario 9.
 * #####
 * *****
 * Control Scenario #9 for 2011 : Arterial 40.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
 The user supplied arterial average speed of 40.0 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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0102	0.0005	0.0017	0.0274	0.0072	1.0000
Composite Emission Factors (g/mi):									
Composite CO :	7.38	7.28	7.02	7.21	4.46	0.631	0.327	0.866	9.06 7.093
Exhaust emissions (g/mi):									
CO Start:	3.90	3.88	3.59	3.81	0.274	0.119		4.051	
CO Running:	3.47	3.40	3.44	3.41	0.357	0.208		5.013	
CO Total Exhaust:	7.38	7.28	7.02	7.21	4.46	0.631	0.327	0.866	9.06 7.093

* File 1, Run 1, Scenario 10.
 * #####
 * Control Scenario #10 for 2011 : Arterial 45.0 mph
 * #####

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
 The user supplied arterial average speed of 45.0 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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Regional Transportation Commission of Southern Nevada

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0102	0.0005	0.0017	0.0274	0.0072	1.0000

Composite Emission Factors (g/mi):									
Composite CO :	7.64	7.54	7.28	7.48	4.36	0.612	0.317	0.821	8.55 7.339

Exhaust emissions (g/mi):									
CO Start:	3.90	3.88	3.59	3.81	0.274	0.119		4.051	
CO Running:	3.74	3.66	3.70	3.67	0.339	0.197		4.501	
CO Total Exhaust:	7.64	7.54	7.28	7.48	4.36	0.612	0.317	0.821	8.55 7.339

* File 1, Run 1, Scenario 11.
 * #####
 * *****
 * Control Scenario #11 for 2011 : Arterial 50.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 7.91 7.81 7.55 7.74 4.50 0.610 0.315 0.815 8.34 7.591

Exhaust emissions (g/mi):

CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
CO Running: 4.00 3.93 3.96 3.93 0.336 0.196 4.292
CO Total Exhaust: 7.91 7.81 7.55 7.74 4.50 0.610 0.315 0.815 8.34 7.591

* File 1, Run 1, Scenario 12.

* #####
* #####

* Control Scenario #12 for 2011 : Arterial 55.0 mph
* #####

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 55.0
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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001

Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027

Alcohol Blend Oxygen Content: 0.035

Regional Transportation Commission of Southern Nevada

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

 Composite Emission Factors (g/mi):

Composite CO : 8.17 8.08 7.81 8.01 4.91 0.623 0.323 0.846 8.34 7.848

 Exhaust emissions (g/mi):

CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
 CO Running: 4.27 4.19 4.22 4.20 0.349 0.203 4.292
 CO Total Exhaust: 8.17 8.08 7.81 8.01 4.91 0.623 0.323 0.846 8.34 7.848

* File 1, Run 1, Scenario 13.

* #####
 * *****

* Control Scenario #13 for 2011 : Arterial 60.0 mph

* *****

* Reading start SOAK distribution from the following external

* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 60.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

 Composite Emission Factors (g/mi):

Composite CO : 8.44 8.34 8.07 8.27 5.67 0.653 0.340 0.920 13.51 8.147

 Exhaust emissions (g/mi):

CO Start: 3.90 3.88 3.59 3.81 0.274 0.119 4.051
 CO Running: 4.53 4.46 4.48 4.46 0.379 0.221 9.461
 CO Total Exhaust: 8.44 8.34 8.07 8.27 5.67 0.653 0.340 0.920 13.51 8.147

* File 1, Run 1, Scenario 14.
 * #####
 * #####
 * Control Scenario #14 for 2011 : Arterial 65.0 mph
 * #####

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

 User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

 User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

 The user supplied arterial average speed of 65.0
 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.

M616 Comment:

 User has supplied post-1999 sulfur levels.

*** 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: 2011

 Month: Jan.

 Altitude: Low

 Minimum Temperature: 42.0 (F)

 Maximum Temperature: 66.0 (F)

 Absolute Humidity: 75. grains/lb

 Nominal Fuel RVP: 9.0 psi

 Weathered RVP: 9.0 psi

 Fuel Sulfur Content: 30. ppm

 Exhaust I/M Program: Yes

 Evap I/M Program: Yes

 ATP Program: Yes

 Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Regional Transportation Commission of Southern Nevada

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	
All Veh										
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.5062	0.3332	0.1136	0.0102	0.0005	0.0017	0.0274	0.0072	1.0000	

Composite Emission Factors (g/mi):										
Composite CO :	8.70	8.61	8.33	8.54	6.90	0.705	0.371	1.046	18.68	8.453

Exhaust emissions (g/mi):										
CO Start:	3.90	3.88	3.59	3.81	0.274	0.119		4.051		
CO Running:	4.80	4.72	4.74	4.73	0.431	0.252		14.629		
CO Total Exhaust:	8.70	8.61	8.33	8.54	6.90	0.705	0.371	1.046	18.68	8.453

