

FUEL CONSUMPTION CALCULATIONS						
Operational Traffic Fuel						
Existing Annual VMT:		1,697,250				
						Gallons
Fleet Mix	auto	91%	1,544,498	gas (mpg)	25.19	61,313.91
	other	9%	152,753	diesel (mpg)	10.21	14,961.07
						76,274.98
Project Annual VMT:		3,165,071				
						Gallons
Fleet Mix	auto	91%	2,880,215	gas (mpg)	25.19	114,339.60
	other	9%	284,856	diesel (mpg)	10.21	27,899.74
						142,239.35
Net Project Annual VMT:		1,467,821				
Fleet Mix	auto	91%	1,335,717	gas (mpg)	25.19	53,025.69
	other	9%	132,104	diesel (mpg)	10.21	12,938.68
						65,964.37

Construction Traffic Fuel						
Worker Fuel (Gasoline, on-road)						
phase	trips	length (miles)	Days	total Miles	MPG	Gallons
Demolition	15	18.5	21	5,828	25.19	231.34
Site Preparation	17.5	18.5	23	7,446	25.19	295.60
Grading	20	18.5	43	15,910	25.19	631.60
Building Construction	21.9	18.5	261	105,744	25.19	4,197.86
Paving	15	18.5	22	6,105	25.19	242.36
Architectural Coating	4.37	18.5	40	3,234	25.19	128.38
Trenching	2.5	18.5	130	6,013	25.19	238.69
						5,965.83
Vender Fuel (Diesel, on-road)						
phase	trips	length (miles)	days	total Miles	MPG	Gallons
Demolition	0	10.2	21	0	10.21	0.00
Site Preparation	0	10.2	23	0	10.21	0.00
Grading	0	10.2	43	0	10.21	0.00
Building Construction	3.93	10.2	261	10,462	10.21	1,024.73
Paving	0	10.2	22	0	10.21	0.00
Architectural Coating	0	10.2	40	0	10.21	0.00
Trenching	0	10.2	130	0	10.21	0.00
						1,024.73
Haul Fuel (Diesel, on-road)						
phase	trips	length (miles)	days	total Miles	MPG	Gallons
Demolition	0.14	20	21	59	10.21	5.76
Site Preparation	0	40	23	0	10.21	0.00
Grading	0	20	43	0	10.21	0.00
Building Construction	0	20	261	0	10.21	0.00
Paving	0	20	22	0	10.21	0.00
Architectural Coating	0	20	40	0	10.21	0.00
Trenching	0	20	130	0	10.21	0.00
						5.76
Total On-Road Gas (gallons)						5,965.83
Total On-Road Diesel (gallons)						1,030.48

Construction Equipment Fuel									
Construction Equipment (Diesel, off-road)									
Phase	Equipment	Units	Hours	HP	Load Factor	Ave. Daily Load Factor	Days	HP Hours	
Demolition	Excavators	3	8	36	0.38	0.6	21	1,378.94	
	Rubber Tired Dozers	2	8	367	0.4	0.6	21	14,797.44	
	concrete saw	1	8	33	0.73	0.6	21	2,428.27	
Site Preparation	Rubber Tired Dozers	3	8	367	0.4	0.6	23	16,206.72	
	Tractors/Loaders/Backhoes	4	8	84	0.37	0.6	23	3,431.23	
Grading	Graders	1	8	148	0.41	0.6	43	12,524.35	
	Excavators	2	8	36	0.38	0.6	43	2,823.55	
	Tractors/Loaders/Backhoes	2	8	84	0.37	0.6	43	6,414.91	
	scrapers	2	8	423	0.48	0.6	43	41,907.46	
	Rubber Tired Dozers	1	8	367	0.4	0.6	43	30,299.52	
Building Construction	forklifts	3	8	82	0.2	0.6	261	20,545.92	
	generator sets	1	8	14	0.2	0.6	261	3,507.84	
	cranes	1	7	367	0.29	0.6	261	116,668.57	
	welders	1	8	46	0.45	0.6	261	25,932.96	
	Tractors/Loaders/Backhoes	3	7	84	0.37	0.6	261	34,069.90	
Paving	pavers	2	8	81	0.42	0.6	22	3,592.51	
	paving equipment	2	8	89	0.36	0.6	22	3,383.42	
	rollers	2	8	26	0.38	0.6	22	1,043.33	
Tranching	trancher	1	6	40	0.5	0.6	130	9,360.00	
Architectural Coating	Air Compressors	1	8	37	0.48	0.6	40	3,409.92	
Total								353,726.77	
Diesel Usage (gallons)								17,686.34	

