

APPENDIX D
AIR QUALITY CALCULATIONS

**APPENDIX D1
CONSTRUCTION EMISSIONS
CALCULATION SHEETS**

Railyards - NOx Emissions/Fee Calculations

Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																							
					January		February		March		April		May		June		July		August		September		October		November		December	
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 1A (2010 - 2011)																												
Grading/Site Prep																												
Dozer	28.3	2.8		22.61	1408	64	704	64																				
Grader	28.3	2.8		10.22	636	29	318	29																				
Water Truck	28.3	2.8		20.89	1301	59	650	59																				
Building Construction																												
Other	27.6		13.8	12.84			1949	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177		
Other	27.6		13.8	12.84			1949	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177		
Other	27.6		13.8	12.84			1949	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177	3898	177		
NOx Emissions (lbs.)					3345	152	1672	152	5847	532	11695	532	11695	532	11695	532	11695	532	11695	532	11695	532	11695	532	11695	532		
NOx Emissions after SMAQMD Mandatory 20% Reduction*					2676	122	1338	122	4678	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425	9356	425		
Residual NOx Emissions over SMAQMD 85 lbs/day Threshold					37		37		340		340		340		340		340		340		340		340		340			
NOx Emissions (Average Daily)					484																							
Notes:																												
Column Heading Definitions: Scaling Factor Grade - Equipment/emissions specified for 10-acre grading sites by SMAQMD must be scaled proportionally for larger/smaller sites. Scaling Factor Build - Equipment/emissions specified for 10-acre, single-story construction sites by SMAQMD must be scaled proportionally for larger/smaller sites and for multi-story structures. NOx Emission Factor - Equipment emission rates per 8-hour day for each piece of equipment as specified by the SMAQMD.																												
* The SMAQMD requires construction projects that would emit more than 85 lbs/day of NOx to use equipment that would attain at least a 20% reduction from that of the average existing equipment operating in the state.																												
** The SMAQMD requires that construction NOx emissions exceeding 85 lbs/day after the mandatory 20% reduction be subject to a mitigation fee of \$14,300 per ton on the excess emissions for every work day exceeding the threshold.																												

Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																							
					January		February		March		April		May		June		July		August		September		October		November		December	
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 1B (2012 - 2013)																												
Grading/Site Prep																												
Dozer	50.0	5.0		22.61	2485	113	1242	113																				
Grader	50.0	5.0		10.22	1123	51	562	51																				
Water Truck	50.0	5.0		20.89	2296	104	1148	104																				
Building Construction																												
Other	32.4		16.2	12.84			2287	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208		
Other	32.4		16.2	12.84			2287	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208		
Other	32.4		16.2	12.84			2287	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208	4573	208		
NOx Emissions (lbs.)					5903	268	2952	268	6860	624	13720	624	13720	624	13720	624	13720	624	13720	624	13720	624	13720	624	13720	624		
NOx Emissions after SMAQMD Mandatory 20% Reduction*					4723	215	2361	215	5488	499	10976	499	10976	499	10976	499	10976	499	10976	499	10976	499	10976	499	10976	499		
Residual NOx Emissions over SMAQMD 85 lbs/day Threshold					130		130		414		414		414		414		414		414		414		414		414			
NOx Emissions (Average Daily)					579																							
Notes:																												
Column Heading Definitions: Scaling Factor Grade - Equipment/emissions specified for 10-acre grading sites by SMAQMD must be scaled proportionally for larger/smaller sites. Scaling Factor Build - Equipment/emissions specified for 10-acre, single-story construction sites by SMAQMD must be scaled proportionally for larger/smaller sites and for multi-story structures. NOx Emission Factor - Equipment emission rates per 8-hour day for each piece of equipment as specified by the SMAQMD.																												
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Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																							
					January		February		March		April		May		June		July		August		September		October		November		December	
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 2 (2014 - 2018)																												
Grading/Site Prep																												
Dozer	21.4	2.1		22.61	1065	48	533	48																				
Grader	21.4	2.1		10.22	482	22	241	22																				
Water Truck	21.4	2.1		20.89	984	45	492	45																				
Building Construction																												
Other	20.4		10.2	12.84			1439	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131		
Other	20.4		10.2	12.84			1439	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131		
Other	20.4		10.2	12.84			1439	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131	2877	131		
NOx Emissions (lbs.)					2532	115	1266	115	4316	392	8631	392	8631	392	8631	392	8631	392	8631	392	8631	392	8631	392	8631	392		
NOx Emissions after SMAQMD Mandatory 20% Reduction*					2025	92	1013	92	3452	314	6905	314	6905	314	6905	314	6905	314	6905	314	6905	314	6905	314	6905	314		
Residual NOx Emissions over SMAQMD 85 lbs/day Threshold					7		7		229		229		229		229		229		229		229		229		229			
NOx Emissions (Average Daily)					358																							
Notes:																												
Column Heading Definitions: Scaling Factor Grade - Equipment/emissions specified for 10-acre grading sites by SMAQMD must be scaled proportionally for larger/smaller sites. Scaling Factor Build - Equipment/emissions specified for 10-acre, single-story construction sites by SMAQMD must be scaled proportionally for larger/smaller sites and for multi-story structures. NOx Emission Factor - Equipment emission rates per 8-hour day for each piece of equipment as specified by the SMAQMD.																												
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Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																							
					January		February		March		April		May		June		July		August		September		October		November		December	
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 3 (2019 - 2023)																												
Grading/Site Prep																												
Dozer	53.6	5.4		22.61	2668	121	1334	121																				
Grader	53.6	5.4		10.22	1206	55	603	55																				
Water Truck	53.6	5.4		20.89	2465	112	1232	112																				
Building Construction																												
Other	34.7		17.4	12.84			2453	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223		
Other	34.7		17.4	12.84			2453	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223		
Other	34.7		17.4	12.84			2453	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223	4907	223		
NOx Emissions (lbs.)					6338	288	3169	288	7360	669	14720	669	14720	669	14720	669	14720	669	14720	669	14720	669	14720	669	14720	669		
NOx Emissions after SMAQMD Mandatory 20% Reduction*					5071	230	2535	230	5888	535	11776	535	11776	535	11776	535	11776	535	11776	535	11776	535	11776	535	11776	535		
Residual NOx Emissions over SMAQMD 85 lbs/day Threshold					145		145		450		450		450		450		450		450		450		450		450			
NOx Emissions (Average Daily)					621																							
Notes:																												
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Phase/ Equipment Type	Area (Acres)	Scaling Factor Grade	Scaling Factor Build	NOx Emission Factor (lbs/day)	NOx Emissions (lbs.)																							
					January		February		March		April		May		June		July		August		September		October		November		December	
					Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day	Month	Day
Phase 4 (2024 - 2029)																												
Grading/Site Prep																												
Dozer	27.1	2.7		22.61	1348	61	674	61																				
Grader	27.1	2.7		10.22	609	28	305	28																				
Water Truck	27.1	2.7		20.89	1245	57	623	57																				
Building Construction																												
Other	24.2		12.1	12.84			1708	155	3417	155	3417	155	3417	155	3417	155	3417	155	3417	155	3417	155	3417	155	3417	155		
Other	24.2		12.1	12.84			1708	155	3417	155</																		