2020 Mobile 6 Input Settings

MOBILE6 INPUT FILE :
POLLUTANTS : CO
REPORT FILE : output\20r2l_at.TX1
DATABASE OUTPUT :
WITH FIELDNAMES :
* DAILY OUTPUT :
* AGGREGATED OUTPUT :
EMISSIONS TABLE : output\20r2l_at.wek REPLACE
RUN DATA :
> Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
> OBD2 test, fuel runs, 35 mph, use 2002 registration data,
> 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
> 2021 base year, Arterial
>
EXPRESS HC AS TOG :
EXPAND EVAPORATIVE :
EXPAND EXHAUST :
* MIN/MAX TEMPERATURE: 36 64
HOURLY TEMPERATURES: 42.0 44.0 49.0 51.0 55.0 58.0 64.0 66.0 66.0 66.0 62.0 58.0
55.0 53.0 51.0 50.0 48.0 47.0 45.0 44.0 44.0 43.0 42.0 42.0
VMT FRACTIONS :
0.5067 0.0770 0.2562 0.0790 0.0363 0.0111 0.0011 0.0009
0.0006 0.0024 0.0029 0.0032 0.0113 0.0028 0.0013 0.0072
REG DIST : ..\lv_files\lv_reg02.rdt
VMT BY HOUR : ..\lv_files\Hvmt_lv.wek
START DIST : ..\unlv\sdist.lv
STARTS PER DAY : ..\unlv\stperday.lv
WE DA TRI LEN DI : ..\unlv\wedatrip.lv
NGV FRACTION : ..\lv_files\ngvfr20.lv
OXYGENATED FUELS : .001 .999 0.027 0.035 1
ANTI-TAMP PROG :
83 81 50 22222 22222222 2 11 090. 22212112
NO REFUELING :

> Exhaust I/M program #1
I/M PROGRAM : 1 1983 2050 1 TRC 2500/IDLE
I/M MODEL YEARS : 1 1968 1995
I/M VEHICLES : 1 22222 22222222 2
I/M STRINGENCY : 1 22
I/M COMPLIANCE : 1 90
I/M WAIVER RATES : 1 0.1 0.1
I/M EFFECTIVENESS : 1.00 1.00 1.00
I/M GRACE PERIOD : 1 2
I/M CREDIT FILE : ..\tech12.d
> Exhaust I/M program #2
I/M PROGRAM : 2 1983 2050 1 TRC OBD I/M
I/M MODEL YEARS : 2 1996 2050
I/M VEHICLES : 2 22222 22222222 2
I/M STRINGENCY : 2 22
I/M COMPLIANCE : 2 90
I/M WAIVER RATES : 2 0.1 0.1
I/M GRACE PERIOD : 2 2
> Evap I/M program #3
I/M PROGRAM : 3 1983 2050 1 TRC EVAP OBD
I/M MODEL YEARS : 3 1996 2050
I/M VEHICLES : 3 22222 11111111 1
I/M COMPLIANCE : 3 90
I/M WAIVER RATES : 3 0.1 0.1
I/M GRACE PERIOD : 3 2

SCENARIO RECORD :

Regional Transportation Commission of Southern Nevada

> *****
> Control Scenario #1 for 2021 : Arterial 2.5 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 2.5 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #2 for 2021 : Arterial 5.0 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 5.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #3 for 2021 : Arterial 10.0 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 10.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #4 for 2021 : Arterial 15.0 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv

DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 15.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #5 for 2021 : Arterial 20.0 mph
> *****

CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 20.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #6 for 2021 : Arterial 25.0 mph
> *****

CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 25.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #7 for 2021 : Arterial 30.0 mph
> *****

CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 30.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

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SCENARIO RECORD :
> *****
> Control Scenario #8 for 2021 : Arterial 35.0 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 35.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #9 for 2021 : Arterial 40.0 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 40.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #10 for 2021 : Arterial 45.0 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 45.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #11 for 2021 : Arterial 50.0 mph
> *****
CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv

HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 50.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #12 for 2021 : Arterial 55.0 mph
> *****

CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 55.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #13 for 2021 : Arterial 60.0 mph
> *****

CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 60.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #14 for 2021 : Arterial 65.0 mph
> *****

CALENDAR YEAR : 2021
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 65.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

2020 Mobile 6 Output Data

- * Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
- * OBD2 test, fuel runs, 35 mph, use 2002 registration data,
- * 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
- * 2021 base year, Arterial
- *

M615 Comment:

User supplied VMT mix.

- * Reading Registration Distributions from the following external

* data file: ..\LV_FILES\LV_REG02.RDT

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 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)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.998 MYR sum not = 1. (will normalize)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

- * Reading Hourly VMT distribution from the following external

* data file: ..\LV_FILES\HVMT_LV.WEK

- * Reading hourly start distribution from the following external

* data file: ..\UNLV\SDIST.LV

- * Reading start Starts/day distribution from the following external

* data file: ..\UNLV\STPERDAY.LV

- * Reading non-default WEEKDAY RUNNING LOSS HOURLY TRIP LENGTH FRACTIONS

* from the following external data file: ..\UNLV\WEDATRIP.LV

- * Reading NGV IMPLEMENTATION SCHEDULE from the following external

* data file: ..\LV_FILES\NGVFR20.LV

Reading User Supplied NGV phase-in fractions

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M603 Comment:

User has disabled the calculation of REFUELING emissions.

