

MUSEUM MARKET PLAZA SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT AIR QUALITY TABLES

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1. Section III Air Quality Calculations Tables

**Table 1A
Demolition Equipment Emissions
(pounds per day)**

Equipment	#		CO	NOx	ROG	SOx*	PM ₁₀	PM _{2.5}	CO ₂
	Pieces	hrs/day							
Off-Highway Trucks	2	8	11.89	38.22	3.97	0.04	1.40	1.25	4,161.60
Tractor/Loader/Backhoe	1	8	3.14	5.40	0.82	0.01	0.42	0.37	534.40
Crushing Equipment	1	8	5.81	11.52	1.72	0.01	0.75	0.67	1,058.40
Excavators	2	4	4.46	9.20	1.19	0.01	0.51	0.45	956.80
Rubber Tired Loader	1	8	11.30	23.91	2.70	0.02	1.03	0.92	1,912.80
Sweeper/Scrubber	1	8	4.30	6.78	1.24	0.01	0.55	0.49	628.00
Total			40.91	95.02	11.63	0.10	4.65	4.14	9,252.00

EMFAC 2007 (Version 2.3)

SCAB Fleet Average Emission Factors (Diesel) for 2010 (pounds per HOUR)

	CO	NOx	ROG	SOx*	PM10	PM2.5	CO2
Off-Highway Trucks	0.743	2.389	0.248	0.003	0.088		260.1
Tractor/Loader/Backhoe	0.393	0.675	0.102	0.001	0.052		66.8
Crushing Equipment	0.726	1.439	0.215	0.002	0.094		132.3
Excavators	0.558	1.150	0.148	0.001	0.064		119.6
Rubber Tired Loader	1.413	2.989	0.338	0.003	0.129		239.1
Sweeper/Scrubber	0.538	0.847	0.155	0.001	0.069		78.50

SCAB Fleet Average Emission Factors (Diesel) for 2010 (pounds per DAY)

	CO	NOx	ROG	SOx*	PM10	PM2.5	CO2
Off-Highway Trucks	5.94	19.11	1.98	0.02	0.70		2,080.8
Tractor/Loader/Backhoe	3.14	5.40	0.82	0.01	0.42		534.4
Crushing Equipment	5.81	11.52	1.72	0.01	0.75		1,058.4
Excavators	4.46	9.20	1.19	0.01	0.51		956.8
Rubber Tired Loader	11.30	23.91	2.70	0.02	1.03		1,912.8
Sweeper/Scrubber	4.30	6.78	1.24	0.01	0.55		628.0

*South Coast Air Quality Management District, "CEQA Air Quality Handbook," Table A-9-8-A.

Table 1B
Demolition - Worker Moving Exhaust Emission Projections
(pounds per day)

	Total No. Vehicle			Ave. Trip			Total
	Trips/Day			Length (miles)			miles/day
	10		x		10	=	100
Pollutant lbs	CO	NOX	ROG	SOX	PM10	PM2.5	CO2
Passenger Vehicle	0.41	0.05	0.05	0.00	0.00	0.00	54.78
Delivery Truck	0.92	1.03	0.13	0.00	0.04	0.03	136.61
Total	1.34	1.08	0.18	0.00	0.04	0.03	191.4

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Total trips is 125% of grading equipment pieces. Passenger vehicle trips and Delivery truck trips are each 50% of total daily trips.

EMFAC2007 Version 2.3

Scenario Year 2010 -- Model Years 1966 to 2010

Pollutant	CO	NOX	ROG	SOX	PM10	PM2.5	CO2
Passenger Vehicle	0.0083	0.0009	0.0009	0.0000	0.0001	0.0001	1.0957
Delivery Truck (>8500lbs)	0.0184	0.0206	0.0026	0.0000	0.0008	0.0006	2.7322

Table 1C
Demolition - Related Emissions Summary
(pounds per day)

	CO	NOx	ROG	SOx	PM₁₀	PM_{2.5}	CO₂
Equipment Emissions	40.9	95.0	11.6	0.1	4.7	4.1	9,252.0
Workers' Vehicle Emissions	1.3	1.1	0.2	0.0	0.0	0.0	191.4
Total Construction Emission	42.2	96.1	11.8	0.1	4.7	4.2	9,443.4
SCAQMD Thresholds of Significance	550.00	100.00	75.00	150.00	150.00	55.00	N/A

Table 2A
Fugitive Dust Potential
(pounds per day)

Total Acres to be Disturbed at Buildout*	Factor (lbs./day/acre)	Total Potential Dust Generation (lbs./day)
20.6	26.4	543.8

Source: Table A9-9, "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993.

Table 3A
Grading Equipment Emissions
(pounds per day)

Equipment	#		CO	NOx	ROG	SOx*	PM10	PM2.5	CO2
	Pieces	hrs/day							
Grader	1	8	4.90	10.00	1.23	0.01	0.52	0.46	1,061.6
Crawler Tractors	1	8	4.84	9.85	1.34	0.01	0.60	0.54	912.0
Scrapers	1	8	8.79	20.54	2.33	0.02	0.87	0.77	2,100.0
Tractor/Loader/Backhoe	2	8	6.12	9.31	1.38	0.01	0.70	0.62	1,068.8
Rubber Tired Dozer	1	8	9.99	21.49	2.49	0.02	0.91	0.81	1,912.8
Off-Highway Trucks	2	8	10.62	32.25	3.59	0.04	1.14	1.02	4,161.6
Other Construction Equipment	2	8	6.16	13.76	7.83	0.14	0.04	0.04	0.18
Total			51.41	117.20	20.19	0.26	4.78	4.25	11,217

Source: EMFAC 2007 (Version 2.3) SCAB Fleet Average Emission Factors (Diesel) for 2012. *PM2.5 is 89% of PM10, based on South Coast Air Quality Management District's "Final- Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, October 2006. PM 10 accounts for all particulate matter less than 10 microns in diameter.

EMFAC 2007 (Version 2.3)

SCAB Fleet Average Emission Factors (Diesel) for 2012 (pounds per HOUR)

	CO	NOx	ROG	SOx*	PM10	PM2.5	CO2
Grader	0.61	1.25	0.15	0.00	0.06		132.7
Crawler Tractors	0.61	1.23	0.17	0.00	0.08		114
Scrapers	1.10	2.57	0.29	0.00	0.11		262.5
Tractor/Loader/Backhoe	0.38	0.58	0.09	0.00	0.04		66.8
Rubber Tired Dozer	1.25	2.69	0.31	0.00	0.11		239.1
Off-Highway Trucks	0.66	2.02	0.22	0.00	0.07		260.1
Other Construction Equipment	0.38	0.86	0.09	0.00	0.04		122.70

SCAB Fleet Average Emission Factors (Diesel) for 2012 (pounds per DAY)

	CO	NOx	ROG	SOx	PM10	PM2.5	CO2
Grader	4.90	10.00	1.23	0.01	0.52		1,061.6
Crawler Tractors	4.84	9.85	1.34	0.01	0.60		912.0
Scrapers	8.79	20.54	2.33	0.02	0.87		2,100.0
Tractor/Loader/Backhoe	3.06	4.65	0.69	0.01	0.35		534.4
Rubber Tired Dozer	9.99	21.49	2.49	0.02	0.91		1,912.8
Off-Highway Trucks	5.31	16.13	1.79	0.02	0.57		2,080.8
Other Construction Equipment	3.08	6.88	0.74	0.01	0.29		981.6

Table 3B
Grading - Worker Moving Exhaust Emission Projections
(pounds per day)

	Total No. Vehicle Trips/Day			Ave. Trip Length (miles)			Total miles/day
	13			x			10 = 125
Pollutant lbs	CO	NOX	ROG	SOX	PM10	PM2.5	CO2
Passenger Vehicle	0.48	0.05	0.05	0.001	0.01	0.00	68.85
Delivery Truck	0.97	1.08	0.14	0.002	0.04	0.03	172.89
Total	1.44	1.13	0.19	0.002	0.05	0.04	241.7

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Total trips is 125% of grading equipment pieces. Passenger vehicle trips and Delivery truck trips are each 50% of total daily trips.

