

Appendix B

Air Quality Data

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: R:\General Air Quality Info\Projects\0D2131000 - Simi Valley Climate Action Plan\Modeling\May 2011\Air Quality URBEMIS RUNS (AQ use only)\2006.urb924

Project Name: Simi Valley Climate Action Plan - Land Use 2006 - February 2011 Update

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (tons/year, unmitigated)	671.72	150.01	644.89	0.66	37.66	36.28

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (tons/year, unmitigated)	2,157.06	2,955.10	24,632.64	25.93	2,917.85	573.08

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (tons/year, unmitigated)	2,828.78	3,105.11	25,277.53	26.59	2,955.51	609.36

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	10.94	143.00	70.56	0.00	0.27	0.27
Hearth	87.17	4.06	235.55	0.64	36.48	35.11
Landscape	60.36	2.95	338.78	0.02	0.91	0.90
Consumer Products	408.35					
Architectural Coatings	104.90					
TOTALS (tons/year, unmitigated)	671.72	150.01	644.89	0.66	37.66	36.28

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	813.24	1,098.25	9,312.61	9.68	1,084.29	213.09
Apartments low rise	146.50	192.95	1,636.15	1.70	190.50	37.44
Mobile home park	8.22	10.50	89.03	0.09	10.37	2.04
Retirement community	11.87	14.75	125.11	0.13	14.57	2.86
Day-care center	17.74	25.77	211.04	0.23	25.42	4.99
Elementary school	56.24	54.92	453.94	0.48	54.32	10.66
High school	26.86	26.62	218.69	0.23	26.28	5.16
University/college (4 yrs)	0.51	0.65	5.30	0.01	0.64	0.13
Library	1.21	1.47	12.07	0.01	1.45	0.29

Page: 3

5/31/2011 5:31:46 PM

Place of worship	14.21	19.39	158.62	0.17	19.12	3.75
City park	12.04	15.38	125.94	0.13	15.17	2.98
Racquet club	0.96	1.36	11.17	0.01	1.35	0.26
Hotel	13.59	18.61	152.42	0.16	18.36	3.60
Strip mall	716.00	1,036.30	8,471.29	9.05	1,021.60	200.52
General office building	34.13	47.37	394.72	0.42	46.97	9.22
Office park	24.47	33.67	282.38	0.30	33.45	6.57
Government office building	11.20	16.34	134.29	0.14	16.14	3.17
Government (civic center)	32.80	47.48	390.11	0.42	46.88	9.20
Hospital	4.39	6.20	51.43	0.05	6.14	1.21
General light industry	166.06	224.27	1,882.54	1.98	222.87	43.77
Auto Dealer	24.51	35.53	290.46	0.31	35.03	6.88
Golf Course	14.67	19.84	162.19	0.17	19.56	3.84
Cemetery	2.03	2.62	21.40	0.02	2.58	0.51
Metrolink - Light Rail Station - ITE	2.56	3.75	30.69	0.03	3.70	0.73
Cultural Arts Center	1.05	1.11	9.05	0.01	1.09	0.21
TOTALS (tons/year, unmitigated)	2,157.06	2,955.10	24,632.64	25.93	2,917.85	573.08

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2006 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	11,103.00	10.19	dwelling units	33,309.00	339,418.70	3,429,079.20
Apartments low rise	532.44	7.00	dwelling units	8,519.00	59,633.00	602,460.27
Mobile home park	108.17	5.00	dwelling units	649.00	3,245.00	32,783.59
Retirement community	228.00	4.00	dwelling units	1,140.00	4,560.00	46,068.77
Day-care center		61.37	1000 sq ft	144.25	8,852.62	80,403.94
Elementary school		1.30	students	13,726.00	17,843.80	171,835.78
High school		1.40	students	6,409.00	8,972.60	83,131.13
University/college (4 yrs)		4.45	students	50.00	222.50	2,020.86
Library		3.31	1000 sq ft	153.00	506.43	4,599.65
Place of worship		9.00	1000 sq ft	746.00	6,714.00	60,489.78
City park		4.57	acres	1,156.00	5,282.92	47,982.12
Racquet club		19.53	1000 sq ft	24.00	468.72	4,257.15
Hotel		9.50	rooms	673.00	6,393.50	58,068.96
Strip mall		44.32	1000 sq ft	8,127.00	360,188.64	3,231,972.51
General office building		12.76	1000 sq ft	1,144.00	14,597.44	148,565.45
Office park		11.00	1000 sq ft	903.00	9,933.00	105,806.32
Government office building		145.00	1000 sq ft	38.00	5,510.00	51,050.15
Government (civic center)		53.00	1000 sq ft	302.00	16,006.00	148,295.59
Hospital		20.00	beds	99.00	1,980.00	19,428.75
General light industry		8.00	1000 sq ft	8,216.00	65,728.00	704,932.80
Auto Dealer		50.00	1000 sq ft	247.00	12,350.00	110,816.55
Golf Course		8.00	acres	862.00	6,896.00	61,877.81

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cemetery		5.00	acres	182.00	910.00	8,165.43
Metrolink - Light Rail Station - ITE		1,305.00	unknown	1.00	1,305.00	11,709.76
Cultural Arts Center		1.75	unknown	220.00	385.00	3,454.60
					957,902.87	9,229,256.92