- * Exhaust I/M program #1
- * Exhaust I/M program #2
- * Evap I/M program #3

* File 1, Run 1, Scenario 1.

* #####
* *****
* Control Scenario #1 for 2021 : Arterial 2.5 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 2.5 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0101 0.0005 0.0017 0.0275 0.0072 1.0000

 Composite Emission Factors (g/mi):
 Composite CO : 13.15 11.95 11.85 11.92 28.17 1.900 1.083 1.575 83.56 12.918

Exhaust emissions (g/mi):

CO Start: 3.51 2.91 2.75 2.87 0.194 0.082 4.051
 CO Running: 9.64 9.03 9.10 9.05 1.706 1.001 79.509
 CO Total Exhaust: 13.15 11.95 11.85 11.92 28.17 1.900 1.083 1.575 83.56 12.918

* File 1, Run 1, Scenario 2.
 * #####
 * *****
 * Control Scenario #2 for 2021 : Arterial 5.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 5.0
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

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

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VMT Distribution: 0.5062 0.3332 0.1136 0.0101 0.0005 0.0017 0.0275 0.0072 1.0000

 Composite Emission Factors (g/mi):

Composite CO : 8.81 8.02 7.88 7.98 22.50 1.587 0.899 1.286 49.85 8.654

 Exhaust emissions (g/mi):

CO Start: 3.51 2.91 2.75 2.87 0.194 0.082 4.051
 CO Running: 5.30 5.10 5.13 5.11 1.393 0.817 45.803
 CO Total Exhaust: 8.81 8.02 7.88 7.98 22.50 1.587 0.899 1.286 49.85 8.654

* File 1, Run 1, Scenario 3.

* #####
 * *****

* Control Scenario #3 for 2021 : Arterial 10.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 10.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

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

VMT Distribution: 0.5062 0.3332 0.1136 0.0101 0.0005 0.0017 0.0275 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 6.81 6.16 6.01 6.12 14.97 1.155 0.646 0.887 26.06 6.547

Exhaust emissions (g/mi):

CO Start: 3.51 2.91 2.75 2.87 0.194 0.082 4.051
 CO Running: 3.30 3.24 3.26 3.25 0.961 0.563 22.004
 CO Total Exhaust: 6.81 6.16 6.01 6.12 14.97 1.155 0.646 0.887 26.06 6.547

* File 1, Run 1, Scenario 4.

* #####
 * *****

* Control Scenario #4 for 2021 : Arterial 15.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 15.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

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Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0101	0.0005	0.0017	0.0275	0.0072	1.0000

Composite Emission Factors (g/mi):									
Composite CO :	6.22	5.58	5.44	5.55	10.52	0.887	0.489	0.640	18.34 5.886

Exhaust emissions (g/mi):									
CO Start:	3.51	2.91	2.75	2.87	0.194	0.082	4.051		
CO Running:	2.71	2.67	2.69	2.67	0.693	0.407	14.292		
CO Total Exhaust:	6.22	5.58	5.44	5.55	10.52	0.887	0.489	0.640	18.34 5.886

* File 1, Run 1, Scenario 5.
 * #####
 * *****
 * Control Scenario #5 for 2021 : Arterial 20.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	
All Veh										
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.5062	0.3332	0.1136		0.0101	0.0005	0.0017	0.0275	0.0072	1.0000

 Composite Emission Factors (g/mi):
 Composite CO : 5.93 5.30 5.15 5.26 7.82 0.717 0.389 0.483 14.79 5.552

Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87		0.194	0.082		4.051	
CO Running:	2.42	2.39	2.40	2.39		0.523	0.307		10.742	
CO Total Exhaust:	5.93	5.30	5.15	5.26		7.82	0.717	0.389	0.483	14.79 5.552

* File 1, Run 1, Scenario 6.
 * #####
 * *****
 * Control Scenario #6 for 2021 : Arterial 25.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..UNLV\SOAKDST.LV

User supplied hot soak activity: ..UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

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Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

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

VMT Distribution:	0.5062	0.3332	0.1136		0.0101	0.0005	0.0017	0.0275	0.0072	1.0000
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 Composite Emission Factors (g/mi):

Composite CO :	5.76	5.14	4.99	5.10	6.13	0.608	0.325	0.382	12.62	5.361
----------------	------	------	------	------	------	-------	-------	-------	-------	-------

 Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87		0.194	0.082		4.051	
CO Running:	2.25	2.22	2.24	2.23		0.414	0.243		8.565	
CO Total Exhaust:	5.76	5.14	4.99	5.10	6.13	0.608	0.325	0.382	12.62	5.361

* File 1, Run 1, Scenario 7.

* #####
 * *****
 * Control Scenario #7 for 2021 : Arterial 30.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

 User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

 User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

 User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

 there are no sales for vehicle class LDDT12

 Calendar Year: 2021

 Month: Jan.