EMFAC2007 Version 2.3
Scenario Year 2012 -- Model Years 1968 to 2012

Pollutant	CO	NOX	ROG	SOX	PM10	PM2.5	CO2
Passenger Vehicle	0.0077	0.0008	0.0008	0.00001	0.0001	0.0001	1.1015
Delivery Truck (>8500lbs)	0.0155	0.0173	0.0022	0.00003	0.0006	0.0005	2.7663

Table 3C
Grading - Related Exhaust Emissions Summary
(pounds per day)

	CO	NOx	ROG	SOx	PM ₁₀	PM _{2.5}	CO ₂
Equipment Emissions	51.41	117.20	20.19	0.26	4.78	4.25	11,216.98
Workers' Vehicle Emissions	1.44	1.13	0.19	0.00	0.05	0.04	241.74
Total Construction Emissions	52.86	118.33	20.37	0.26	4.83	4.29	11,458.71
SCAQMD Thresholds of Significance	550.00	100.00	75.00	150.00	150.00	55.00	N/A

**Table 4A
Construction Equipment Emissions**

Equipment	#		CO	NO _x	ROG	SO _x *	PM ₁₀	PM _{2.5}	CO ₂
	Pieces	hrs/ day							
Skid Steer Loader	1	8	0.75	1.18	0.16	0.00	0.07	0.06	133.60
Fork Lift	2	8	3.61	6.93	0.94	0.01	0.37	0.33	870.40
Rollers	1	8	3.29	5.55	0.83	0.01	0.39	0.35	536.80
Tractor/Loader/Backhoe	2	8	6.12	9.31	1.38	0.01	0.70	0.62	1,068.80
Pavers	1	8	4.36	7.18	1.28	0.01	0.51	0.46	623.20
Cement and Mortar Mixer	1	8	0.34	0.45	0.07	0.00	0.02	0.02	57.60
Dumper/Tender	2	8	0.52	0.98	0.16	0.00	0.05	0.04	121.60
Excavator	1	8	4.32	7.85	1.04	0.01	0.43	0.38	956.80
Other Equipment	2	8	6.16	13.76	1.48	0.02	0.59	0.52	1,963.20
Total			29.46	53.19	7.34	0.07	3.12	2.78	6,332.00

Source: EMFAC 2007 (Version 2.3) SCAB Fleet Average Emission Factors (Diesel) for 2012. *PM2.5 is 89% of PM10, based on South Coast Air Quality Management District's "Final- Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, October 2006. PM 10 accounts for all particulate matter less than 10 microns in diameter.

EMFAC2007 (Version 2.3)

SCAB Fleet Average Emission Factors (Diesel) for 2012 (pounds per HOUR)

	CO	NO _x	ROG	SO _x	PM10	PM2.5	CO2
Skid Steer Loader	0.09	0.15	0.02	0.00	0.01		16.70
Fork Lift	0.23	0.43	0.06	0.00	0.02		54.40
Rollers	0.41	0.69	0.10	0.00	0.05		67.10
Tractor/Loader/Backhoe	0.38	0.58	0.09	0.00	0.04		66.8
Pavers	0.54	0.90	0.16	0.00	0.06		77.90
Cement and Mortar Mixer	0.04	0.06	0.01	0.00	0.00		7.20
Dumper/Tender	0.03	0.06	0.01	0.00	0.00		7.60
Excavator	0.54	0.98	0.13	0.00	0.05		119.60
Other Equipment	0.38	0.86	0.09	0.00	0.04		122.70

SCAB Fleet Average Emission Factors (Diesel) for 2012 (pounds per DAY)

	CO	NO _x	ROG	SO _x	PM10	PM2.5	CO2
Skid Steer Loader	0.75	1.18	0.16	0.00	0.07		133.60
Fork Lift	1.81	3.46	0.47	0.00	0.18		435.20
Rollers	3.29	5.55	0.83	0.01	0.39		536.80
Tractor/Loader/Backhoe	3.06	4.65	0.69	0.01	0.35		534.40
Pavers	4.36	7.18	1.28	0.01	0.51		623.20
Cement and Mortar Mixer	0.34	0.45	0.07	0.00	0.02		57.60
Dumper/Tender	0.26	0.49	0.08	0.00	0.02		60.80
Excavator	4.32	7.85	1.04	0.01	0.43		956.80
Other Equipment	3.08	6.88	0.74	0.01	0.29		981.60

Table 4B
Construction -Worker Moving Exhaust Emission Projections
(pounds per day)

	Total No. Vehicle Trips/Day			Ave. Trip Length (miles)			Total miles/day
	16		x	10	=		163
Pollutant lbs	CO	NOX	ROG	SOX	PM10	PM2.5	CO2
Passenger Vehicle	0.62	0.06	0.06	0.001	0.01	0.00	89.50
Delivery Truck	1.26	1.41	0.18	0.002	0.05	0.04	224.76
Total	1.88	1.47	0.25	0.003	0.06	0.05	314.3

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Total trips is 125% of grading equipment pieces. Passenger vehicle trips and Delivery truck trips are each 50% of total daily trips.

EMFAC2007 Version 2.3
Scenario Year 2012 -- Model Years 1968 to 2012

Pollutant	CO	NOX	ROG	SOX	PM10	PM2.5	CO2
Passenger Vehicle	0.0077	0.0008	0.0008	0.0000	0.0001	0.0001	1.1015
Delivery Truck (>8500lbs)	0.0155	0.0173	0.0022	0.0000	0.0006	0.0005	2.7663

Table 4C
Asphalt Off-gassing

Average Asphalt Acreage per Phase	VOC Factor (lbs./acre)	Total Potential		Average Daily VOC Emissions (lbs.)
		VOC Generation (lbs.)	Total Days of Paving	
20.6	2.62	53.97	10	5.40

Source: URBEMIS2002 Users' Guide Version 7.4 May 2003.

Table 4D
Architectural Coatings

Maximum Daily Building Coverage (sqft)*	VOC Factor (lbs./1,000 sqft)	Total Potential VOC Generation (lbs.)
2,500	18.5	46.3

*Estimated maximum area that could be coated in one day during construction activities.

Table 4E
Aggregate Construction - Related Emissions Summary
(pounds per day)

	CO	NOx	ROG	SOx	PM10	PM2.5
Equipment Emissions	29.46	53.19	7.34	0.07	3.12	2.78
Workers' Vehicle Emissions	1.88	1.47	0.25	0.00	0.06	0.05
Asphalt Paving Emissions	-	-	5.40	-	-	-
Architectural Coatings Emissions	-	-	46.25	-	-	-
Total Construction Emissions	31.34	54.66	59.23	0.07	3.18	2.83
SCAQMD Thresholds of Significance	550.00	100.00	75.00	150.00	150.00	55.00

Table 5A
Power Plant Emission Projections
at Project Buildout
(Lbs. per 1,000 kwh)

Total Annual Electric Usage (kwh):					16,540,189.98
			Reactive		
Pollutants	Carbon Monoxide	Nitrogen Oxides	Organic Gases	Sulfur Oxides	Particulates
Project (mw/yr)	16,540.19	16,540.19	16,540.19	16,540.19	16,540.19
Factor (lbs/mw/hr)	0.2	1.15	0.12	0.04	0.01
Lbs./Year	3308.0	19021.2	1984.8	661.6	165.4
Lbs./Day	9.1	52.1	5.4	1.8	0.5

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plants and an average contribution from hydro-electric sources. Represents total pounds emitted per year by all development at buildout.

Table 5B
Emissions Associated with Natural Gas Consumption
at Project Buildout
(Lbs. per cubic foot)

Daily Residential Usage (cubic feet):		125,950			
			Reactive		
Pollutants	Carbon Monoxide	Nitrogen Oxides	Organic Gases	Sulfur Oxides	PM₁₀
Daily Use (in million cf)	0.13	0.13	0.13	0.13	0.13
Factor (lbs/million cf)	20.0	80.0	5.3	Negligible	0.2
Subtotal	2.5	10.1	0.7	Negligible	0.0
Daily Nonresidential Usage (cubic feet):		115,396			
			Reactive		
Pollutants	Carbon Monoxide	Nitrogen Oxides	Organic Gases	Sulfur Oxides	PM₁₀
Daily Use (in million cf)	0.12	0.12	0.12	0.12	0.12
Factor (lbs/million cf)	20.0	120.0	5.3	Negligible	0.2
Subtotal	2.3	36.5	0.6	Negligible	0.0
Total	4.8	46.6	1.3	Negligible	0.0

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plants and an average contribution from hydro-electric sources. Represents total pounds emitted per year by all development at buildout.

Table 5C
Daily Exhaust Emissions at Project Buildout
(pounds per day)

	Total Miles Traveled per Day						=	177,208
Pollutant	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}	CO₂	
Passenger Vehicles	999.96	96.66	109.85	1.86	16.31	10.65	192,207	
Delivery Trucks	38.30	41.57	5.72	0.10	1.65	1.34	10,035	
Total Pounds per Day	1,038.25	138.23	115.57	1.96	17.96	11.99	202,242	

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Passenger vehicles are assumed to be traveled by 98% of the total trips and delivery trucks represent 2% of total miles traveled.

EMFAC2007 Version 2.3
Scenario Year 2016 -- Model Years 1972 to 2016

Pollutant (lbs/mile)	CO	NO_x	ROG	SO_x	PM₁₀	PM_{2.5}	CO₂
Passenger Vehicle	0.0058	0.0006	0.0006	0.00001	0.0001	0.0001	1.1068
Delivery Truck (>8500lbs)	0.0108	0.0117	0.0016	0.00003	0.0005	0.0004	2.8313

Note: Total miles traveled per day are based on the 2-way trip estimates as set forth in the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, which used ITE Trip Generation Rates from the 7th Edition, December 2003 and was prepared by Endo Engineering September 2008.

All trip generating land uses assume each 2-way trip to be a total of 6.8 miles.

