

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name:

Project Name: Carlsbad General Plan 2035 Emissions

Project Location: California State-wide

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)	13,261.85	1,736.31	53,308.52	165.26	8,522.32	8,203.14

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)	2,841.93	3,410.65	29,763.92	70.68	13,935.46	2,659.66

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)	16,103.78	5,146.96	83,072.44	235.94	22,457.78	10,862.80

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	42.20	546.83	235.90	0.01	1.05	1.03
Hearth	10,075.45	1,189.48	53,072.62	165.25	8,521.27	8,202.11
Landscaping - No Winter Emissions						
Consumer Products	2,450.56					
Architectural Coatings	693.64					
TOTALS (lbs/day, unmitigated)	13,261.85	1,736.31	53,308.52	165.26	8,522.32	8,203.14

Area Source Changes to Defaults

The residential percentage of surface area repainted each year changed from 10% to 11.7%

The nonresidential percentage of surface area repainted each year changed from 10% to 11.7%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25
Single family housing	785.42	937.94	8,283.64	19.60	3,842.72	734.08
Apartments mid rise	325.24	388.40	3,430.23	8.12	1,591.26	303.98
Mobile home park	20.94	25.00	220.83	0.52	102.44	19.57
Regnl shop. center	102.67	123.39	1,063.29	2.53	502.15	95.71
Strip mall	101.27	121.71	1,048.79	2.49	495.30	94.41
Bank (with drive-through)	3.55	4.26	36.73	0.09	17.35	3.31
General office building	206.22	248.72	2,162.56	5.16	1,016.45	194.00
Government office building	25.82	31.06	268.26	0.64	126.53	24.13
Government (civic center)	64.81	77.96	673.34	1.60	317.60	60.56
Industrial park	564.88	681.74	5,936.79	14.16	2,788.09	532.26
Community Commercial	123.02	147.84	1,273.97	3.03	601.65	114.68
Neighborhood Commercial	240.28	288.76	2,488.40	5.91	1,175.18	223.99
Specialty Commercial	86.60	104.08	896.86	2.13	423.55	80.73
Streetfront Commercial	158.17	190.09	1,638.09	3.89	773.61	147.45
Other Commercial	33.04	39.70	342.14	0.81	161.58	30.80
TOTALS (lbs/day, unmitigated)	2,841.93	3,410.65	29,763.92	70.68	13,935.46	2,659.66

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	10,252.67	8.50	dwelling units	30,758.00	261,443.00	2,235,259.26
Apartments mid rise	467.05	6.10	dwelling units	17,748.00	108,262.80	925,614.46
Mobile home park	264.00	4.40	dwelling units	1,584.00	6,969.60	59,587.99
Regnl shop. center		510.10	1000 sq ft	77.50	39,532.75	292,265.62
Strip mall		625.90	1000 sq ft	62.30	38,993.57	288,279.47
Bank (with drive-through)		227.60	1000 sq ft	6.00	1,365.60	10,095.88
General office building		224.30	1000 sq ft	325.41	72,989.46	591,397.13
Government office building		286.30	1000 sq ft	34.00	9,734.20	73,639.22
Government (civic center)		787.40	1000 sq ft	31.03	24,433.02	184,835.82
Industrial park		144.60	1000 sq ft	1,361.00	196,800.61	1,622,079.80
Community Commercial		532.20	1000 sq ft	89.00	47,365.80	350,175.36
Neighborhood Commercial		928.80	1000 sq ft	99.61	92,517.77	683,983.85
Specialty Commercial		872.90	1000 sq ft	38.20	33,344.78	246,517.97
Streetfront Commercial		929.40	1000 sq ft	65.53	60,903.58	450,260.18
Other Commercial		86.30	1000 sq ft	147.40	12,720.62	94,043.54
					1,007,377.16	8,108,035.55

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.8	0.0	100.0	0.0

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Truck < 3750 lbs	11.2	0.0	100.0	0.0
Light Truck 3751-5750 lbs	22.4	0.0	100.0	0.0
Med Truck 5751-8500 lbs	10.1	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	0.7	0.0	57.1	42.9
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	18.2	81.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.4	32.4	67.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	0.0	92.3	7.7

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
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	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
Bank (with drive-through)				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Government office building				10.0	5.0	85.0
Government (civic center)				10.0	5.0	85.0
Industrial park				41.5	20.8	37.8
Community Commercial				2.0	1.0	97.0
Neighborhood Commercial				2.0	1.0	97.0
Specialty Commercial				2.0	1.0	97.0
Streetfront Commercial				2.0	1.0	97.0
Other Commercial				2.0	1.0	97.0