 Altitude: Low

 Minimum Temperature: 42.0 (F)

 Maximum Temperature: 66.0 (F)

 Absolute Humidity: 75. grains/lb

 Nominal Fuel RVP: 9.0 psi

 Weathered RVP: 9.0 psi

 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0101	0.0005	0.0017	0.0275	0.0072	1.0000

Composite Emission Factors (g/mi):									
Composite CO :	5.72	5.10	4.95	5.06	5.08	0.536	0.283	0.316	11.04 5.295

Exhaust emissions (g/mi):									
CO Start:	3.51	2.91	2.75	2.87	0.194	0.082	4.051		
CO Running:	2.20	2.18	2.20	2.19	0.342	0.201	6.991		
CO Total Exhaust:	5.72	5.10	4.95	5.06	5.08	0.536	0.283	0.316	11.04 5.295

* File 1, Run 1, Scenario 8.
 * #####
 * *****
 * Control Scenario #8 for 2021 : Arterial 35.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 35.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Regional Transportation Commission of Southern Nevada

Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0101	0.0005	0.0017	0.0275	0.0072	1.0000

Composite Emission Factors (g/mi):
 Composite CO : 5.75 5.14 4.99 5.10 4.45 0.490 0.256 0.273 9.88 5.314

Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87	0.194	0.082	4.051		
CO Running:	2.24	2.22	2.24	2.23	0.296	0.174	5.824		
CO Total Exhaust:	5.75	5.14	4.99	5.10	4.45	0.490	0.256	0.273	9.88 5.314

* File 1, Run 1, Scenario 9.
 * #####
 * *****
 * Control Scenario #9 for 2021 : Arterial 40.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
 The user supplied arterial average speed of 40.0
 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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:
 there are no sales for vehicle class LDDT12

Calendar Year: 2021
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 9.0 psi
Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0101	0.0005	0.0017	0.0275	0.0072	1.0000

Composite Emission Factors (g/mi):

Composite CO :	5.96	5.35	5.20	5.31	4.12	0.462	0.240	0.248	9.06	5.504
----------------	------	------	------	------	------	-------	-------	-------	------	-------

Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87	0.194	0.082	4.051			
CO Running:	2.45	2.43	2.45	2.44	0.268	0.157	5.013			
CO Total Exhaust:	5.96	5.35	5.20	5.31	4.12	0.462	0.240	0.248	9.06	5.504

* File 1, Run 1, Scenario 10.

* #####
* *****
* Control Scenario #10 for 2021 : Arterial 45.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

 User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

 User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

 The user supplied arterial average speed of 45.0
 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.

M616 Comment:

 User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

 there are no sales for vehicle class LDDT12

Calendar Year: 2021
Month: Jan.
Altitude: Low

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Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

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

VMT Distribution:	0.5062	0.3332	0.1136	0.0101	0.0005	0.0017	0.0275	0.0072	1.0000
-------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Composite Emission Factors (g/mi):

Composite CO :	6.17	5.56	5.41	5.52	4.03	0.448	0.231	0.235	8.55	5.698
----------------	------	------	------	------	------	-------	-------	-------	------	-------

Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87	0.194	0.082	4.051			
CO Running:	2.66	2.64	2.66	2.65	0.254	0.149	4.501			
CO Total Exhaust:	6.17	5.56	5.41	5.52	4.03	0.448	0.231	0.235	8.55	5.698

* File 1, Run 1, Scenario 11.
 * #####
 * *****
 * Control Scenario #11 for 2021 : Arterial 50.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

there are no sales for vehicle class LDDT12

Calendar Year: 2021
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0101	0.0005	0.0017	0.0275	0.0072	1.0000

Composite Emission Factors (g/mi):
 Composite CO : 6.38 5.77 5.62 5.73 4.16 0.447 0.230 0.233 8.34 5.898

Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87	0.194	0.082	4.051		
CO Running:	2.86	2.86	2.87	2.86	0.253	0.148	4.292		
CO Total Exhaust:	6.38	5.77	5.62	5.73	4.16	0.447	0.230	0.233	8.34 5.898

* File 1, Run 1, Scenario 12.
 * #####
 * *****
 * Control Scenario #12 for 2021 : Arterial 55.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions
 M583 Warning:

The user supplied arterial average speed of 55.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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

M 48 Warning:

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there are no sales for vehicle class LDDT12

Calendar Year: 2021
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

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

VMT Distribution:	0.5062	0.3332	0.1136		0.0101	0.0005	0.0017	0.0275	0.0072	1.0000
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 Composite Emission Factors (g/mi):

Composite CO :	6.58	5.98	5.83	5.94	4.54	0.456	0.236	0.242	8.34	6.101
----------------	------	------	------	------	------	-------	-------	-------	------	-------

 Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87		0.194	0.082		4.051	
CO Running:	3.07	3.07	3.08	3.07		0.262	0.154		4.292	
CO Total Exhaust:	6.58	5.98	5.83	5.94	4.54	0.456	0.236	0.242	8.34	6.101

* File 1, Run 1, Scenario 13.
 * #####
 * *****
 * Control Scenario #13 for 2021 : Arterial 60.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 60.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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
M 48 Warning:
there are no sales for vehicle class LDDT12