Table 5D
Anticipated Cumulative Daily Project-Related Emissions
at Project Buildout

	Stationary		Moving	Total	SCAQMD
	Source Emissions		Source	Anticipated	Threshold
	Power	Nat. Gas	Emissions	Emissions	Criteria*
	Plants			(lbs./day)	(lbs./day)
Carbon Monoxide	9.1	4.8	1,038.25	1,052.14	550.00
Nitrogen Oxides	52.1	46.6	138.23	236.95	100.00
Reactive Organic Gases	5.4	1.3	115.57	122.29	75.00
Sulfur Oxides	1.8	Negligible	1.96	3.77	150.00
Particulates	0.5	0.0	29.95	30.45	55.00
Carbon Dioxide	-	-	202,241.81	202,241.81	N/A

* Threshold criteria offered by the South Coast Air Quality Management District for assistance in determining the significance of air quality impacts. Source: "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993, Revised October 2006.

Table 6A
Power Plant Emission Projections
at Buildout of the No Project Alternative
(Lbs. per 1,000 kwh)

Total Annual Electric Usage (kwh) = 8,006,945					
Pollutants	Carbon Monoxide	Nitrogen Oxides	Reactive Organic Gases	Sulfur Oxides	Particulates
Project (mw/yr)	8,007	8,007	8,007	8,007	8,007
Factor (lbs/mw/hr)	0.2	1.15	0.12	0.04	0.01
Lbs./Year	1601.4	9208.0	960.8	320.3	80.1
Lbs./Day	4.4	25.2	2.6	0.9	0.2

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plan

Table 6B
Emissions Associated with Natural Gas Consumption
at Buildout of the No Project Alternative
(Lbs./cubic foot)

Daily Nonresidential Usage (cubic feet): 1,353,314					
Pollutants	Carbon Monoxide	Nitrogen Oxides	Reactive Organic Gases	Sulfur Oxides	PM₁₀
Daily Use (in million cf)	1.35	1.35	1.35	1.35	1.35
Factor (lbs/million cf)	20.00	120.0	5.30	Negligible	0.20
Total	27.07	36.53	7.17	Negligible	0.27

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plants and an average contribution from hydro-electric sources. Represents total pounds emitted per year by all development at buildout.

Table 6C
Daily Exhaust Emissions at Buildout of the No Project Alternative
(pounds per day)

Pollutant	Total Miles Traveled per Day			= 169,184			
	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Passenger Vehicles	954.68	92.28	104.88	1.78	15.57	10.17	183,504
Trucks	36.56	39.69	5.47	0.09	1.58	1.28	9,580
Total Pounds per Day	991.24	131.97	110.34	1.87	17.15	11.45	193,084

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Passenger vehicles are assumed to be traveled by 98% of the total trips and delivery trucks represent 2% of total miles traveled.

EMFAC2007 Version 2.3

Scenario Year 2016 -- Model Years 1972 to 2016

Pollutant (lbs/mile)	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Passenger Vehicle	0.0058	0.0006	0.0006	0.00001	0.0001	0.0001	1.1068
Delivery Truck (>8500lb	0.0108	0.0117	0.0016	0.00003	0.0005	0.0004	2.8313

Note: Total miles traveled per day are based on the 2-way trip estimates as set forth in the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-1: Site Trip Generation Forecast By Alternative, which used ITE Trip Generation Rates from the 7th Edition, December 2003 and was prepared by Endo Engineering September 2008. All trip generating land uses assume each 2-way trip to be a total of 6.8 miles.

Table 6D
Anticipated Cumulative Daily Project-Related Emissions
at Buildout of the No Project Alternative

	Stationary Source Emissions		Moving Source Emissions	Total Anticipated Emissions	SCAQMD Threshold Criteria*
	Power Plants	Nat. Gas		(lbs./day)	(lbs./day)
Carbon Monoxide	4.4	27.1	991.2	1022.69	550
Nitrogen Oxides	25.2	36.5	132.0	193.73	100
Reactive Organic Gases	2.6	7.2	110.3	120.15	75
Sulfur Oxides	0.9	Negligible	1.9	2.75	150
Particulates	0.2	0.3	28.6	29.09	55
Carbon Dioxide	-	-	193,084	193,084.28	N/A

* Threshold criteria offered by the South Coast Air Quality Management District for assistance in determining the significance of air quality impacts. Source: "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993

Table 7A
Power Plant Emission Projections
at Buildout of the Town and Country Alternative
(Lbs. per 1,000 kwh)

Total Annual Electric Usage (kwh)					=	15,395,383
Pollutants	Carbon	Nitrogen	Reactive	Sulfur		
	Monoxide	Oxides	Organic	Oxides		
Project (mw/yr)	15,395	15,395	15,395	15,395		15,395
Factor (lbs/mw/hr)	0.20	1.15	0.12	0.04		0.01
	Lbs./Year	3,079	17,705	1,847		616
	Lbs./Day	8.44	48.51	5.06		1.69
						0.42

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plan

Table 7B
Emissions Associated with Natural Gas Consumption
at Buildout of the Town and Country Alternative
(Lbs./cubic foot)

Daily Residential Usage (cubic feet)					=	125,950.13
Pollutants	Carbon	Nitrogen	Reactive	Sulfur		
	Monoxide	Oxides	Organic	Oxides		
Daily Use (in million cf)	0.13	0.13	0.13	0.13		0.13
Factor (lbs/million cf)	20.0	80.0	5.3	Negligible		0.20
	Subtotal	2.5	10.1	0.67	Negligible	0.03
Daily Nonresidential Usage (cubic feet):					=	86,728.73
Pollutants	Carbon	Nitrogen	Reactive	Sulfur		
	Monoxide	Oxides	Organic	Oxides		
Daily Use (in million cf)	0.09	0.09	0.09	0.09		0.09
Factor (lbs/million cf)	20.0	120.0	5.30	Negligible		0.20
	Subtotal	1.73	10.41	0.46	Negligible	0.02
	Total	4.3	20.5	1.1	Negligible	0.04

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plants and an average contribution from hydro-electric sources. Represents total pounds emitted per year by all development at buildout.

Table 7C
Daily Exhaust Emissions at Buildout of the Town and Country Alternative
(pounds per day)

Pollutant	Total Miles Traveled per Day			= 191,964			
	CO	NOx	ROG	SOx	PM ₁₀	PM _{2.5}	CO2
Passenger Vehicles	1,083.22	104.71	119.00	2.01	17.67	11.53	208,212
Trucks	41.49	45.03	6.20	0.11	1.79	1.45	10,870
Total Pounds per Day	1,124.71	149.74	125.20	2.12	19.46	12.99	219,082

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Passenger vehicles are assumed to be traveled by 98% of the total trips and delivery trucks represent 2% of total miles traveled.

EMFAC2007 Version 2.3

Scenario Year 2016 -- Model Years 1972 to 2016

Pollutant (lbs/mile)	CO	NOX	ROG	SOX	PM10	PM2.5	CO2
Passenger Vehicle	0.0058	0.0006	0.0006	0.00001	0.0001	0.0001	1.1068
Delivery Truck (>8500lbs)	0.0108	0.0117	0.0016	0.00003	0.0005	0.0004	2.8313

Note: Total miles traveled per day are based on the 2-way trip estimates as set forth in the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-1: Site Trip Generation Forecast By Alternative, which used ITE Trip Generation Rates from the 7th Edition, December 2003 and was prepared by Endo Engineering September 2008. All trip generating land uses assume each 2-way trip to be a total of 6.8 miles.

Table 7D
Anticipated Cumulative Daily Project-Related Emissions
at Buildout of the Town and Country Alternative

	Stationary		Moving	Total	SCAQMD
	Power	Nat. Gas	Source	Anticipated	Threshold
	Plants		Emissions	Emissions	Criteria*
				(lbs./day)	(lbs./day)
Carbon Monoxide	8.4	4.3	1,124.7	1137.40	550
Nitrogen Oxides	48.5	20.5	149.7	218.73	100
Reactive Organic Gases	5.1	1.1	125.2	131.39	75
Sulfur Oxides	1.7	Negligible	2.1	3.81	150
Particulates	0.4	0.0	32.4	32.91	55
Carbon Dioxide	-	-	219,082	219,082.36	N/A

* Threshold criteria offered by the South Coast Air Quality Management District for assistance in determining the significance of air quality impacts. Source: "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993

Table 8A
Power Plant Emission Projections
at Buildout of the Less Intense Alternative A
(Lbs. per 1,000 kwh)

Total Annual Electric Usage (kwh)			=	6,111,786		
			Reactive			
Pollutants	Carbon Monoxide	Nitrogen Oxides	Organic Gases	Sulfur Oxides	Particulates	
Project (mw/yr)	6,112	6,112	6,112	6,112	6,112	
Factor (lbs/mw/hr)	0.20	1.15	0.12	0.04	0.01	
	Lbs./Year	1,222.4	7,028.6	733.4	244.5	61.1
	Lbs./Day	3.3	19.3	2.0	0.7	0.2

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plan

Table 8B
Emissions Associated with Natural Gas Consumption
at Buildout of the Less Intense Alternative A
(Lbs./cubic foot)

Daily Residential Usage (cubic feet):			15,826		
Pollutants	Carbon Monoxide	Nitrogen Oxides	Reactive Organic	Sulfur Oxides	PM₁₀
Daily Use (in million cf)	0.02	0.02	0.02	0.02	0.02
Factor (lbs/million cf)	20.0	80.0	5.3	Negligible	0.20
	Subtotal	0.32	1.27	0.08	Negligible
Daily Nonresidential Usage (cubic feet):			23,236		
Pollutants	Carbon Monoxide	Nitrogen Oxides	Reactive Organic Gases	Sulfur Oxides	PM₁₀
Daily Use (in million cf)	0.02	0.02	0.02	0.02	0.02
Factor (lbs/million cf)	20.0	120.0	5.30	Negligible	0.02
	Subtotal	0.46	2.79	0.12	Negligible
	Total	0.78	4.05	0.21	Negligible
					0.008

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plants and an average contribution from hydro-electric sources. Represents total pounds emitted per year by all development at buildout.