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.0	2.5	97.1	0.4
Light Truck < 3750 lbs	7.4	5.4	90.5	4.1
Light Truck 3751-5750 lbs	22.6	0.9	98.7	0.4
Med Truck 5751-8500 lbs	10.5	1.9	98.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	100.0	0.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	81.5	18.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	12.5	75.0	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Day-care center				5.0	2.5	92.5
Elementary school				20.0	10.0	70.0
High school				10.0	5.0	85.0
University/college (4 yrs)				5.0	2.5	92.5
Library				5.0	2.5	92.5
Place of worship				3.0	1.5	95.5
City park				5.0	2.5	92.5
Racquet club				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
Hospital				25.0	12.5	62.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
General light industry				50.0	25.0	25.0
Auto Dealer				2.0	1.0	97.0
Golf Course				2.0	1.0	97.0
Cemetery				2.0	1.0	97.0
Metrolink - Light Rail Station - ITE				2.0	1.0	97.0
Cultural Arts Center				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: R:\General Air Quality Info\Projects\0D2131000 - Simi Valley Climate Action Plan\Modeling\May 2011\Air Quality URBEMIS RUNS (AQ use only)\2006.urb924

Project Name: Simi Valley Climate Action Plan - Land Use 2006 - February 2011 Update

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	3,202.99	799.72	2,242.97	0.10	6.49	6.42

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	11,453.37	15,134.59	136,235.56	147.58	15,988.05	3,140.13

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	14,656.36	15,934.31	138,478.53	147.68	15,994.54	3,146.55

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	59.92	783.58	386.63	0.01	1.49	1.47
Hearth - No Summer Emissions						
Landscape	330.71	16.14	1,856.34	0.09	5.00	4.95
Consumer Products	2,237.55					
Architectural Coatings	574.81					
TOTALS (lbs/day, unmitigated)	3,202.99	799.72	2,242.97	0.10	6.49	6.42

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	4,324.41	5,623.98	51,554.77	55.02	5,941.30	1,167.63
Apartments low rise	784.28	988.09	9,057.74	9.67	1,043.84	205.14
Mobile home park	44.38	53.77	492.89	0.53	56.80	11.16
Retirement community	64.46	75.56	692.62	0.74	79.82	15.69
Day-care center	92.89	131.98	1,165.62	1.28	139.26	27.34
Elementary school	322.52	281.27	2,510.74	2.74	297.65	58.44
High school	153.70	136.32	1,208.45	1.33	143.99	28.27
University/college (4 yrs)	2.76	3.32	29.30	0.03	3.50	0.69
Library	6.64	7.55	66.68	0.07	7.97	1.56

Page: 3

5/31/2011 5:27:44 PM

Place of worship	75.71	99.33	875.94	0.96	104.77	20.56
City park	65.27	78.76	695.60	0.76	83.11	16.31
Racquet club	5.07	6.99	61.72	0.07	7.37	1.45
Hotel	72.32	95.32	841.83	0.93	100.58	19.74
Strip mall	3,752.79	5,308.44	46,774.95	51.49	5,597.82	1,098.72
General office building	180.72	242.56	2,185.87	2.37	257.35	50.54
Office park	129.78	172.41	1,565.19	1.69	183.29	36.00
Government office building	58.55	83.72	742.10	0.81	88.42	17.36
Government (civic center)	171.84	243.19	2,155.72	2.36	256.86	50.42
Hospital	23.13	31.77	284.56	0.31	33.65	6.61
General light industry	885.17	1,148.31	10,436.30	11.28	1,221.19	239.86
Auto Dealer	128.38	182.01	1,603.80	1.77	191.94	37.67
Golf Course	78.34	101.63	895.53	0.99	107.17	21.04
Cemetery	10.97	13.41	118.17	0.13	14.14	2.78
Metrolink - Light Rail Station - ITE	13.34	19.23	169.47	0.19	20.28	3.98
Cultural Arts Center	5.95	5.67	50.00	0.06	5.98	1.17
TOTALS (lbs/day, unmitigated)	11,453.37	15,134.59	136,235.56	147.58	15,988.05	3,140.13

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2006 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	11,103.00	10.19	dwelling units	33,309.00	339,418.70	3,429,079.20
Apartments low rise	532.44	7.00	dwelling units	8,519.00	59,633.00	602,460.27
Mobile home park	108.17	5.00	dwelling units	649.00	3,245.00	32,783.59
Retirement community	228.00	4.00	dwelling units	1,140.00	4,560.00	46,068.77
Day-care center		61.37	1000 sq ft	144.25	8,852.62	80,403.94
Elementary school		1.30	students	13,726.00	17,843.80	171,835.78
High school		1.40	students	6,409.00	8,972.60	83,131.13
University/college (4 yrs)		4.45	students	50.00	222.50	2,020.86
Library		3.31	1000 sq ft	153.00	506.43	4,599.65
Place of worship		9.00	1000 sq ft	746.00	6,714.00	60,489.78
City park		4.57	acres	1,156.00	5,282.92	47,982.12
Racquet club		19.53	1000 sq ft	24.00	468.72	4,257.15
Hotel		9.50	rooms	673.00	6,393.50	58,068.96
Strip mall		44.32	1000 sq ft	8,127.00	360,188.64	3,231,972.51
General office building		12.76	1000 sq ft	1,144.00	14,597.44	148,565.45
Office park		11.00	1000 sq ft	903.00	9,933.00	105,806.32
Government office building		145.00	1000 sq ft	38.00	5,510.00	51,050.15
Government (civic center)		53.00	1000 sq ft	302.00	16,006.00	148,295.59
Hospital		20.00	beds	99.00	1,980.00	19,428.75
General light industry		8.00	1000 sq ft	8,216.00	65,728.00	704,932.80
Auto Dealer		50.00	1000 sq ft	247.00	12,350.00	110,816.55
Golf Course		8.00	acres	862.00	6,896.00	61,877.81