Calendar Year: 2021
Month: Jan.
Altitude: Low
Minimum Temperature: 42.0 (F)
Maximum Temperature: 66.0 (F)
Absolute Humidity: 75. grains/lb
Nominal Fuel RVP: 9.0 psi
Weathered RVP: 9.0 psi
Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
Alcohol Blend RVP Waiver: No

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

VMT Distribution: 0.5062 0.3332 0.1136 0.0101 0.0005 0.0017 0.0275 0.0072 1.0000

Composite Emission Factors (g/mi):
Composite CO : 6.79 6.19 6.04 6.15 5.24 0.479 0.249 0.263 13.51 6.346

Exhaust emissions (g/mi):

CO Start:	3.51	2.91	2.75	2.87	0.194	0.082	4.051		
CO Running:	3.28	3.28	3.29	3.28	0.285	0.167	9.461		
CO Total Exhaust:	6.79	6.19	6.04	6.15	5.24	0.479	0.249	0.263	13.51 6.346

* File 1, Run 1, Scenario 14.
* #####
* *****
* Control Scenario #14 for 2021 : Arterial 65.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV
User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
The user supplied arterial average speed of 65.0
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.

M616 Comment:
User has supplied post-1999 sulfur levels.

*** I/M credits for Tech1&2 vehicles were read from the following external

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data file: ..\TECH12.D

M 48 Warning:
 there are no sales for vehicle class HDGV8b
 M 48 Warning:
 there are no sales for vehicle class LDDT12

Calendar Year: 2021
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	
All Veh										
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.5062	0.3332	0.1136	0.0101	0.0005	0.0017	0.0275	0.0072	1.0000	
Composite Emission Factors (g/mi):										
Composite CO :	7.00	6.40	6.25	6.36	6.38	0.518	0.272	0.299	18.68	6.596
Exhaust emissions (g/mi):										
CO Start:	3.51	2.91	2.75	2.87	0.194	0.082		4.051		
CO Running:	3.49	3.49	3.49	3.49	0.324	0.190		14.629		
CO Total Exhaust:	7.00	6.40	6.25	6.36	6.38	0.518	0.272	0.299	18.68	6.596

2030 Mobile 6 Input Settings

MOBILE6 INPUT FILE :

POLLUTANTS : CO
REPORT FILE : output\30r2l_at.TX1
DATABASE OUTPUT :
WITH FIELDNAMES :
* DAILY OUTPUT :
* AGGREGATED OUTPUT :
EMISSIONS TABLE : output\30r2l_at.wek REPLACE

RUN DATA :

> Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
> OBD2 test, fuel runs, 35 mph, use 2002 registration data,
> 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
> 2031 base year, Arterial
EXPRESS HC AS TOG :
EXPAND EVAPORATIVE :
EXPAND EXHAUST :
* MIN/MAX TEMPERATURE: 36 64
HOURLY TEMPERATURES: 42.0 44.0 49.0 51.0 55.0 58.0 64.0 66.0 66.0 66.0 62.0 58.0
55.0 53.0 51.0 50.0 48.0 47.0 45.0 44.0 44.0 43.0 42.0 42.0
VMT FRACTIONS :
0.5067 0.0770 0.2562 0.0790 0.0363 0.0111 0.0011 0.0009
0.0006 0.0024 0.0029 0.0032 0.0113 0.0028 0.0013 0.0072

REG DIST : ..\lv_files\lv_reg02.rdt
VMT BY HOUR : ..\lv_files\Hvmt_lv.wek
START DIST : ..\unlv\sdist.lv
STARTS PER DAY : ..\unlv\stperday.lv

WE DA TRI LEN DI : ..\unlv\wedatrip.lv

NGV FRACTION : ..\lv_files\ngvfr20.lv

OXYGENATED FUELS : .001 .999 0.027 0.035 1

ANTI-TAMP PROG :
83 81 50 22222 22222222 2 11 090. 22212112
NO REFUELING :

> Exhaust I/M program #1
I/M PROGRAM : 1 1983 2050 1 TRC 2500/IDLE
I/M MODEL YEARS : 1 1968 1995
I/M VEHICLES : 1 22222 22222222 2
I/M STRINGENCY : 1 22
I/M COMPLIANCE : 1 90
I/M WAIVER RATES : 1 0.1 0.1
I/M EFFECTIVENESS : 1.00 1.00 1.00
I/M GRACE PERIOD : 1 2
I/M CREDIT FILE : ..\tech12.d

> Exhaust I/M program #2
I/M PROGRAM : 2 1983 2050 1 TRC OBD I/M
I/M MODEL YEARS : 2 1996 2050
I/M VEHICLES : 2 22222 22222222 2
I/M STRINGENCY : 2 22
I/M COMPLIANCE : 2 90
I/M WAIVER RATES : 2 0.1 0.1
I/M GRACE PERIOD : 2 2