Table 8C
Daily Exhaust Emissions at Buildout of the Less Intense Alternative A
(pounds per day)

	Total Miles Traveled per Day			=	161,092		
Pollutant	CO	NOx	ROG	SOx	PM ₁₀	PM _{2.5}	CO ₂
Passenger Vehicles	909.02	87.87	99.86	1.69	14.83	9.68	174,727.01
Trucks	34.81	37.79	5.20	0.09	1.50	1.22	9,122.13
Total Pounds per Day	943.83	125.66	105.06	1.78	16.33	10.90	183,849.14

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Passenger vehicles are assumed to be traveled by 98% of the total trips and delivery trucks represent 2% of total miles traveled.

EMFAC2007 Version 2.3

Scenario Year 2016 -- Model Years 1972 to 2016

Pollutant (lbs/mile)	CO	NOX	ROG	SOX	PM10	PM2.5	CO ₂
Passenger Vehicle	0.0058	0.0006	0.0006	0.00001	0.0001	0.0001	1.1068
Delivery Truck (>8500lbs)	0.0108	0.0117	0.0016	0.00003	0.0005	0.0004	2.8313

Note: Total miles traveled per day are based on the 2-way trip estimates as set forth in the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-1: Site Trip Generation Forecast By Alternative, which used ITE Trip Generation Rates from the 7th Edition, December 2003 and was prepared by Endo Engineering September 2008. All trip generating land uses assume each 2-way trip to be a total of 6.8 miles.

Table 8D
Anticipated Cumulative Daily Project-Related Emissions
at Buildout of the Less Intense Alternative A

	Stationary Source Emissions		Moving Source Emissions	Total Anticipated Emissions (lbs./day)	SCAQMD Threshold Criteria* (lbs./day)
	Power Plants	Nat. Gas			
Carbon Monoxide	3.3	0.78	943.8	948.0	550.0
Nitrogen Oxides	19.3	4.05	125.7	149.0	100.0
Reactive Organic Gases	2.0	0.21	105.1	107.3	75.0
Sulfur Oxides	0.7	Negligible	1.8	2.4	150.0
Particulates	0.2	0.01	27.2	27.4	55.0
Carbon Dioxide	-	-	183,849	183,849.14	N/A

* Threshold criteria offered by the South Coast Air Quality Management District for assistance in determining the significance of air quality impacts. Source: "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993.

Table 9A
Power Plant Emission Projections
at Buildout of the Less Intense Alternative B
(Lbs. per 1,000 kwh)

Total Annual Electric Usage (kwh)						=	10,364,023
Pollutants	Carbon	Nitrogen	Reactive	Sulfur	Particulates		
	Monoxide	Oxides	Organic	Oxides			
			Gases				
Project (mw/yr)	10,364	10,364	10,364	10,364	10,364	10,364	
Factor (lbs/mw/hr)	0.2	1.15	0.12	0.04	0.01		
	Lbs./Year	2072.8	11918.6	1243.7	414.6	103.6	
	Lbs./Day	5.7	32.7	3.4	1.1	0.3	

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plan

Table 9B
Emissions Associated with Natural Gas Consumption
at Buildout of the Less Intense Alternative B
(Lbs./cubic foot)

Daily Residential Usage (cubic feet)						=	100,892
Pollutants	Carbon	Nitrogen	Reactive	Sulfur	PM₁₀		
	Monoxide	Oxides	Organic	Oxides			
			Gases				
Daily Use (in million cf)	0.10	0.10	0.10	0.10	0.10	0.10	
Factor (lbs/million cf)	20.0	80.0	5.30	Negligible	0.20		
	Subtotal	2.02	8.07	0.53	Negligible	0.02	
Daily Nonresidential Usage (cubic feet)						=	59,905.48
Pollutants	Carbon	Nitrogen	Reactive	Sulfur	PM₁₀		
	Monoxide	Oxides	Organic	Oxides			
			Gases				
Daily Use (in million cf)	0.06	0.06	0.06	0.06	0.06	0.06	
Factor (lbs/million cf)	20.0	120.0	5.30	Negligible	0.20		
	Subtotal	1.20	7.19	0.32	Negligible	0.01	
	Total	3.22	15.26	0.85	Negligible	0.03	

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plants and an average contribution from hydro-electric sources. Represents total pounds emitted per year by all development at buildout.

Table 9C
Daily Exhaust Emissions at Buildout of the Less Intense Alternative B
(pounds per day)

	Total Miles Traveled per Day			=	155,040		
Pollutant	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Passenger Vehicles	874.87	84.57	96.11	1.63	14.27	9.32	168,163
Trucks	33.51	36.37	5.01	0.09	1.45	1.17	8,779
Total Pounds per Day	908.37	120.94	101.12	1.71	15.72	10.49	176,942

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Passenger vehicles are assumed to be traveled by 98% of the total trips and delivery trucks represent 2% of total miles traveled.

EMFAC2007 Version 2.3

Scenario Year 2016 -- Model Years 1972 to 2016

Pollutant (lbs/mile)	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Passenger Vehicle	0.0058	0.0006	0.0006	0.00001	0.0001	0.0001	1.1068
Delivery Truck (>8500lbs)	0.0108	0.0117	0.0016	0.00003	0.0005	0.0004	2.8313

Note: Total miles traveled per day are based on the 2-way trip estimates as set forth in the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-1: Site Trip Generation Forecast By Alternative, which used ITE Trip Generation Rates from the 7th Edition, December 2003 and was prepared by Endo Engineering September 2008. All trip generating land uses assume each 2-way trip to be a total of 6.8 miles.

Table 9D
Anticipated Cumulative Daily Project-Related Emissions
at Buildout of the Less Intense Alternative B

	Stationary		Moving	Total	SCAQMD
	Power	Nat. Gas	Source		
	Plants		Emissions	Anticipated	Threshold
				Emissions	Criteria*
				(lbs./day)	(lbs./day)
Carbon Monoxide	5.68	3.22	908.37	917.27	550.0
Nitrogen Oxides	32.65	15.26	120.94	168.85	100.0
Reactive Organic Gases	3.41	0.85	101.12	105.38	75.0
Sulfur Oxides	1.14	Negligible	1.71	2.85	150.0
Particulates	0.28	0.03	26.20	26.52	55.0
Carbon Dioxide	-	-	176,942	176,942.19	N/A

* Threshold criteria offered by the South Coast Air Quality Management District for assistance in determining the significance of air quality impacts. Source: "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993.

Table 10A
Power Plant Emissions from
Existing Land Uses
(Lbs. per 1,000 kwh)

Total Annual Electric Usage (kwh)		=		6,659,573	
Pollutants	Carbon Monoxide	Nitrogen Oxides	Reactive Organic Gases	Sulfur Oxides	Particulates
Project (mw/yr)	6,660	6,660	6,660	6,660	6,660
Factor (lbs/mw/hr)	0.2	1.15	0.12	0.04	0.01
Lbs./Year	1331.9	7658.5	799.1	266.4	66.6
Lbs./Day	3.6	21.0	2.2	0.7	0.2

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plant.

Table 10B
Existing Emissions Associated with Natural Gas Consumption
(Lbs./cubic foot)

Daily Nonresidential Usage (cubic feet)		=		1,157,189	
Pollutants	Carbon Monoxide	Nitrogen Oxides	Reactive Organic Gases	Sulfur Oxides	PM₁₀
Daily Use (in million cf)	1.16	1.16	=		86,728.73
Factor (lbs/million cf)	20.00	120.0	5.30	Negligible	0.20
Total	23.14	36.53	6.13	Negligible	0.23

Based on per unit usage and emissions factors provided in Tables A9-11-A and A9-11-B, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993. Assumes continued availability and use of natural gas in power plants and an average contribution from hydro-electric sources. Represents total pounds emitted per year by all development at buildout.

**Table 10C
Existing Daily Exhaust Emissions
(pounds per day)**

	Total Miles Traveled per Day				=	69,768		
Pollutant	CO	NOx	ROG	SOx	PM ₁₀	PM _{2.5}	CO ₂	
Passenger Vehicles	393.69	38.05	43.25	0.73	6.42	4.19	75,673.24	
Trucks	15.08	16.37	2.25	0.04	0.65	0.53	3,950.74	
Total Pounds per Day	408.77	54.42	45.50	0.77	7.07	4.72	79,623.98	

Source: EMFAC 2007 (Version 2.3) Emissions Factors for On-Road Passenger Vehicles & Delivery Trucks. Passenger Vehicles are < 8500 lbs, and Delivery Trucks are > 8500 lbs. Passenger vehicles are assumed to be traveled by 98% of the total trips and delivery trucks represent 2% of total miles traveled.