APPENDIX D2
URBEMIS 2002 EMISSIONS
MODEL RUNS FOR OPERATIONAL EMISSIONS

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\21504\My Documents\D51234.00 Railyards\D51234.00 Railyards Operation.
Project Name: D51234.00 Sacramento Railyards Operation
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES					
	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	872.16	140.47	84.22	0.00	0.27
OPERATIONAL (VEHICLE) EMISSION ESTIMATES					
	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	300.00	244.93	2,840.59	7.68	1,326.38
SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES					
	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,172.17	385.40	2,924.81	7.68	1,326.65

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\21504\My Documents\D51234.00 Railyards\D51234.00 Railyards Operation.
Project Name: D51234.00 Sacramento Railyards Operation
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES					
	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	871.53	140.40	79.81	0.00	0.26
OPERATIONAL (VEHICLE) EMISSION ESTIMATES					
	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	273.11	363.69	3,093.34	7.54	1,326.38
SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES					
	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	1,144.64	504.10	3,173.15	7.54	1,326.64

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\21504\My Documents\D51234.00 Railyards\D51234.00 Railyards Operation.
Project Name: D51234.00 Sacramento Railyards Operation
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	145.78	25.63	14.96	0.00	0.05

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	53.11	51.92	533.78	1.39	242.06

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	198.89	77.55	548.75	1.39	242.11

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\21504\My Documents\D51234.00 Railyards\D51234.00 Railyards Operation.
Project Name: D51234.00 Sacramento Railyards Operation
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	10.62	140.40	79.81	0	0.26
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	596.86	-	-	-	-
Architectural Coatings	264.05	-	-	-	-
TOTALS (lbs/day, unmitigated)	871.53	140.40	79.81	0.00	0.26

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments mid rise	126.96	167.45	1,435.89	3.54	618.70
Museum	3.20	4.29	36.31	0.09	15.44
City park	0.10	0.13	1.08	0.00	0.46
Hotel	13.08	17.57	148.37	0.36	63.36
Regnl shop. center	86.05	115.37	975.47	2.34	414.82
Strip mall	30.18	40.46	342.11	0.82	145.48
General office building	13.54	18.42	154.11	0.39	68.11
TOTAL EMISSIONS (lbs/day)	273.11	363.69	3,093.34	7.54	1,326.38