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> Evap I/M program #3
I/M PROGRAM : 3 1983 2050 1 TRC EVAP OBD
I/M MODEL YEARS : 3 1996 2050
I/M VEHICLES : 3 22222 11111111 1
I/M COMPLIANCE : 3 90
I/M WAIVER RATES : 3 0.1 0.1
I/M GRACE PERIOD : 3 2

SCENARIO RECORD :

> *****
> Control Scenario #1 for 2031 : Arterial 2.5 mph
> *****
CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 2.5 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :

> *****
> Control Scenario #2 for 2031 : Arterial 5.0 mph
> *****
CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 5.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :

> *****
> Control Scenario #3 for 2031 : Arterial 10.0 mph
> *****
CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 10.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #4 for 2031 : Arterial 15.0 mph
 > *****
 CALENDAR YEAR : 2031
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
 AVERAGE SPEED : 15.0 Arterial
 FUEL RVP : 9
 SEASON : 2
 FUEL PROGRAM : 4
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #5 for 2031 : Arterial 20.0 mph
 > *****
 CALENDAR YEAR : 2031
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
 AVERAGE SPEED : 20.0 Arterial
 FUEL RVP : 9
 SEASON : 2
 FUEL PROGRAM : 4
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #6 for 2031 : Arterial 25.0 mph
 > *****
 CALENDAR YEAR : 2031
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
 AVERAGE SPEED : 25.0 Arterial
 FUEL RVP : 9
 SEASON : 2
 FUEL PROGRAM : 4
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
 > *****
 > Control Scenario #7 for 2031 : Arterial 30.0 mph
 > *****
 CALENDAR YEAR : 2031
 EVALUATION MONTH : 1
 SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
 HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
 DIURN SOAK ACTIVITY: ..\unlv\dsact.lv

AVERAGE SPEED : 30.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #8 for 2031 : Arterial 35.0 mph
> *****

CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 35.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #9 for 2031 : Arterial 40.0 mph
> *****

CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 40.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :
> *****
> Control Scenario #10 for 2031 : Arterial 45.0 mph
> *****

CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 45.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :

> *****
> Control Scenario #11 for 2031 : Arterial 50.0 mph
> *****
CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 50.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :

> *****
> Control Scenario #12 for 2031 : Arterial 55.0 mph
> *****
CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 55.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :

> *****
> Control Scenario #13 for 2031 : Arterial 60.0 mph
> *****
CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv
DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 60.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

SCENARIO RECORD :

> *****
> Control Scenario #14 for 2031 : Arterial 65.0 mph
> *****
CALENDAR YEAR : 2031
EVALUATION MONTH : 1
SOAK DISTRIBUTION : ..\unlv\Soakdst.lv
HOT SOAK ACTIVITY : ..\unlv\Hsactday.lv

DIURN SOAK ACTIVITY: ..\unlv\dsact.lv
AVERAGE SPEED : 65.0 Arterial
FUEL RVP : 9
SEASON : 2
FUEL PROGRAM : 4
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0
80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0

2030 Mobile 6 Output Data

- * Las Vegas base run; LV I/M with TTC begins on 3rd reg,incl HDGV
- * OBD2 test, fuel runs, 35 mph, use 2002 registration data,
- * 0.1% waiver rate, 22% I/M STRINGENCY, 90% I/M COMPLIANCE
- * 2011 base year, Arterial
- *

M615 Comment:

User supplied VMT mix.

- * Reading Registration Distributions from the following external
- * data file: ..\LV_FILES\LV_REG02.RDT

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 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)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.999 MYR sum not = 1. (will normalize)

M 49 Warning:

0.998 MYR sum not = 1. (will normalize)

M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

- * Reading Hourly VMT distribution from the following external

* data file: ..\LV_FILES\HVMT_LV.WEK

- * Reading hourly start distribution from the following external

* data file: ..\UNLV\SDIST.LV

- * Reading start Starts/day distribution from the following external

* data file: ..\UNLV\STPERDAY.LV

- * Reading non-default WEEKDAY RUNNING LOSS HOURLY TRIP LENGTH FRACTIONS

* from the following external data file: ..\UNLV\WEDATRIP.LV

- * Reading NGV IMPLEMENTATION SCHEDULE from the following external

* data file: ..\LV_FILES\NGVFR20.LV

Reading User Supplied NGV phase-in fractions

M603 Comment:

Regional Transportation Commission of Southern Nevada

User has disabled the calculation of REFUELING emissions.

- * Exhaust I/M program #1
- * Exhaust I/M program #2
- * Evap I/M program #3

* File 1, Run 1, Scenario 1.
 * #####
 * *****
 * Control Scenario #1 for 2011 : Arterial 2.5 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
 The user supplied arterial average speed of 2.5
 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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									
GVWR:	<6000	>6000	(All)						
VMT Distribution:	0.5062	0.3332	0.1136	0.0102	0.0005	0.0017	0.0274	0.0072	1.0000

Composite Emission Factors (g/mi):
 Composite CO : 17.74 16.83 16.95 16.86 30.46 2.544 1.443 5.506 83.56 17.582

Exhaust emissions (g/mi):

CO Start:	3.91	3.89	3.60	3.82	0.274	0.119	4.051			
CO Running:	13.83	12.94	13.36	13.05	2.270	1.324	79.509			
CO Total Exhaust:	17.74	16.83	16.95	16.86	30.46	2.544	1.443	5.506	83.56	17.582

* File 1, Run 1, Scenario 2.