EMFAC2007 Version 2.3

Scenario Year 2016 -- Model Years 1972 to 2016

Pollutant (lbs/mile)	CO	NOX	ROG	SOX	PM10	PM2.5	CO ₂
Passenger Vehicle	0.0058	0.0006	0.0006	0.00001	0.0001	0.0001	1.1068
Delivery Truck (>8500lbs)	0.0108	0.0117	0.0016	0.00003	0.0005	0.0004	2.8313

Note: Total miles traveled per day are based on the 2-way trip estimates as set forth in the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-1: Site Trip Generation Forecast By Alternative, which used ITE Trip Generation Rates from the 7th Edition, December 2003 and was prepared by Endo Engineering September 2008. All trip generating land uses assume each 2-way trip to be a total of 6.8 miles.

**Table 10D
Existing Daily Emissions Summary**

	Stationary		Moving	Total	SCAQMD Threshold Criteria*
	Power Plants	Nat. Gas	Source Emissions	Anticipated Emissions (lbs./day)	
Carbon Monoxide	3.65	23.14	408.77	435.56	550.0
Nitrogen Oxides	20.98	36.53	54.42	111.93	100.0
Reactive Organic Gases	2.19	6.13	45.50	53.82	75.0
Sulfur Oxides	0.73	Negligible	0.77	1.50	150.0
Particulates	0.18	0.23	11.79	12.21	55.0
Carbon Dioxide	-	-	79,624	79,624	N/A

* Threshold criteria offered by the South Coast Air Quality Management District for assistance in determining the significance of air quality impacts. Source: "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993.

2. Green House Gases Tables

Table 11A

GHG Emissions from Indirect Electricity Use at Buildout of the Proposed Project

Electricity Use¹	kwh per year	16,540,190	mwh per year	16,540
Emissions	Emission Factor	Projected Emissions (Lbs/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO2)	804.54	13,307,244	6,654	6,034.84
Methane (CH4)	0.0067	110.82	0.0554	0.05
Nitrous Oxide (N2O)	0.0037	61.20	0.0306	0.03
Total		13,307,416	6,654	6,034.91
			CO2 Equivalent per Year²	6,044.49

1 Electricity Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-11-A, 1993.

2 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

3 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Note that electricity consumption does not consider the transport of water.

Table 11B

GHG Emissions from Natural Gas Use at Buildout of the Proposed Project

Natural Gas Use¹	Cubic Feet per Day		Cubic Feet per Year		MMBtu²
	241,346		88,091,376		90,558
Emissions	Emission Factor	Unit	Projected Emissions (kg/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO2) ³	0.0546	kg CO2/cubic foot	4,809,789	5,302	4,808.76
Methane (CH4) ⁴	0.0059	kg CH4/MMBtu	534.29	0.59	0.53
Nitrous Oxide (N2O) ⁴	0.0001	kg N2O/MMBtu	9.06	0.01	0.01
Total			4,810,332	5,302.43	4,809
				CO2 Equivalent per Year⁵	4,822.78

1 Natural Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-12, 1993.

2 Btu assumes 1,028 Btu per cubic foot. "Table A4 Approximate Heat Content of Natural Gas 1949-2007," energy information administration.

3 "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Equations III.8d," version 3.0 prepared by California Climate Action Registry, April 2008.

5 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

**Table 11C
GHG Emissions from Moving Sources
at Buildout of the Proposed Project**

Vehicle Type	Miles Per Day¹	Miles Per Year	Gallons Per Year²		
Passenger Car	173,664	63,387,302	3,217,629.52		
Light Duty Truck	3,544	1,293,618	65,665.91		
Total	177,208	64,680,920	3,283,295		
GHG Emission Type	Emission Factor Passenger Car⁵	Emission Factor Light Duty Truck⁶	Unit³	Metric Tons per Year	CO2 Equivalent per Year⁷
Carbon Dioxide (CO2) ³	0.00881	0.00881	metric tons CO2 per	28,926	28,926
Methane (CH4) ⁴	0.04	0.05	grams per mile	2.60	55
Nitrous Oxide (N2O) ⁴	0.04	0.06	grams per mile	2.61	810
Total				28,931	29,791

1 Miles per year are based on the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, prepared by Endo Engineering, September 2008. The mix of vehicles assumes 98 percent of total miles traveled are passenger cars and 2 percent are light duty trucks.

2 To quantify the estimated gallons of gasoline that the project will use per year for the Moving Source component, 19.7 miles per gallon was assumed.

3 Emission factor for CO2 is from "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

5 Passenger cars are based on factors given for the use of gasoline and are based on model year 2000 to present.

6 Light duty trucks assume the use of gasoline and are based on model year 2000 to present.

7 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Table 11D
Annual GHG Summary
at Buildout of the Proposed Project Alternative

Emission Source	CO2 Equivalent Metric Tons	CO2 Equivalent Million Metric Tons
Electricity	6,044.49	0.006
Natural Gas	4,822.78	0.005
Moving Source	29,790.50	0.030
Total	40,657.78	0.041

California Emissions in 2004	500
Project percentage	0.008%
US Emissions in 2005	7,260.40
Project percentage	0.001%

Table 12A
GHG Emissions from Indirect Electricity Use
at Buildout of the No Project Alternative

Electricity Use¹	kwh per year Emission Factor	8,006,945 Projected Emissions (Lbs/Year)	mwh per year Projected Emissions (Tons/Year)	8,007 Metric Tons per Year
Carbon Dioxide (CO2)	804.54	6,441,908	3,221	2,921.41
Methane (CH4)	0.0067	53.65	0.0268	0.02
Nitrous Oxide (N2O)	0.0037	29.63	0.0148	0.01
Total		6,441,991	3,221	2,921.44
		CO2 Equivalent per Year³		2,926.08

1 Electricity Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-11-A, 1993.

2 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

3 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Note that electricity consumption does not consider the transport of water.

Table 12B
GHG Emissions from Natural Gas Use
at Buildout of the No Project Alternative

	Cubic Feet per Day		Cubic Feet per Year		MMBtu ²
Natural Gas Use ¹	44,493		16,239,768		16,694
Emissions	Emission Factor	Unit	Projected Emissions (kg/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO ₂) ³	0.0546 g	CO ₂ /cubic fo	886,691	977	886.50
Methane (CH ₄) ⁴	0.0059 cg	CH ₄ /MMBtu	98.50	0.11	0.10
Nitrous Oxide (N ₂ O) ⁴	0.0001 cg	N ₂ O/MMBtu	1.67	0.00	0.00
Total			886,791	977.51	887
			CO₂ Equivalent per Year⁵		889.09

1 Natural Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-12, 1993.

2 Btu assumes 1,028 Btu per cubic foot. "Table A4 Approximate Heat Content of Natural Gas 1949-2007," energy information administration.

3 "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Equations III.8d," version 3.0 prepared by California Climate Action Registry, April 2008.

5 CO₂ Equivalent is based on SAR (1996) global warming potential of 21 for CH₄ and 310 for N₂O.

**Table 12C
GHG Emissions from Moving Sources
at Buildout of the No Project Alternative**

Vehicle Type	Miles Per		Miles Per Year	Gallons Per	
	Day ¹			Year ²	
Passenger Car	165,800		60,517,117		3,071,935
Light Duty Truck	3,384		1,235,043		62,693
Total	169,184		61,752,160		3,134,627

GHG Emission Type	EMISSION		Unit ³	Metric Tons per Year	CO2 Equivalent per Year ⁷
	Factor Passenger Car ⁵	Emission Factor Light Duty Truck ⁶			
Carbon Dioxide (CO2) ³	0.00881	0.00881	metric tons CO2 per gallon	27,616	27,616
Methane (CH4) ⁴	0.04	0.05	grams per mile	2.48	52
Nitrous Oxide (N2O) ⁴	0.04	0.06	grams per mile	2.49	773
Total				27,621	28,442

1 Miles per year are based on the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, prepared by Endo Engineering, September 2008. The mix of vehicles assumes 98 percent of total miles traveled are passenger cars and 2 percent are light duty trucks.

2 To quantify the estimated gallons of gasoline that the project will use per year for the Moving Source component, 19.7 miles per gallon was assumed.