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cemetery		5.00	acres	182.00	910.00	8,165.43
Metrolink - Light Rail Station - ITE		1,305.00	unknown	1.00	1,305.00	11,709.76
Cultural Arts Center		1.75	unknown	220.00	385.00	3,454.60
					957,902.87	9,229,256.92

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.0	2.5	97.1	0.4
Light Truck < 3750 lbs	7.4	5.4	90.5	4.1
Light Truck 3751-5750 lbs	22.6	0.9	98.7	0.4
Med Truck 5751-8500 lbs	10.5	1.9	98.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	100.0	0.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	81.5	18.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	12.5	75.0	12.5

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Day-care center				5.0	2.5	92.5
Elementary school				20.0	10.0	70.0
High school				10.0	5.0	85.0
University/college (4 yrs)				5.0	2.5	92.5
Library				5.0	2.5	92.5
Place of worship				3.0	1.5	95.5
City park				5.0	2.5	92.5
Racquet club				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
Hospital				25.0	12.5	62.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
General light industry				50.0	25.0	25.0
Auto Dealer				2.0	1.0	97.0
Golf Course				2.0	1.0	97.0
Cemetery				2.0	1.0	97.0
Metrolink - Light Rail Station - ITE				2.0	1.0	97.0
Cultural Arts Center				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: R:\General Air Quality Info\Projects\0D2131000 - Simi Valley Climate Action Plan\Modeling\May 2011\Air Quality URBEMIS RUNS (AQ use only)\Revised 5-31-2011\2006.urb924

Project Name: Simi Valley Climate Action Plan - Land Use 2006 - February 2011 Update

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	9,708.77	1,384.54	19,348.01	53.31	2,942.15	2,832.42

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	12,551.81	18,307.70	132,449.51	131.46	15,988.05	3,140.13

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	22,260.58	19,692.24	151,797.52	184.77	18,930.20	5,972.55

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	59.92	783.58	386.63	0.01	1.49	1.47
Hearth	6,836.49	600.96	18,961.38	53.30	2,940.66	2,830.95
Landscaping - No Winter Emissions						
Consumer Products	2,237.55					
Architectural Coatings	574.81					
TOTALS (lbs/day, unmitigated)	9,708.77	1,384.54	19,348.01	53.31	2,942.15	2,832.42

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	4,719.50	6,805.38	49,974.51	49.02	5,941.30	1,167.63
Apartments low rise	839.68	1,195.65	8,780.10	8.61	1,043.84	205.14
Mobile home park	46.42	65.06	477.78	0.47	56.80	11.16
Retirement community	66.13	91.43	671.39	0.66	79.82	15.69
Day-care center	105.89	159.59	1,137.90	1.14	139.26	27.34
Elementary school	279.46	340.23	2,440.63	2.44	297.65	58.44
High school	134.19	164.86	1,177.96	1.18	143.99	28.27
University/college (4 yrs)	2.84	4.01	28.60	0.03	3.50	0.69
Library	6.63	9.13	65.10	0.07	7.97	1.56

Page: 3

5/31/2011 6:07:11 PM

Place of worship	82.16	120.10	855.63	0.86	104.77	20.56
City park	67.40	95.23	679.05	0.68	83.11	16.31
Racquet club	5.67	8.45	60.25	0.06	7.37	1.45
Hotel	78.72	115.25	821.81	0.82	100.58	19.74
Strip mall	4,264.34	6,418.15	45,704.21	45.85	5,597.82	1,098.72
General office building	199.64	293.51	2,116.88	2.11	257.35	50.54
Office park	142.67	208.68	1,511.39	1.51	183.29	36.00
Government office building	67.05	101.24	723.38	0.72	88.42	17.36
Government (civic center)	195.54	294.09	2,101.34	2.11	256.86	50.42
Hospital	25.89	38.44	276.26	0.28	33.65	6.61
General light industry	959.34	1,389.95	10,073.31	10.05	1,221.19	239.86
Auto Dealer	146.09	220.06	1,567.09	1.57	191.94	37.67
Golf Course	84.42	122.88	875.03	0.88	107.17	21.04
Cemetery	11.41	16.22	115.47	0.12	14.14	2.78
Metrolink - Light Rail Station - ITE	15.34	23.25	165.59	0.17	20.28	3.98
Cultural Arts Center	5.39	6.86	48.85	0.05	5.98	1.17
TOTALS (lbs/day, unmitigated)	12,551.81	18,307.70	132,449.51	131.46	15,988.05	3,140.13