* #####
* *****
* Control Scenario #2 for 2011 : Arterial 5.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 5.0
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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO :	11.46	11.11	10.99	11.08	24.34	2.127	1.200	4.495	49.85	11.485
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Regional Transportation Commission of Southern Nevada

Exhaust emissions (g/mi):

CO Start:	3.91	3.89	3.60	3.82	0.274	0.119	4.051			
CO Running:	7.55	7.22	7.40	7.27	1.853	1.081	45.803			
CO Total Exhaust:	11.46	11.11	10.99	11.08	24.34	2.127	1.200	4.495	49.85	11.485

* File 1, Run 1, Scenario 3.

* #####
 * *****
 * Control Scenario #3 for 2011 : Arterial 10.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..UNLV\SOAKDST.LV

User supplied hot soak activity: ..UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 10.0
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC
All Veh									

GVWR:	<6000	>6000	(All)						
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VMT Distribution:	0.5062	0.3332	0.1136	0.0102	0.0005	0.0017	0.0274	0.0072	1.0000
-------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Composite Emission Factors (g/mi):

Composite CO : 8.59 8.45 8.23 8.39 16.19 1.552 0.864 3.099 26.06 8.540

Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
CO Running: 4.68 4.56 4.64 4.58 1.278 0.745 22.004
CO Total Exhaust: 8.59 8.45 8.23 8.39 16.19 1.552 0.864 3.099 26.06 8.540

* File 1, Run 1, Scenario 4.

* #####
* *****

* Control Scenario #4 for 2011 : Arterial 15.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 15.0
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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 7.77 7.65 7.42 7.59 11.38 1.196 0.657 2.237 18.34 7.638

Regional Transportation Commission of Southern Nevada

 Exhaust emissions (g/mi):

CO Start:	3.91	3.89	3.60	3.82	0.274	0.119	4.051		
CO Running:	3.86	3.76	3.82	3.78	0.922	0.538	14.292		
CO Total Exhaust:	7.77	7.65	7.42	7.59	11.38	1.196	0.657	2.237	18.34 7.638

* File 1, Run 1, Scenario 5.

* #####
 * *****

* Control Scenario #5 for 2011 : Arterial 20.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

 VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):
 Composite CO : 7.36 7.25 7.01 7.19 8.45 0.970 0.525 1.689 14.79 7.181

 Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 3.45 3.36 3.42 3.37 0.696 0.406 10.742
 CO Total Exhaust: 7.36 7.25 7.01 7.19 8.45 0.970 0.525 1.689 14.79 7.181

* File 1, Run 1, Scenario 6.
 * #####
 * *****
 * Control Scenario #6 for 2011 : Arterial 25.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

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

 VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Regional Transportation Commission of Southern Nevada

Composite CO : 7.14 7.04 6.80 6.98 6.63 0.824 0.440 1.335 12.62 6.929

 Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 3.23 3.15 3.20 3.16 0.550 0.321 8.565
 CO Total Exhaust: 7.14 7.04 6.80 6.98 6.63 0.824 0.440 1.335 12.62 6.929

* File 1, Run 1, Scenario 7.
 * #####
 * *****
 * Control Scenario #7 for 2011 : Arterial 30.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

 VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

 Composite Emission Factors (g/mi):
 Composite CO : 7.07 6.97 6.72 6.90 5.50 0.729 0.385 1.104 11.04 6.830

Exhaust emissions (g/mi):
 CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 3.16 3.08 3.12 3.09 0.455 0.266 6.991
 CO Total Exhaust: 7.07 6.97 6.72 6.90 5.50 0.729 0.385 1.104 11.04 6.830

* File 1, Run 1, Scenario 8.
 * #####
 * #####
 * Control Scenario #8 for 2011 : Arterial 35.0 mph
 * #####

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
 The user supplied arterial average speed of 35.0
 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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011
 Month: Jan.
 Altitude: Low
 Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

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

 VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Regional Transportation Commission of Southern Nevada

Composite Emission Factors (g/mi):

Composite CO : 7.12 7.02 6.77 6.96 4.82 0.668 0.349 0.956 9.88 6.862

 Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 3.21 3.13 3.18 3.14 0.394 0.230 5.824
 CO Total Exhaust: 7.12 7.02 6.77 6.96 4.82 0.668 0.349 0.956 9.88 6.862

* File 1, Run 1, Scenario 9.

* #####
 * *****

* Control Scenario #9 for 2011 : Arterial 40.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 40.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 7.39 7.29 7.03 7.22 4.46 0.631 0.327 0.866 9.06 7.102

Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
CO Running: 3.48 3.40 3.44 3.41 0.357 0.208 5.013
CO Total Exhaust: 7.39 7.29 7.03 7.22 4.46 0.631 0.327 0.866 9.06 7.102

* File 1, Run 1, Scenario 10.