3 Emission factor for CO2 is from "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

5 Passenger cars are based on factors given for the use of gasoline and are based on model year 2000 to present.

6 Light duty trucks assume the use of gasoline and are based on model year 2000 to present.

7 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

**Table 12D
Annual GHG Summary
at Buildout of the No Project Alternative**

Emission Source	CO2 Equivalent Metric Tons	CO2 Equivalent Million Metric Tons
Electricity	2,926.08	0.003
Natural Gas	889.09	0.001
Moving Source	28,441.58	0.028
Total	32,256.75	0.032

California Emissions in 2004	500
Project percentage	0.006%
US Emissions in 2005	7,260.40
Project percentage	0.0004%

**Table 13A
GHG Emissions from Indirect Electricity Use
at Buildout of the Town and Country Alternative**

Electricity Use¹	kwh per year Emission Factor	15,395,383 Projected Emissions (Lbs/Year)	mwh per year Projected Emissions (Tons/Year)	15,395 Metric Tons per Year
Carbon Dioxide (CO2)	804.54	12,386,201	6,193	5,617.14
Methane (CH4)	0.0067	103.15	0.0516	0.05
Nitrous Oxide (N2O)	0.0037	56.96	0.0285	0.03
Total		12,386,362	6,193	5,617
		CO2 Equivalent per Year²		5,626.13

1 Electricity Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-11-A, 1993.

2 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

3 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Note that electricity consumption does not consider the transport of water.

Table 13B
GHG Emissions from Natural Gas Use
at Buildout of the Town and Country Alternative

	Cubic Feet		Cubic Feet		MMBtu ²
Natural Gas Use ¹	per Day		per Year		
	212,679		77,627,784		79,801
Emissions	Emission Factor	Unit	Projected Emissions (kg/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO ₂) ³	0.0546	kg CO ₂ /cubic foot	4,238,477	4,672	4,237.57
Methane (CH ₄) ⁴	0.0059	kg CH ₄ /MMBtu	470.83	0.52	0.47
Nitrous Oxide (N ₂ O) ⁴	0.0001	kg N ₂ O/MMBtu	7.98	0.01	0.01
Total			4,238,956	4,672.60	4,238
			CO₂ Equivalent per Year⁵		4,249.93

1 Natural Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-12, 1993.

2 Btu assumes 1,028 Btu per cubic foot. "Table A4 Approximate Heat Content of Natural Gas 1949-2007," energy information administration.

3 "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Equations III.8d," version 3.0 prepared by California Climate Action Registry, April 2008.

5 CO₂ Equivalent is based on SAR (1996) global warming potential of 21 for CH₄ and 310 for N₂O.

**Table 13C
GHG Emissions from Moving Sources
at Buildout of the Town and Country Alternative**

Vehicle Type	Miles Per Day¹	Miles Per Year	Gallons Per Year²
Passenger Car	188,125	68,665,523	3,485,560
Light Duty Truck	3,839	1,401,337	71,134
Total	191,964	70,066,860	3,556,693

GHG Emission Type	Emission Factor Passenger Car⁵	Emission Factor Light Duty Truck⁶	Metric Tons per Year	CO2 Equivalent per Year⁷
Carbon Dioxide (CO2) ³	0.00881	0.00881	31,334	31,334
Methane (CH4) ⁴	0.04	0.05	2.82	59
Nitrous Oxide (N2O) ⁴	0.04	0.06	2.83	878
Total			31,340	32,271

1 Miles per year are based on the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, prepared by Endo Engineering, September 2008. The mix of vehicles assumes 98 percent of total miles traveled are passenger cars and 2 percent are light duty trucks.

2 To quantify the estimated gallons of gasoline that the project will use per year for the Moving Source component, 19.7 miles per gallon was assumed.

3 Emission factor for CO2 is from "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

5 Passenger cars are based on factors given for the use of gasoline and are based on model year 2000 to present.

6 Light duty trucks assume the use of gasoline and are based on model year 2000 to present.

7 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Table 13D
Annual GHG Summary
at Buildout of the Town and Country Alternative

Emission Source	CO2 Equivalent Metric Tons	CO2 Equivalent Million Metric Tons
Electricity	5,626.13	0.006
Natural Gas	4,249.93	0.004
Moving Source	32,271.14	0.032
Total	42,147.20	0.042

California Emissions in 2004	500
Project percentage	0.008%
US Emissions in 2005	7,260.40
Project percentage	0.001%

Table 14A
GHG Emissions from Indirect Electricity Use
at Buildout of the Less Intense Alternative A

Electricity Use¹	kwh per year	6,111,786	mwh per year	6,112
	Emission Factor	Projected Emissions	Projected Emissions	Metric Tons per Year
Emissions	(Lbs/MWh)²	(Lbs/Year)	(Tons/Year)	
Carbon Dioxide (CO2)	804.54	4,917,176	2,459	2,229.94
Methane (CH4)	0.0067	40.95	0.0205	0.02
Nitrous Oxide (N2O)	0.0037	22.61	0.0113	0.01
Total		4,917,240	2,459	2,229.97
		CO2 Equivalent per Year³		2,233.51

1 Electricity Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-11-A, 1993.

2 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

3 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Note that electricity consumption does not consider the transport of water.

Table 14B
GHG Emissions from Natural Gas Use
at Buildout of the Less Intense Alternative A

	Cubic Feet		Cubic Feet		MMBtu ²
Natural Gas Use ¹	per Day		per Year		
	39,062		14,257,632		14,657
Emissions	Emission Factor	Unit	Projected Emissions (kg/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO ₂) ³	0.0546	kg CO ₂ /cubic foot	778,467	858	778.30
Methane (CH ₄) ⁴	0.0059	kg CH ₄ /MMBtu	86.48	0.10	0.09
Nitrous Oxide (N ₂ O) ⁴	0.0001	kg N ₂ O/MMBtu	1.47	0.00	0.00
Total			778,555	858.20	778
			CO₂ Equivalent per Year⁵		780.57

1 Natural Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-12, 1993.

2 Btu assumes 1,028 Btu per cubic foot. "Table A4 Approximate Heat Content of Natural Gas 1949-2007," energy information administration.

3 "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Equations III.8d," version 3.0 prepared by California Climate Action Registry, April 2008.

5 CO₂ Equivalent is based on SAR (1996) global warming potential of 21 for CH₄ and 310 for N₂O.

Table 14C
GHG Emissions from Moving Sources
at Buildout of the Less Intense Alternative A

Vehicle Type	Miles Per Day¹	Miles Per Year	Gallons Per Year²
Passenger Car	157,870	57,622,608	2,925,006
Light Duty Truck	3,222	1,175,972	59,694
Total	161,092	58,798,580	2,984,699

GHG Emission Type	Emission Factor Passenger Car⁵	Emission Factor Light Duty Truck⁶	Unit³	Metric Tons per Year	CO2 Equivalent per Year⁷
Carbon Dioxide (CO2) ³	0.00881	0.00881	metric tons CO2 per	26,295	26,295
Methane (CH4) ⁴	0.04	0.05	grams per mile	2.36	50
Nitrous Oxide (N2O) ⁴	0.04	0.06	grams per mile	2.38	736
			Total	26,300	27,081

1 Miles per year are based on the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, prepared by Endo Engineering, September 2008. The mix of vehicles assumes 98 percent of total miles traveled are passenger cars and 2 percent are light duty trucks.

2 To quantify the estimated gallons of gasoline that the project will use per year for the Moving Source component, 19.7 miles per gallon was assumed.

3 Emission factor for CO2 is from "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

5 Passenger cars are based on factors given for the use of gasoline and are based on model year 2000 to present.

6 Light duty trucks assume the use of gasoline and are based on model year 2000 to present.

7 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Table 14D
Annual GHG Summary
at Buildout of the Less Intense Alternative A

Emission Source	CO2 Equivalent Metric Tons	CO2 Equivalent Million Metric Tons
Electricity	2,233.51	0.002
Natural Gas	780.57	0.001
Moving Source	27,081.23	0.027
Total	30,095.31	0.030

California Emissions in 2004	500
Project percentage	0.006%
US Emissions in 2005	7,260.40
Project percentage	0.0004%

Table 15A
GHG Emissions from Indirect Electricity Use
at Buildout of the Less Intense Alternative B

Electricity Use¹	kwh per year	10,364,023	mwh per year	10,364
Emissions	Emission Factor (Lbs/MWh)²	Projected Emissions (Lbs/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO2)	804.54	8,338,271	4,169	3,781.41
Methane (CH4)	0.0067	69.44	0.0347	0.03
Nitrous Oxide (N2O)	0.0037	38.35	0.0192	0.02
Total		8,338,379	4,169	3,781.45
		CO2 Equivalent per Year³		3,787.46

1 Electricity Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-11-A, 1993.

2 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

3 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Note that electricity consumption does not consider the transport of water.

Table 15B
GHG Emissions from Natural Gas Use
at Buildout of the Less Intense Alternative B

	Cubic Feet		Cubic Feet		MMBtu ²
Natural Gas Use ¹	per Day		per Year		
	160,797		58,691,076		60,334
Emissions	Emission Factor	Unit	Projected Emissions (kg/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO ₂) ³	0.0546	kg CO ₂ /cubic foot	3,204,533	3,532	3,203.85
Methane (CH ₄) ⁴	0.0059	kg CH ₄ /MMBtu	355.97	0.39	0.36
Nitrous Oxide (N ₂ O) ⁴	0.0001	kg N ₂ O/MMBtu	6.03	0.01	0.01
Total			3,204,895	3,532.76	3,204
			CO₂ Equivalent per Year⁵		3,213.19

1 Natural Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-12, 1993.

2 Btu assumes 1,028 Btu per cubic foot. "Table A4 Approximate Heat Content of Natural Gas 1949-2007," energy information administration.