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2006 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	11,103.00	10.19	dwelling units	33,309.00	339,418.70	3,429,079.20
Apartments low rise	532.44	7.00	dwelling units	8,519.00	59,633.00	602,460.27
Mobile home park	108.17	5.00	dwelling units	649.00	3,245.00	32,783.59
Retirement community	228.00	4.00	dwelling units	1,140.00	4,560.00	46,068.77
Day-care center		61.37	1000 sq ft	144.25	8,852.62	80,403.94
Elementary school		1.30	students	13,726.00	17,843.80	171,835.78
High school		1.40	students	6,409.00	8,972.60	83,131.13
University/college (4 yrs)		4.45	students	50.00	222.50	2,020.86
Library		3.31	1000 sq ft	153.00	506.43	4,599.65
Place of worship		9.00	1000 sq ft	746.00	6,714.00	60,489.78
City park		4.57	acres	1,156.00	5,282.92	47,982.12
Racquet club		19.53	1000 sq ft	24.00	468.72	4,257.15
Hotel		9.50	rooms	673.00	6,393.50	58,068.96
Strip mall		44.32	1000 sq ft	8,127.00	360,188.64	3,231,972.51
General office building		12.76	1000 sq ft	1,144.00	14,597.44	148,565.45
Office park		11.00	1000 sq ft	903.00	9,933.00	105,806.32
Government office building		145.00	1000 sq ft	38.00	5,510.00	51,050.15
Government (civic center)		53.00	1000 sq ft	302.00	16,006.00	148,295.59
Hospital		20.00	beds	99.00	1,980.00	19,428.75
General light industry		8.00	1000 sq ft	8,216.00	65,728.00	704,932.80
Auto Dealer		50.00	1000 sq ft	247.00	12,350.00	110,816.55
Golf Course		8.00	acres	862.00	6,896.00	61,877.81

5/31/2011 6:07:11 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cemetery		5.00	acres	182.00	910.00	8,165.43
Metrolink - Light Rail Station - ITE		1,305.00	unknown	1.00	1,305.00	11,709.76
Cultural Arts Center		1.75	unknown	220.00	385.00	3,454.60
					957,902.87	9,229,256.92

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.0	2.5	97.1	0.4
Light Truck < 3750 lbs	7.4	5.4	90.5	4.1
Light Truck 3751-5750 lbs	22.6	0.9	98.7	0.4
Med Truck 5751-8500 lbs	10.5	1.9	98.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	100.0	0.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	81.5	18.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	12.5	75.0	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Day-care center				5.0	2.5	92.5
Elementary school				20.0	10.0	70.0
High school				10.0	5.0	85.0
University/college (4 yrs)				5.0	2.5	92.5
Library				5.0	2.5	92.5
Place of worship				3.0	1.5	95.5
City park				5.0	2.5	92.5
Racquet club				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
Hospital				25.0	12.5	62.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
General light industry				50.0	25.0	25.0
Auto Dealer				2.0	1.0	97.0
Golf Course				2.0	1.0	97.0
Cemetery				2.0	1.0	97.0
Metrolink - Light Rail Station - ITE				2.0	1.0	97.0
Cultural Arts Center				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: R:\General Air Quality Info\Projects\0D2131000 - Simi Valley Climate Action Plan\Modeling\May 2011\Air Quality URBEMIS RUNS (AQ use only)\2030.urb924

Project Name: Simi Valley Climate Action Plan - Land Use 2030 - Feb 2011

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (tons/year, unmitigated)	846.96	200.57	746.51	0.88	50.12	48.28

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (tons/year, unmitigated)	751.99	766.13	7,862.67	23.14	3,988.05	773.19

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (tons/year, unmitigated)	1,598.95	966.70	8,609.18	24.02	4,038.17	821.47

5/31/2011 5:26:16 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	14.60	191.37	97.81	0.00	0.36	0.36
Hearth	117.38	5.43	315.59	0.86	48.87	47.04
Landscape	59.43	3.77	333.11	0.02	0.89	0.88
Consumer Products	547.11					
Architectural Coatings	108.44					
TOTALS (tons/year, unmitigated)	846.96	200.57	746.51	0.88	50.12	48.28

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	237.09	239.54	2,505.89	7.27	1,248.14	242.21
Apartments low rise	47.27	45.87	479.85	1.39	239.01	46.38
Apartments mid rise	34.17	33.16	346.84	1.01	172.76	33.52
Mobile home park	1.75	1.62	16.93	0.05	8.43	1.64
Retirement community	3.80	3.38	35.35	0.10	17.60	3.42
Day-care center	4.97	5.50	55.19	0.16	28.53	5.53
Elementary school	19.21	11.95	121.30	0.36	62.23	12.06
High school	9.13	5.78	58.26	0.17	30.04	5.82
University/college (4 yrs)	0.11	0.10	0.98	0.00	0.51	0.10