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2030 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments mid rise	321.05	5.76 trips/dwelling unit	12,200.00	70,272.00
Museum		4.61 trips/1000 sq. ft.	485.39	2,237.65
City park		1.59 trips/acres	41.16	65.44
Hotel		8.17 trips/rooms	1,100.00	8,987.00
Regnl shop. center		42.94 trips/1000 sq. ft.	1,400.00	60,116.00
Strip mall		42.94 trips/1000 sq. ft.	491.00	21,083.54
General office building		3.32 trips/1000 sq. ft.	2,400.00	7,968.00
Sum of Total Trips				170,729.63
Total Vehicle Miles Traveled				877,435.67

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.90	0.00	100.00	0.00
Light Truck 3,751- 5,750	16.70	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.60	0.00	100.00	0.00
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	33.30	66.70	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.60	0.00	92.30	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			

% of Trips - Commercial (by land use)

Museum	2.0	1.0	97.0
City park	5.0	2.5	92.5
Hotel	5.0	2.5	92.5
Regnl shop. center	2.0	1.0	97.0
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2030.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\21504\My Documents\D51234.00 Railyards\D51234.00 Railyards Operation.
Project Name: D51234.00 Sacramento Railyards Operation
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)	Source	ROG	NOx	CO	SO2	PM10
Natural Gas		10.62	140.40	79.81	0	0.26
Hearth - No summer emissions						
Landscaping		0.63	0.07	4.42	0.00	0.01
Consumer Prdcts		596.86	-	-	-	-
Architectural Coatings		264.05	-	-	-	-
TOTALS (lbs/day, unmitigated)		872.16	140.47	84.22	0.00	0.27

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments mid rise	154.26	112.41	1,355.06	3.61	618.70
Museum	4.55	2.90	32.35	0.09	15.44
City park	0.24	0.09	0.97	0.00	0.46
Hotel	15.22	11.86	133.01	0.36	63.36
Regnl shop. center	77.85	77.96	869.01	2.38	414.82
Strip mall	27.30	27.34	304.77	0.84	145.48
General office building	20.58	12.37	145.42	0.39	68.11
TOTAL EMISSIONS (lbs/day)	300.00	244.93	2,840.59	7.68	1,326.38

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2030 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments mid rise	321.05	5.76 trips/dwelling unit	12,200.00	70,272.00
Museum		4.61 trips/1000 sq. ft.	485.39	2,237.65
City park		1.59 trips/acres	41.16	65.44
Hotel		8.17 trips/rooms	1,100.00	8,987.00
Regnl shop. center		42.94 trips/1000 sq. ft.	1,400.00	60,116.00
Strip mall		42.94 trips/1000 sq. ft.	491.00	21,083.54
General office building		3.32 trips/1000 sq. ft.	2,400.00	7,968.00
Sum of Total Trips				170,729.63
Total Vehicle Miles Traveled				877,435.67

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.90	0.00	100.00	0.00
Light Truck 3,751- 5,750	16.70	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.60	0.00	100.00	0.00
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	33.30	66.70	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.60	0.00	92.30	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			

% of Trips - Commercial (by land use)

Museum	2.0	1.0	97.0
City park	5.0	2.5	92.5
Hotel	5.0	2.5	92.5
Regnl shop. center	2.0	1.0	97.0
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2030.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\21504\My Documents\D51234.00 Railyards\D51234.00 Railyards Operation.
Project Name: D51234.00 Sacramento Railyards Operation
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	1.94	25.62	14.56	0.00	0.05
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping	0.06	0.01	0.40	0.00	0.00
Consumer Prdcts	108.93	-	-	-	-
Architectural Coatings	34.85	-	-	-	-
TOTALS (tpy, unmitigated)	145.78	25.63	14.96	0.00	0.05

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments mid rise	26.49	23.86	252.22	0.65	112.91
Museum	0.75	0.61	6.14	0.02	2.82
City park	0.03	0.02	0.18	0.00	0.08
Hotel	2.65	2.51	25.21	0.07	11.56
Regnl shop. center	14.71	16.50	165.07	0.43	75.70
Strip mall	5.16	5.79	57.89	0.15	26.55
General office building	3.33	2.63	27.07	0.07	12.43
TOTAL EMISSIONS (tons/yr)	53.11	51.92	533.78	1.39	242.06

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2030 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments mid rise	321.05	5.76 trips/dwelling unit	12,200.00	70,272.00
Museum		4.61 trips/1000 sq. ft.	485.39	2,237.65
City park		1.59 trips/acres	41.16	65.44
Hotel		8.17 trips/rooms	1,100.00	8,987.00
Regnl shop. center		42.94 trips/1000 sq. ft.	1,400.00	60,116.00
Strip mall		42.94 trips/1000 sq. ft.	491.00	21,083.54
General office building		3.32 trips/1000 sq. ft.	2,400.00	7,968.00
Sum of Total Trips				170,729.63
Total Vehicle Miles Traveled				877,435.67

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.90	0.00	100.00	0.00
Light Truck 3,751- 5,750	16.70	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.60	0.00	100.00	0.00
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.70	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	33.30	66.70	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.60	0.00	92.30	7.70

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Museum				2.0	1.0	97.0
City park				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2020.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2030.