3 "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Equations III.8d," version 3.0 prepared by California Climate Action Registry, April 2008.

5 CO₂ Equivalent is based on SAR (1996) global warming potential of 21 for CH₄ and 310 for N₂O.

Table 15C
GHG Emissions from Moving Sources
at Buildout of the Less Intense Alternative B

Vehicle Type	Miles Per Day¹	Miles Per Year	Gallons Per Year²
Passenger Car	151,939	55,457,808	2,815,117
Light Duty Truck	3,101	1,131,792	57,451
Total	155,040	56,589,600	2,872,569

GHG Emission Type	EMISSION		Unit³	Metric Tons per Year	CO2 Equivalent per Year⁷
	Factor Passenger Car⁵	Emission Factor Light Duty Truck⁶			
Carbon Dioxide (CO2) ³	0.00881	0.00881	metric tons CO2 per	25,307	25,307
Methane (CH4) ⁴	0.04	0.05	grams per mile	2.27	48
Nitrous Oxide (N2O) ⁴	0.04	0.06	grams per mile	2.29	709
Total				25,312	26,064

1 Miles per year are based on the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, prepared by Endo Engineering, September 2008. The mix of vehicles assumes 98 percent of total miles traveled are passenger cars and 2 percent are light duty trucks.

2 To quantify the estimated gallons of gasoline that the project will use per year for the Moving Source component, 19.7 miles per gallon was assumed.

3 Emission factor for CO2 is from "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

5 Passenger cars are based on factors given for the use of gasoline and are based on model year 2000 to present.

6 Light duty trucks assume the use of gasoline and are based on model year 2000 to present.

7 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Table 15D
Annual GHG Summary
at Buildout of the Less Intense Alternative B

Emission Source	CO2 Equivalent Metric Tons	CO2 Equivalent Million Metric Tons
Electricity	3,787.46	0.004
Natural Gas	3,213.19	0.003
Moving Source	26,063.83	0.026
Total	33,064.48	0.033

California Emissions in 2004	500
Project percentage	0.007%
US Emissions in 2005	7,260.40
Project percentage	0.0003%

Table 16A
GHG Emissions from Indirect Electricity Use
Existing Development Onsite

Electricity Use¹	kwh per year	6,659,573	mwh per year	6,660
Emissions	Emission Factor (Lbs/MWh)²	Projected Emissions (Lbs/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO2)	804.54	5,357,893	2,679	2,429.80
Methane (CH4)	0.0067	44.62	0.0223	0.02
Nitrous Oxide (N2O)	0.0037	24.64	0.0123	0.01
Total		5,357,962	2,679	2,429.84
		CO2 Equivalent per Year³		2,433.69

1 Electricity Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-11-A, 1993.

2 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

3 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Note that electricity consumption does not consider the transport of water.

Table 16B
GHG Emissions from Natural Gas Use
Existing Development Onsite

	Cubic Feet		Cubic Feet		MMBtu ²
Natural Gas Use ¹	per Day		per Year		
	38,045		13,886,268		14,275
Emissions	Emission Factor	Unit	Projected Emissions (kg/Year)	Projected Emissions (Tons/Year)	Metric Tons per Year
Carbon Dioxide (CO ₂) ³	0.0546	kg CO ₂ /cubic foot	758,190	836	758.03
Methane (CH ₄) ⁴	0.0059	kg CH ₄ /MMBtu	84.22	0.09	0.08
Nitrous Oxide (N ₂ O) ⁴	0.0001	kg N ₂ O/MMBtu	1.43	0.00	0.00
Total			758,276	835.85	758
			CO₂ Equivalent per Year⁵		760.24

1 Natural Usage rate is estimated using SCAQMD CEQA Handbook, Table A9-12, 1993.

2 Btu assumes 1,028 Btu per cubic foot. "Table A4 Approximate Heat Content of Natural Gas 1949-2007," energy information administration.

3 "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Equations III.8d," version 3.0 prepared by California Climate Action Registry, April 2008.

5 CO₂ Equivalent is based on SAR (1996) global warming potential of 21 for CH₄ and 310 for N₂O.

**Table 16C
GHG Emissions from Moving Sources
Existing Development Onsite**

Vehicle Type	Miles Per Day¹	Miles Per Year	Gallons Per Year²
Passenger Car	68,373	24,956,014	1,266,803
Light Duty Truck	1,395	509,306	25,853
Total	69,768	25,465,320	1,292,656

GHG Emission Type	Emission Factor Passenger Car⁵	Emission Factor Light Duty Truck⁶	Unit³	Metric Tons per Year	CO2 Equivalent per Year⁷
Carbon Dioxide (CO2) ³	0.00881	0.00881	metric tons CO2 per gallon	11,388	11,388
Methane (CH4) ⁴	0.04	0.05	grams per mile	1.02	21
Nitrous Oxide (N2O) ⁴	0.04	0.06	grams per mile	1.03	319
Total				11,390	11,729

1 Miles per year are based on the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, prepared by Endo Engineering, September 2008. The mix of vehicles assumes 98 percent of total miles traveled are passenger cars and 2 percent are light duty trucks.

2 To quantify the estimated gallons of gasoline that the project will use per year for the Moving Source component, 19.7 miles per gallon was assumed.

3 Emission factor for CO2 is from "Calculations and References," of the Greenhouse Gas Equivalencies Calculator, prepared by EPA and last updated on August 4, 2008.

4 Emission factors from "California Climate Action Registry General Reporting Protocol: Tables C5 and C6," version 3.0 prepared by California Climate Action Registry, April 2008.

5 Passenger cars are based on factors given for the use of gasoline and are based on model year 2000 to present.

6 Light duty trucks assume the use of gasoline and are based on model year 2000 to present.

7 CO2 Equivalent is based on SAR (1996) global warming potential of 21 for CH4 and 310 for N2O.

Table 16D
Annual GHG Summary
Existing Development Onsite

Emission Source	CO2 Equivalent Metric Tons	CO2 Equivalent Million Metric Tons
Electricity	2,433.69	0.002
Natural Gas	760.24	0.001
Moving Source	11,728.72	0.012
Total	14,922.66	0.015

California Emissions in 2004	500
Project percentage	0.003%
US Emissions in 2005	7,260.40
Project percentage	0.0002%

3. Air Quality Emissions Sources.

Table 1
Estimated Electrical Usage Rates
Museum Market Plaza Specific Plan

Land Use Type	Usage Rate	Unit Type	Units (DU/Sq. Ft.)	Annual kwh
Residential (Dwelling Units) ¹	5,626.50	kwh/unit/year	955	5,373,308
Hotel/Motel ²	9.95	kwh/sq.ft./year	498,430	4,959,382
Retail / Commercial ³	13.55	kwh/sq.ft./year	275,000	3,726,250
Office ⁴	12.95	kwh/sq.ft./year	100,000	1,295,000
Restaurant ⁵	47.45	kwh/sq.ft./year	25,000	1,186,250
Total				16,540,190

kwh= Kilowatt Hour

Source: Museum Market Plaza Specific Plan, Terra Nova Planning & Research, April 2008. Usage rates are based on Table A9-11-A, Electricity Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

- 1) Residential: includes 955 attached units including those units.
- 2) Hotel/Motel is an estimate of all hotels within the planning area, and is based on an average hotel room size of 803.92 square feet.
- 3) Retail/Commercial is estimated to be 68.75% of total projected area for office and retail (400,000 square feet) as cited in the Specific Plan.
- 4) Office is estimated to be 25% of total projected area for office and retail (400,000 square feet) as cited in the Specific Plan.
- 5) Restaurant is estimated to be 6.25% of total projected area for office and retail (400,000 square feet) as cited in the Specific Plan.

Table 2
Natural Gas Consumption Projections
Museum Market Plaza Specific Plan

Land Use	Natural Gas Usage Factor	Units (DU/SF)	Natural Gas Consumption (cf/mo)
Multi-Family Residential ¹	4,011.5 cubic feet/unit/month	955	3,830,983
Hotel/Motel ²	4.8 cubic feet/sq. ft./month	498,430	2,392,466
Retail / Commercial ³	2.9 cubic feet/sq. ft./month	275,000	797,500
Office ⁴	2.0 cubic feet/sq. ft./month	100,000	200,000
Restaurant ⁵	4.8 cubic feet/sq. ft./month	25,000	120,000
Total			7,340,948

Source: Terra Nova Staff Estimates based on Table A9-12-A, Natural Gas Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993 and "Museum Market Plaza Specific Plan," Table II-1, prepared by Terra Nova, April 2008.

- 1) Residential: includes 955 attached units including those units.
- 2) Hotel/Motel is an estimate of all hotels within the planning area, and is based on an average hotel room size of 803.92 square feet.
- 3) Retail/Commercial is estimated to be 68.75% of total projected area for office and retail (400,000 square feet) as cited in the Specific Plan.
- 4) Office is estimated to be 25% of total projected area for office and retail (400,000 square feet) as cited in the Specific Plan.
- 5) Restaurant is estimated to be 6.25% of total projected area for office and retail (400,000 square feet) as cited in the Specific Plan.