Page: 3

5/31/2011 5:26:16 PM

Library	0.33	0.28	2.80	0.01	1.45	0.28
Place of worship	2.83	2.84	28.41	0.08	14.70	2.85
City park	3.63	3.29	33.01	0.10	17.07	3.31
Racquet club	0.25	0.27	2.70	0.01	1.40	0.27
Hotel	5.53	5.58	56.02	0.17	28.96	5.61
Strip mall	92.15	101.37	1,014.60	3.03	525.35	101.74
Hardware/paint store	100.32	110.35	1,104.55	3.30	571.92	110.76
General office building	43.19	44.94	460.91	1.36	234.86	45.52
Office park	33.39	34.40	355.63	1.05	180.26	34.95
Government office building	1.68	1.87	18.87	0.06	9.73	1.88
Government (civic center)	9.82	10.83	109.15	0.33	56.28	10.90
Medical office building	16.45	16.84	169.29	0.50	87.42	16.93
Hospital	1.86	1.99	20.28	0.06	10.38	2.01
General light industry	62.48	62.55	647.35	1.91	327.88	63.58
Auto Dealer	12.90	14.23	142.40	0.43	73.73	14.28
Golf Course	5.00	4.95	49.54	0.15	25.65	4.97
Cemetery	1.11	1.02	10.23	0.03	5.30	1.03
Metrolink - Light Rail Station - ITE	1.26	1.42	14.24	0.04	7.37	1.43
Cultural Arts Center	0.31	0.21	2.10	0.01	1.09	0.21
TOTALS (tons/year, unmitigated)	751.99	766.13	7,862.67	23.14	3,988.05	773.19

Operational Settings:

Does not include correction for passby trips

Page: 4

5/31/2011 5:26:16 PM

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	12,680.33	10.31	dwelling units	38,041.00	392,202.73	3,962,345.69
Apartments low rise	670.56	7.00	dwelling units	10,729.00	75,103.00	758,750.59
Apartments mid rise	204.08	7.00	dwelling units	7,755.00	54,285.00	548,430.50
Mobile home park	88.33	5.00	dwelling units	530.00	2,650.00	26,772.42
Retirement community	276.60	4.00	dwelling units	1,383.00	5,532.00	55,888.69
Day-care center		61.37	1000 sq ft	162.57	9,976.92	90,615.38
Elementary school		1.30	students	15,787.00	20,523.10	197,637.44
High school		1.40	students	7,355.00	10,297.00	95,401.70
University/college (4 yrs)		4.45	students	40.00	178.00	1,616.68
Library		3.31	1000 sq ft	153.00	506.43	4,599.65
Place of worship		9.00	1000 sq ft	576.00	5,184.00	46,705.25
City park		4.57	acres	1,306.00	5,968.42	54,208.17
Racquet club		19.53	1000 sq ft	25.00	488.25	4,434.53
Hotel		9.50	rooms	1,066.00	10,127.00	91,978.47
Strip mall		44.32	1000 sq ft	4,196.00	185,966.72	1,668,679.30
Hardware/paint store		44.32	1000 sq ft	4,568.00	202,453.76	1,816,617.50
General office building		12.76	1000 sq ft	5,743.00	73,280.68	745,814.13
Office park		11.00	1000 sq ft	4,885.00	53,735.00	572,385.22

5/31/2011 5:26:16 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Government office building		145.00	1000 sq ft	23.00	3,335.00	30,898.77
Government (civic center)		53.00	1000 sq ft	364.00	19,292.00	178,740.37
Medical office building		11.00	1000 sq ft	2,757.00	30,327.00	277,658.84
Hospital		20.00	beds	168.00	3,360.00	32,970.00
General light industry		8.00	1000 sq ft	12,134.00	97,072.00	1,041,097.20
Auto Dealer		50.00	1000 sq ft	522.00	26,100.00	234,195.29
Golf Course		8.00	acres	1,135.00	9,080.00	81,474.84
Cemetery		5.00	acres	375.00	1,875.00	16,824.37
Metrolink - Light Rail Station - ITE		1,305.00	unknown	2.00	2,610.00	23,419.53
Cultural Arts Center		1.75	unknown	220.00	385.00	3,454.60
					1,301,894.01	12,663,615.12

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	49.4	0.0	100.0	0.0
Light Truck < 3750 lbs	7.3	0.0	100.0	0.0
Light Truck 3751-5750 lbs	23.9	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.4	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.8	0.0	83.3	16.7
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0

5/31/2011 5:26:16 PM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	33.3	66.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Day-care center	5.0	2.5	92.5
Elementary school	20.0	10.0	70.0
High school	10.0	5.0	85.0
University/college (4 yrs)	5.0	2.5	92.5
Library	5.0	2.5	92.5
Place of worship	3.0	1.5	95.5
City park	5.0	2.5	92.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Racquet club				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
Hardware/paint store				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5
General light industry				50.0	25.0	25.0
Auto Dealer				2.0	1.0	97.0
Golf Course				2.0	1.0	97.0
Cemetery				2.0	1.0	97.0
Metrolink - Light Rail Station - ITE				2.0	1.0	97.0
Cultural Arts Center				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: R:\General Air Quality Info\Projects\0D2131000 - Simi Valley Climate Action Plan\Modeling\May 2011\Air Quality URBEMIS RUNS (AQ use only)\2030.urb924

Project Name: Simi Valley Climate Action Plan - Land Use 2030 - Feb 2011

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	3,997.72	1,069.24	2,361.22	0.09	6.85	6.78

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	4,023.46	3,930.51	44,009.97	134.31	21,852.30	4,236.50

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	8,021.18	4,999.75	46,371.19	134.40	21,859.15	4,243.28

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	79.98	1,048.58	535.95	0.01	1.98	1.96
Hearth - No Summer Emissions						
Landscape	325.67	20.66	1,825.27	0.08	4.87	4.82
Consumer Products	2,997.87					
Architectural Coatings	594.20					
TOTALS (lbs/day, unmitigated)	3,997.72	1,069.24	2,361.22	0.09	6.85	6.78