* #####
* *****

* Control Scenario #10 for 2011 : Arterial 45.0 mph

* *****

* Reading start SOAK distribution from the following external

* data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 45.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Regional Transportation Commission of Southern Nevada

 Composite Emission Factors (g/mi):

Composite CO : 7.65 7.55 7.29 7.49 4.36 0.612 0.317 0.821 8.55 7.348

Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 3.74 3.66 3.70 3.67 0.339 0.197 4.501
 CO Total Exhaust: 7.65 7.55 7.29 7.49 4.36 0.612 0.317 0.821 8.55 7.348

* File 1, Run 1, Scenario 11.

* #####
 * *****

* Control Scenario #11 for 2011 : Arterial 50.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

 VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):
 Composite CO : 7.92 7.82 7.55 7.75 4.50 0.610 0.315 0.815 8.34 7.600

Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 4.01 3.93 3.96 3.94 0.336 0.196 4.292
 CO Total Exhaust: 7.92 7.82 7.55 7.75 4.50 0.610 0.315 0.815 8.34 7.600

* File 1, Run 1, Scenario 12.
 * #####
 * *****
 * Control Scenario #12 for 2011 : Arterial 55.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 55.0
 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR: <6000 >6000 (All)

Regional Transportation Commission of Southern Nevada

VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

 Composite Emission Factors (g/mi):

Composite CO : 8.18 8.09 7.81 8.02 4.91 0.623 0.323 0.846 8.34 7.858

 Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 4.27 4.19 4.22 4.20 0.349 0.203 4.292
 CO Total Exhaust: 8.18 8.09 7.81 8.02 4.91 0.623 0.323 0.846 8.34 7.858

* File 1, Run 1, Scenario 13.
 * #####
 * *****
 * Control Scenario #13 for 2011 : Arterial 60.0 mph
 * *****

* Reading start SOAK distribution from the following external
 * data file: ..\UNLV\SOAKDST.LV

User supplied hot soak activity: ..\UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..\UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:
 The user supplied arterial average speed of 60.0
 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.

M616 Comment:
 User has supplied post-1999 sulfur levels.

*** 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: 2011
 Month: Jan.
 Altitude: Low

Minimum Temperature: 42.0 (F)
 Maximum Temperature: 66.0 (F)
 Absolute Humidity: 75. grains/lb
 Nominal Fuel RVP: 9.0 psi
 Weathered RVP: 9.0 psi
 Fuel Sulfur Content: 30. ppm

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

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999
 Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035
 Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
 All Veh

GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.5062	0.3332	0.1136		0.0102	0.0005	0.0017	0.0274	0.0072	1.0000

Composite Emission Factors (g/mi):
Composite CO : 8.45 8.35 8.07 8.28 5.67 0.653 0.340 0.920 13.51 8.157

Exhaust emissions (g/mi):

CO Start:	3.91	3.89	3.60	3.82		0.274	0.119		4.051	
CO Running:	4.53	4.46	4.48	4.47		0.379	0.221		9.461	
CO Total Exhaust:	8.45	8.35	8.07	8.28		5.67	0.653	0.340	0.920	13.51 8.157

* File 1, Run 1, Scenario 14.
* #####
* *****
* Control Scenario #14 for 2011 : Arterial 65.0 mph
* *****

* Reading start SOAK distribution from the following external
* data file: ..UNLV\SOAKDST.LV

User supplied hot soak activity: ..UNLV\HSACTDAY.LV

Reading User Supplied Hot Soak Activity Fractions

User supplied diurnal activity: ..UNLV\DSACT.LV

Reading User Supplied Diurnal Soak Activity Fractions

M583 Warning:

The user supplied arterial average speed of 65.0 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.

M616 Comment:

User has supplied post-1999 sulfur levels.

*** 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: 2011

Month: Jan.

Altitude: Low

Minimum Temperature: 42.0 (F)

Maximum Temperature: 66.0 (F)

Absolute Humidity: 75. grains/lb

Nominal Fuel RVP: 9.0 psi

Weathered RVP: 9.0 psi

Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes

Evap I/M Program: Yes

ATP Program: Yes

Reformulated Gas: No

Ether Blend Market Share: 0.001 Alcohol Blend Market Share: 0.999

Ether Blend Oxygen Content: 0.027 Alcohol Blend Oxygen Content: 0.035

Alcohol Blend RVP Waiver: No

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC
All Veh

GVWR: <6000 >6000 (All)

Regional Transportation Commission of Southern Nevada

 VMT Distribution: 0.5062 0.3332 0.1136 0.0102 0.0005 0.0017 0.0274 0.0072 1.0000

Composite Emission Factors (g/mi):

Composite CO : 8.71 8.62 8.34 8.55 6.90 0.705 0.371 1.046 18.68 8.463

Exhaust emissions (g/mi):

CO Start: 3.91 3.89 3.60 3.82 0.274 0.119 4.051
 CO Running: 4.80 4.73 4.74 4.73 0.431 0.252 14.629
 CO Total Exhaust: 8.71 8.62 8.34 8.55 6.90 0.705 0.371 1.046 18.68 8.463