Table 3
Estimated Electrical Usage Rates
No Project Alternative

Land Use¹	Usage Rate	Unit Type	Units (DU/Sq. Ft.)	Annual kwh
Hotel/Motel	9.95	kwh/sq.ft./year	36,176	359,955
Retail / Commercial	13.55	kwh/sq.ft./year	231,875	3,141,906
Office	12.95	kwh/sq.ft./year	74,450	964,128
Restaurant	47.45	kwh/sq.ft./year	74,625	3,540,956
			Total	8,006,945

kwh= Kilowatt Hour

Source: Museum Market Plaza EIR, Terra Nova Planning & Research, April 2008. Usage rates are based on Table A9-11-A, Electricity Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the No Project Alternative.

Table 4
Natural Gas Consumption Projections
No Project Alternative

Land Use¹	Natural Gas Usage Factor	Square Footage	Natural Gas Consumption (cf/mo)
Hotel/Motel	4.8 cubic feet/sq. ft./month	36,176	173,647
Retail / Commercial	2.9 cubic feet/sq. ft./month	231,875	672,438
Office	2.0 cubic feet/sq. ft./month	74,450	148,900
Restaurant	4.8 cubic feet/sq. ft./month	74,652	358,330
		Total	1,353,314

Source: Terra Nova Staff Estimates based on Table A9-12-A, Natural Gas Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993 and Museum Market Plaza Land Use Summary Table ?, prepared by Terra Nova, July 15, 2008.

1) Land use designations are based on the No Project Alternative.

Table 5
Estimated Electrical Usage Rates
Town and County Alternative

Land Use¹	Usage Rate	Unit Type	Units (DU/Sq. Ft.)	Annual kwh
Residential (Dwelling Units)	5,626.50	kwh/unit/year	955	5,373,308
Hotel/Motel	9.95	kwh/sq.ft./year	293,431	2,919,636
Retail / Commercial	13.55	kwh/sq.ft./year	288,563	3,910,022
Office	12.95	kwh/sq.ft./year	101,100	1,309,245
Restaurant	47.45	kwh/sq.ft./year	39,688	1,883,172
Total				15,395,383

kwh= Kilowatt Hour

Source: Museum Market Plaza EIR, Terra Nova Planning & Research, April 2008. Usage rates are based on Table A9-11-A, Electricity Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the Preservation of the Town & Country Center Alternative as described in the T&C Land Use Plan.

Table 6
Natural Gas Consumption Projections
Town and County Alternative

Land Use¹	Natural Gas Usage Factor	Square Footage	Natural Gas Consumption (cf/mo)
Multi-Family Residential	4,011.5 cubic feet/unit/month	955	3,830,983
Hotel/Motel	4.8 cubic feet/sq. ft./month	293,431	1,408,468
Retail / Commercial	2.9 cubic feet/sq. ft./month	288,563	836,831
Office	2.0 cubic feet/sq. ft./month	101,100	202,200
Restaurant	4.8 cubic feet/sq. ft./month	39,688	190,500
Total			6,468,982

Source: Terra Nova Staff Estimates based on Table A9-12-A, Natural Gas Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993 and Museum Market Plaza Land Use Summary Table ?, prepared by Terra Nova, July 15, 2008.

1) Land use designations are based on the Preservation of the Town & Country Center Alternative as described in the T&C Land Use Plan.

Table 7
Estimated Electrical Usage Rates
Less Intense Alternative A

Land Use¹	Usage Rate	Unit Type	Units (DU/Sq. Ft.)	Annual kwh
High Density Residential	5,626.50	kwh/unit/year	120	675,180
Retail / Commercial	13.55	kwh/sq.ft./year	99,000	1,341,450
Office	12.95	kwh/sq.ft./year	76,000	984,200
Restaurant	13.55	kwh/sq.ft./year	9,720	131,706
Cinema	10.50	kwh/sq.ft./year	68,000	714,000
Market	53.30	kwh/sq.ft./year	42,500	2,265,250
			Total	6,111,786

kwh= Kilowatt Hour

Source: Museum Market Plaza EIR, Terra Nova Planning & Research, April 2008. Usage rates are based on Table A9-11-A, Electricity Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the Less Intense Alternative A.

Table 8
Natural Gas Consumption Projections
Less Intense Alternative A

Land Use¹	Natural Gas Usage Factor	Units/Square Footage	Natural Gas Consumption (cf/mo)
High Density Residential	4,011.5 cubic feet/unit/month	120	481,380
Retail / Commercial	2.9 cubic feet/sq. ft./month	99,000	287,100
Office	2.0 cubic feet/sq. ft./month	76,000	152,000
Restaurant	4.8 cubic feet/sq. ft./month	9,720	46,656
Cinema	2.0 cubic feet/sq. ft./month	68,000	136,000
Market	2.0 cubic feet/sq. ft./month	42,500	85,000
		Total	1,188,136

Source: Terra Nova Staff Estimates based on Table A9-12-A, Natural Gas Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the Less Intense Alternative A.

Table 9
Estimated Electrical Usage Rates
Less Intense Alternative B

Land Use¹	Usage Rate	Unit Type	Units (DU/Sq. Ft.)	Annual kwh
Multi-Family Residential	5,626.50	kwh/unit/year	765	4,304,273
Hotel/Motel	9.95	kwh/sq.ft./year	205,000	2,039,750
Retail / Commercial	13.55	kwh/sq.ft./year	206,250	2,794,688
Office	12.95	kwh/sq.ft./year	75,000	971,250
Restaurant	13.55	kwh/sq.ft./year	18,750	254,063
Total				10,364,023

kwh= Kilowatt Hour

Source: Museum Market Plaza EIR, Terra Nova Planning & Research, April 2008. Usage rates are based on Table A9-11-A, Electricity Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the Less Intense Alternative B.

Table 10
Natural Gas Consumption Projections
Less Intense Alternative B

Land Use¹	Natural Gas Usage Factor	Units (DU/Sq. Ft.)	Natural Gas Consumption (cf/mo)
Multi-Family Residential	4,011.5 cubic feet/unit/month	765	3,068,798
Hotel/Motel	4.8 cubic feet/sq. ft./month	205,000	984,000
Retail / Commercial	2.9 cubic feet/sq. ft./month	206,250	598,125
Office	2.0 cubic feet/sq. ft./month	75,000	150,000
Restaurant	4.8 cubic feet/sq. ft./month	18,750	90,000
Total			4,890,923

Source: Terra Nova Staff Estimates based on Table A9-12-A, Natural Gas Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the Less Intense Alternative B.

Table 11
Existing Electrical Usage Rates
Existing Development Onsite

Land Use¹	Usage Rate	Unit Type	Units (DU/Sq. Ft.)	Annual kwh
Retail / Commercial	13.55	kwh/sq.ft./year	299,729	4,061,328
Office	12.95	kwh/sq.ft./year	36,434	471,820
Restaurant	47.45	kwh/sq.ft./year	44,814	2,126,424
Total			380,977	6,659,573

kwh= Kilowatt Hour

Source: Usage rates are based on Table A9-11-A, Electricity Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the existing square footages onsite provided by Wessman Development Co.

Table 12
Natural Gas Consumption Projections
Existing Development Onsite

Land Use¹	Natural Gas Usage Factor		Units (DU/Sq. Ft.)	Natural Gas Consumption (cf/mo)
Retail / Commercial	2.9	cubic feet/sq. ft./month	299,729	869,214
Office	2.0	cubic feet/sq. ft./month	36,434	72,868
Restaurant	4.8	cubic feet/sq. ft./month	44,814	215,107
Total			380,977	1,157,189

Source: Terra Nova Staff Estimates based on Table A9-12-A, Natural Gas Usage Rate, "CEQA Air Quality Handbook," prepared by the South Coast Air Quality Management District, April 1993.

1) Land use designations are based on the existing square footages onsite provided by Wessman Development Co.

Table 13
Projected Miles per Trip Traveled
Museum Market Plaza Specific Plan and Alternatives

Preferred Alternative			
	2-way Trips	Miles per Trip	Total Miles
Adjusted	26,060	6.8	177,208

Less Intense Alternative A			
	2-way Trips	Miles per Trip	Total Miles
Adjusted	23,690	6.8	161,092

No Project Alternative			
	2-way Trip	Miles per Trip	Total Miles
Adjusted	24,880	6.8	169,184

Less Intense Alternative B			
	2-way Trips	Miles per Trip	Total Miles
Adjusted	22,800	6.8	155,040

Town and Country Alternativ			
	2-way Trip	Miles per Trip	Total Miles
Adjusted	28,230	6.8	191,964

Existing Land Use			
	2-way Trip	Miles per Trip	Total Miles
Adjusted	10,260	6.8	69,768

Source: 2-way trips are based on the "Palm Springs Museum Market Plaza Specific Plan Traffic Impact Study," Table 4-2: Adjusted Site Trip Generation Forecast By Alternative, which used ITE Trip Generation Rates from the 7th Edition, December 2003 and prepared by Endo Engineering September 2008.

All trip generating land uses assume each 2-way trip to be a total of 6.8 miles.