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	1,268.57	1,228.79	14,031.03	42.21	6,839.12	1,327.16
Apartments low rise	255.17	235.30	2,686.80	8.08	1,309.63	254.14
Apartments mid rise	184.44	170.08	1,942.04	5.84	946.61	183.69
Mobile home park	9.54	8.30	94.80	0.29	46.21	8.97
Retirement community	20.90	17.33	197.91	0.60	96.47	18.72
Day-care center	26.12	28.22	308.58	0.96	156.32	30.28
Elementary school	111.79	61.31	679.02	2.09	340.99	66.07
High school	53.04	29.67	325.88	1.01	164.59	31.88
University/college (4 yrs)	0.60	0.50	5.51	0.02	2.79	0.54

Page: 3

5/31/2011 5:25:33 PM

Library	1.84	1.43	15.66	0.05	7.94	1.54
Place of worship	15.22	14.55	158.85	0.49	80.57	15.60
City park	19.93	16.88	184.60	0.57	93.52	18.11
Racquet club	1.34	1.38	15.10	0.05	7.65	1.48
Hotel	29.72	28.65	313.23	0.97	158.68	30.73
Strip mall	485.43	520.16	5,671.74	17.59	2,878.62	557.46
Hardware/paint store	528.47	566.27	6,174.57	19.15	3,133.83	606.88
General office building	230.07	230.56	2,582.50	7.90	1,286.91	249.45
Office park	178.10	176.45	1,994.07	6.08	987.74	191.52
Government office building	8.79	9.61	105.55	0.33	53.31	10.33
Government (civic center)	51.65	55.59	610.56	1.89	308.36	59.73
Medical office building	88.06	86.43	946.72	2.93	479.01	92.78
Hospital	9.87	10.22	113.58	0.35	56.89	11.02
General light industry	335.45	320.81	3,630.19	11.06	1,796.60	348.37
Auto Dealer	67.89	73.00	796.02	2.47	404.01	78.24
Golf Course	27.01	25.40	276.93	0.86	140.55	27.22
Cemetery	6.08	5.24	57.19	0.18	29.02	5.62
Metrolink - Light Rail Station - ITE	6.61	7.30	79.60	0.25	40.40	7.82
Cultural Arts Center	1.76	1.08	11.74	0.04	5.96	1.15
TOTALS (lbs/day, unmitigated)	4,023.46	3,930.51	44,009.97	134.31	21,852.30	4,236.50

Operational Settings:

Does not include correction for passby trips

Page: 4

5/31/2011 5:25:33 PM

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	12,680.33	10.31	dwelling units	38,041.00	392,202.73	3,962,345.69
Apartments low rise	670.56	7.00	dwelling units	10,729.00	75,103.00	758,750.59
Apartments mid rise	204.08	7.00	dwelling units	7,755.00	54,285.00	548,430.50
Mobile home park	88.33	5.00	dwelling units	530.00	2,650.00	26,772.42
Retirement community	276.60	4.00	dwelling units	1,383.00	5,532.00	55,888.69
Day-care center		61.37	1000 sq ft	162.57	9,976.92	90,615.38
Elementary school		1.30	students	15,787.00	20,523.10	197,637.44
High school		1.40	students	7,355.00	10,297.00	95,401.70
University/college (4 yrs)		4.45	students	40.00	178.00	1,616.68
Library		3.31	1000 sq ft	153.00	506.43	4,599.65
Place of worship		9.00	1000 sq ft	576.00	5,184.00	46,705.25
City park		4.57	acres	1,306.00	5,968.42	54,208.17
Racquet club		19.53	1000 sq ft	25.00	488.25	4,434.53
Hotel		9.50	rooms	1,066.00	10,127.00	91,978.47
Strip mall		44.32	1000 sq ft	4,196.00	185,966.72	1,668,679.30
Hardware/paint store		44.32	1000 sq ft	4,568.00	202,453.76	1,816,617.50
General office building		12.76	1000 sq ft	5,743.00	73,280.68	745,814.13
Office park		11.00	1000 sq ft	4,885.00	53,735.00	572,385.22

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Government office building		145.00	1000 sq ft	23.00	3,335.00	30,898.77
Government (civic center)		53.00	1000 sq ft	364.00	19,292.00	178,740.37
Medical office building		11.00	1000 sq ft	2,757.00	30,327.00	277,658.84
Hospital		20.00	beds	168.00	3,360.00	32,970.00
General light industry		8.00	1000 sq ft	12,134.00	97,072.00	1,041,097.20
Auto Dealer		50.00	1000 sq ft	522.00	26,100.00	234,195.29
Golf Course		8.00	acres	1,135.00	9,080.00	81,474.84
Cemetery		5.00	acres	375.00	1,875.00	16,824.37
Metrolink - Light Rail Station - ITE		1,305.00	unknown	2.00	2,610.00	23,419.53
Cultural Arts Center		1.75	unknown	220.00	385.00	3,454.60
					1,301,894.01	12,663,615.12

