

Emissions from Motor Vehicle Travel

File Name: laenter.URB
 Project Name: LA Entertainment District
 Project Location: South Coast Air Basin (Los Angeles area)

DETAILED REPORT - Winter

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 60 Season: Winter

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Apartments low rise	1.00 trips / trips	2183.00	2,183.00
Live Theater	1.00 trips / trips	3763.00	3,763.00
Entertainment	1.00 trips / trips	6557.00	6,557.00
Museum	1.00 trips / trips	673.00	673.00
Visitor Attraction	1.00 trips / trips	1159.00	1,159.00
Racquetball/health	1.00 trips / trips	2430.00	2,430.00
Quality restaurant	1.00 trips / trips	10503.00	10,503.00
Hotel	1.00 trips / trips	6065.00	6,065.00
Regnl shop. center > 5	1.00 trips / trips	8323.00	8,323.00
General office buildin	1.00 trips / trips	1584.00	1,584.00
Medical office buildin	1.00 trips / trips	4536.00	4,536.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	63.49	0.13	99.78	0.09
Light Duty Trucks	24.66	0.58	87.07	12.35
Medium Duty Trucks	7.59	0.58	99.42	
Lite-Heavy Duty Trucks	1.22	0.28	7.03	92.69
Med.-Heavy Duty Trucks	1.22	0.28	7.03	92.69
Heavy-Heavy Trucks	1.22			100.00
Urban Buses	0.17			100.00
Motorcycles	0.43	100.00 % all fuels		

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35	40	40	40	40	40
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

Live Theater	2.0	1.0	97.0
Entertainment	2.0	1.0	97.0
Museum	2.0	1.0	97.0
Visitor Attraction	2.0	1.0	97.0
Racquetball/health	5.0	2.5	92.5
Quality restaurant	8.0	4.0	88.0
Hotel	5.0	2.5	92.5
Regnl shop. center > 570000 sf	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Medical office building	7.0	3.5	89.5

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Apartments low rise	39.92	23.44	147.04	17.32
Live Theater	64.32	35.44	187.61	24.96
Entertainment	112.07	61.75	326.91	43.50
Museum	11.50	6.34	33.55	4.46
Visitor Attraction	19.81	10.91	57.78	7.69
Racquetball/health	41.75	23.36	124.63	16.54
Quality restaurant	181.38	103.02	553.73	73.27
Hotel	104.20	58.30	311.07	41.27
Regnl shop. center > 5700	142.25	78.38	414.96	55.22
General office building	28.62	18.32	103.92	13.48
Medical office building	78.20	44.20	236.98	31.38

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	824.03	463.45	2498.19	329.09

Does not include correction for passby trips.

Does not include double counting adjustment for internal trips.

Changes Made to the Default Values

Operational/Vehicle Related:

The passby option switch has been changed

The operational emissions mitigation switch has been changed

The default light duty auto fleet mix percentages or fuel/technology classes have been modified

The default light duty truck fleet mix percentages or fuel/technology classes have been modified

The default medium duty truck fleet mix percentages or fuel/technology classes have been modified

The default light heavy duty truck fleet mix percentages or fuel/technology classes have been modified

The default medium heavy duty truck fleet mix percentages or fuel/technology classes have been modified

The default winter temperature has been modified

The default summer temperature has been modified

File Name: laenter.URB
 Project Name: LA Entertainment District
 Project Location: South Coast Air Basin (Los Angeles area)

DETAILED REPORT - Summer

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Apartments low rise	1.00 trips / trips	2183.00	2,183.00
Live Theater	1.00 trips / trips	3763.00	3,763.00
Entertainment	1.00 trips / trips	6557.00	6,557.00
Museum	1.00 trips / trips	673.00	673.00
Visitor Attraction	1.00 trips / trips	1159.00	1,159.00
Racquetball/health	1.00 trips / trips	2430.00	2,430.00
Quality resturant	1.00 trips / trips	10503.00	10,503.00
Hotel	1.00 trips / trips	6065.00	6,065.00
Regnl shop. center > 5	1.00 trips / trips	8323.00	8,323.00
General office buildin	1.00 trips / trips	1584.00	1,584.00
Medical office buildin	1.00 trips / trips	4536.00	4,536.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	63.49	0.13	99.78	0.09
Light Duty Trucks	24.66	0.58	87.07	12.35
Medium Duty Trucks	7.59	0.58	99.42	
Lite-Heavy Duty Trucks	1.22	0.28	7.03	92.69
Med.-Heavy Duty Trucks	1.22	0.28	7.03	92.69
Heavy-Heavy Trucks	1.22			100.00
Urban Buses	0.17			100.00
Motorcycles	0.43	100.00 % all fuels		

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35	40	40	40	40	40
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

Live Theater	2.0	1.0	97.0
Entertainment	2.0	1.0	97.0
Museum	2.0	1.0	97.0
Visitor Attraction	2.0	1.0	97.0
Racquetball/health	5.0	2.5	92.5
Quality resturant	8.0	4.0	88.0
Hotel	5.0	2.5	92.5
Regnl shop. center > 57000 sf	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Medical office building	7.0	3.5	89.5

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Apartments low rise	36.23	21.12	110.80	17.32
Live Theater	59.06	31.79	145.78	24.96
Entertainment	102.91	55.40	254.02	43.50
Museum	10.56	5.69	26.07	4.46
Visitor Attraction	18.19	9.79	44.90	7.69
Racquetball/health	38.31	20.96	96.74	16.54
Quality resturant	166.34	92.47	429.42	73.27
Hotel	95.62	52.32	241.46	41.27
Regnl shop. center > 5700	130.62	70.32	322.43	55.22
General office building	26.10	16.48	80.06	13.48
Medical office building	71.73	39.67	183.83	31.38

	ROG	NOx	CO	PM10
TOTAL EMISSIONS (lbs/day)	755.67	416.02	1935.51	329.09

Does not include correction for passby trips.

Does not include double counting adjustment for internal trips.

Changes Made to the Default Values

Operational/Vehicle Related:

The passby option switch has been changed

The operational emissions mitigation switch has been changed

The default light duty auto fleet mix percentages or fuel/technology classes have been modified

The default light duty truck fleet mix percentages or fuel/technology classes have been modified

The default medium duty truck fleet mix percentages or fuel/technology classes have been modified

The default light heavy duty truck fleet mix percentages or fuel/technology classes have been modified

The default medium heavy duty truck fleet mix percentages or fuel/technology classes have been modified

The default winter temperature has been modified

The default summer temperature has been modified

Vehicle Fleet Mix Composite Emission Factor for 1999, 2002, 2020

Vehicle Fleet Percent Mix (LA County):

2002	VMT %	Light Duty Automobiles				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks			Urban Bus			Total
		Non-Cat	Cat	Diesel	Total	Non-Cat	Cat	Diesel	Total	Non-Cat	Cat	Diesel	Total	Non-Cat	Cat	Diesel	Total	Diesel	Mortcycle	
		1243	118131	284	119658	52	43778	111	43941	288	11165	1621	13074	82	476	6200	6758	332	795	184558
		1.04	98.72	0.24	64.83	0.12	99.63	0.25	23.81	2.20	85.40	12.40	7.08	1.21	7.04	91.74	3.66	0.18	0.43	100.00
		Light Duty Automobiles				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks			Urban Bus			Total