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	49.4	0.0	100.0	0.0
Light Truck < 3750 lbs	7.3	0.0	100.0	0.0
Light Truck 3751-5750 lbs	23.9	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.4	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.8	0.0	83.3	16.7
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	33.3	66.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Day-care center	5.0	2.5	92.5
Elementary school	20.0	10.0	70.0
High school	10.0	5.0	85.0
University/college (4 yrs)	5.0	2.5	92.5
Library	5.0	2.5	92.5
Place of worship	3.0	1.5	95.5
City park	5.0	2.5	92.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Racquet club				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
Hardware/paint store				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5
General light industry				50.0	25.0	25.0
Auto Dealer				2.0	1.0	97.0
Golf Course				2.0	1.0	97.0
Cemetery				2.0	1.0	97.0
Metrolink - Light Rail Station - ITE				2.0	1.0	97.0
Cultural Arts Center				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: R:\General Air Quality Info\Projects\0D2131000 - Simi Valley Climate Action Plan\Modeling\May 2011\Air Quality URBEMIS RUNS (AQ use only)\2030.urb924

Project Name: Simi Valley Climate Action Plan - Land Use 2030 - Feb 2011

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	12,830.59	1,837.14	25,933.31	71.31	3,940.53	3,793.54

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	4,314.68	4,733.05	41,229.64	111.82	21,852.30	4,236.50

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	17,145.27	6,570.19	67,162.95	183.13	25,792.83	8,030.04

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	79.98	1,048.58	535.95	0.01	1.98	1.96
Hearth	9,158.54	788.56	25,397.36	71.30	3,938.55	3,791.58
Landscaping - No Winter Emissions						
Consumer Products	2,997.87					
Architectural Coatings	594.20					
TOTALS (lbs/day, unmitigated)	12,830.59	1,837.14	25,933.31	71.31	3,940.53	3,793.54

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	1,360.29	1,480.14	13,130.61	35.17	6,839.12	1,327.16
Apartments low rise	266.74	283.43	2,514.38	6.74	1,309.63	254.14
Apartments mid rise	192.80	204.87	1,817.42	4.87	946.61	183.69
Mobile home park	9.69	10.00	88.72	0.24	46.21	8.97
Retirement community	20.72	20.88	185.21	0.50	96.47	18.72
Day-care center	29.42	33.97	290.04	0.80	156.32	30.28
Elementary school	92.15	73.82	636.02	1.74	340.99	66.07
High school	44.01	35.72	305.93	0.84	164.59	31.88
University/college (4 yrs)	0.59	0.61	5.17	0.01	2.79	0.54

Page: 3

5/31/2011 5:25:55 PM

Library	1.76	1.72	14.72	0.04	7.94	1.54
Place of worship	16.06	17.52	149.38	0.41	80.57	15.60
City park	19.79	20.32	173.51	0.48	93.52	18.11
Racquet club	1.47	1.66	14.19	0.04	7.65	1.48
Hotel	31.50	34.48	294.40	0.81	158.68	30.73
Strip mall	543.98	625.96	5,334.84	14.63	2,878.62	557.46
Hardware/paint store	592.20	681.45	5,807.81	15.93	3,133.83	606.88
General office building	249.91	277.71	2,411.66	6.58	1,286.91	249.45
Office park	192.60	212.60	1,857.81	5.06	987.74	191.52
Government office building	9.97	11.57	99.09	0.27	53.31	10.33
Government (civic center)	58.10	66.92	573.18	1.57	308.36	59.73
Medical office building	94.24	104.03	889.40	2.44	479.01	92.78
Hospital	10.89	12.30	106.28	0.29	56.89	11.02
General light industry	356.20	386.56	3,380.96	9.21	1,796.60	348.37
Auto Dealer	76.22	87.85	748.73	2.05	404.01	78.24
Golf Course	28.25	30.56	260.48	0.71	140.55	27.22
Cemetery	6.09	6.31	53.79	0.15	29.02	5.62
Metrolink - Light Rail Station - ITE	7.53	8.79	74.87	0.21	40.40	7.82
Cultural Arts Center	1.51	1.30	11.04	0.03	5.96	1.15
TOTALS (lbs/day, unmitigated)	4,314.68	4,733.05	41,229.64	111.82	21,852.30	4,236.50

Operational Settings:

Does not include correction for passby trips

Page: 4

5/31/2011 5:25:55 PM

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	12,680.33	10.31	dwelling units	38,041.00	392,202.73	3,962,345.69
Apartments low rise	670.56	7.00	dwelling units	10,729.00	75,103.00	758,750.59
Apartments mid rise	204.08	7.00	dwelling units	7,755.00	54,285.00	548,430.50
Mobile home park	88.33	5.00	dwelling units	530.00	2,650.00	26,772.42
Retirement community	276.60	4.00	dwelling units	1,383.00	5,532.00	55,888.69
Day-care center		61.37	1000 sq ft	162.57	9,976.92	90,615.38
Elementary school		1.30	students	15,787.00	20,523.10	197,637.44
High school		1.40	students	7,355.00	10,297.00	95,401.70
University/college (4 yrs)		4.45	students	40.00	178.00	1,616.68
Library		3.31	1000 sq ft	153.00	506.43	4,599.65
Place of worship		9.00	1000 sq ft	576.00	5,184.00	46,705.25
City park		4.57	acres	1,306.00	5,968.42	54,208.17
Racquet club		19.53	1000 sq ft	25.00	488.25	4,434.53
Hotel		9.50	rooms	1,066.00	10,127.00	91,978.47
Strip mall		44.32	1000 sq ft	4,196.00	185,966.72	1,668,679.30
Hardware/paint store		44.32	1000 sq ft	4,568.00	202,453.76	1,816,617.50
General office building		12.76	1000 sq ft	5,743.00	73,280.68	745,814.13
Office park		11.00	1000 sq ft	4,885.00	53,735.00	572,385.22

5/31/2011 5:25:55 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Government office building		145.00	1000 sq ft	23.00	3,335.00	30,898.77
Government (civic center)		53.00	1000 sq ft	364.00	19,292.00	178,740.37
Medical office building		11.00	1000 sq ft	2,757.00	30,327.00	277,658.84
Hospital		20.00	beds	168.00	3,360.00	32,970.00
General light industry		8.00	1000 sq ft	12,134.00	97,072.00	1,041,097.20
Auto Dealer		50.00	1000 sq ft	522.00	26,100.00	234,195.29
Golf Course		8.00	acres	1,135.00	9,080.00	81,474.84
Cemetery		5.00	acres	375.00	1,875.00	16,824.37
Metrolink - Light Rail Station - ITE		1,305.00	unknown	2.00	2,610.00	23,419.53
Cultural Arts Center		1.75	unknown	220.00	385.00	3,454.60
					1,301,894.01	12,663,615.12

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	49.4	0.0	100.0	0.0
Light Truck < 3750 lbs	7.3	0.0	100.0	0.0
Light Truck 3751-5750 lbs	23.9	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.4	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.8	0.0	83.3	16.7
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0

5/31/2011 5:25:55 PM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	33.3	66.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.1	0.0	90.9	9.1

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Day-care center	5.0	2.5	92.5
Elementary school	20.0	10.0	70.0
High school	10.0	5.0	85.0
University/college (4 yrs)	5.0	2.5	92.5
Library	5.0	2.5	92.5
Place of worship	3.0	1.5	95.5
City park	5.0	2.5	92.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Racquet club				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
Hardware/paint store				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5
General light industry				50.0	25.0	25.0
Auto Dealer				2.0	1.0	97.0
Golf Course				2.0	1.0	97.0
Cemetery				2.0	1.0	97.0
Metrolink - Light Rail Station - ITE				2.0	1.0	97.0
Cultural Arts Center				2.0	1.0	97.0

**Simi Valley General Plan EIR
CO Hotspot Analysis**

CO Results

Intersection	AM/PM	Level of Service	Peak Hour Volume	1-Hr Conc. (ppm)	8-Hr Conc. (ppm)	Exceed Standards?
State Standards				20	9	
Stearns Street at Los Angeles Avenue	AM/PM	D	4,700.0	6.8	0.4	NO
Sycamore Drive at Los Angeles Avenue	AM/PM	D	5,399.0	6.8	0.4	NO
Los Angeles Avenue at Patricia Avenue	AM/PM	E	5,845.0	6.9	0.5	NO
First Street at Easy Street	AM/PM	D	6,224.0	7.0	0.6	NO
First Street at Los Angeles Avenue	AM/PM	E	8,265.0	7.0	0.6	NO

*Ambient concentrations provided in VCAPCD Assessment Guidelines (6.2 for 1 hour and 4.3 for 8 hour).

First at Easy.txt
 JOB: First Avenue at Easy Street
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M)		
	X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	764	2.0
4. Receptor	-3	764	2.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM)								
			A	B	C	D	E	F	G	H	
1. Receptor	3.	.8	.0	.0	.0	.1	.0	.0	.0	.0	.4
2. Receptor	357.	.7	.0	.0	.4	.0	.0	.0	.0	.1	.0
3. Receptor	183.	.7	.0	.3	.0	.0	.0	.0	.0	.0	.0
4. Receptor	177.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM)											
	I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

First at LA.txt
 JOB: First Avenue at Los Angeles Avenue
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M)		
	X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	769	2.0
4. Receptor	-3	769	2.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM)							
			A	B	C	D	E	F	G	H
1. Receptor	3.	.8	.0	.0	.0	.0	.0	.1	.0	.3
2. Receptor	356.	.8	.0	.0	.3	.0	.0	.0	.1	.0
3. Receptor	266.	.8	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	93.	.8	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM)											
	I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
4. Receptor	.0	.0	.0	.0	.0	.1	.0	.3	.0	.0	.0	.0

□□

LA at Patricia.txt
 JOB: Los Angeles Avenue at Patricia Avenue
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M)		
	X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	11	747	2.0
3. Receptor	11	769	2.0
4. Receptor	-3	769	2.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM)								
			A	B	C	D	E	F	G	H	
1. Receptor	88.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	273.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	266.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	93.	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM)											
	I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.1	.0	.0	.0	.0	.0	.3	.0	.0	.0
4. Receptor	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0

□□

Stearns at LA.txt
 JOB: Stearns St at Los Angeles Avenue
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M)		
	X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	16	747	2.0
3. Receptor	16	769	2.0
4. Receptor	-3	769	2.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM)								
			A	B	C	D	E	F	G	H	
1. Receptor	88.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	273.	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	267.	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	93.	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM)											
	I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
4. Receptor	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0

□□

Sycamore at LA.txt
 JOB: Sycamore Drive at Los Angeles Aveue
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
		X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	16	747	2.0
3. Receptor	*	16	769	2.0
4. Receptor	*	-3	769	2.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)								
				A	B	C	D	E	F	G	H	
1. Receptor	*	87.	* .6 *	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	273.	* .5 *	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	267.	* .6 *	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	93.	* .6 *	.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM)											
		I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
4. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0

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