HP = horsepower. Gallons of diesel fuel per HP-hour = 0.05.

Equipment assumptions are provided in the CalEEMod output files for the Project and fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

Water Usage for fugitive dust control during construction

Water application rate = 3,020 gallons/acre/day

Each gallon of delivered potable water in Southern California is associated with 0.009727 kWhr of electricity).

Grading 43 days x 129 acres x 3,020 gallons = 16,751,940 gallons x 0.009727 = 162,946 kWhr

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: County

Region: Ventura

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Fuel	Total VMT	Trips	Energy Consumption	Fuel Consumption
Ventura	Diesel	6005.440028	948.1472066		0 0.630991323
Ventura	Diesel	33438.44358	4589.337125		0 0.787328285
Ventura	Diesel	243.4814922	49.77534334		0 0.010114645
Ventura	Diesel	21599.6216	2375.933805		0 0.679553133
Ventura	Diesel	310830.5459	99092.15307		0 14.95395763
Ventura	Diesel	127666.9242	39540.71913		0 7.358080717
Ventura	Diesel	53631.16099	6515.762004		0 2.262158161
Ventura	Diesel	11135.07362	115.0470089		0 1.082572015
Ventura	Diesel	1491.031251	245.5710712		0 0.265716028
Ventura	Diesel	10806.51662	0		0 2.200699007
Ventura	Diesel	8710.466031	5492.48541		0 1.140540691
Ventura	Diesel	62.28316726	21.67030904		0 0.006698778
Ventura	Diesel	85.50780361	28.91861128		0 0.009193939
Ventura	Diesel	222.7129591	94.48374113		0 0.023582486
Ventura	Diesel	1403.835815	159.7709902		0 0.139191041
Ventura	Diesel	10474.41409	4426.933225		0 1.167217015
Ventura	Diesel	10481.61924	4357.56674		0 1.177587866
Ventura	Diesel	31000.61503	12863.63085		0 3.457519184
Ventura	Diesel	7907.611142	2049.07435		0 0.855275565
Ventura	Diesel	27961.7993	7780.615997		0 3.106580965
Ventura	Diesel	61625.20879	16317.94819		0 6.872495244
Ventura	Diesel	49162.775	13295.77518		0 5.476096456
Ventura	Diesel	27098.67572	6832.299324		0 2.924805572
Ventura	Diesel	317.7259289	75.34799466		0 0.035387286
Ventura	Diesel	9658.223543	1818.42071		0 0.99158425
Ventura	Diesel	29.94602823	10.494858		0 0.003204571
Ventura	Diesel	41.08056574	13.9416431		0 0.004397481
Ventura	Diesel	107.3446936	45.75446642		0 0.01128751
Ventura	Diesel	780.5294044	71.96106712		0 0.076799344
Ventura	Diesel	1437.429094	219.3289176		0 0.166479831
Ventura	Diesel	2746.448188	380.312673		0 0.318800805
Ventura	Diesel	2763.677383	397.7374061		0 0.319130695
Ventura	Diesel	7418.569622	864.8518467		0 0.848456351
Ventura	Diesel	1766.279657	557.4978477		0 0.18785799
Ventura	Diesel	333.8261954	105.8863349		0 0.035361077
Ventura	Diesel	463.8166776	120.8898721		0 0.048971894
Ventura	Diesel	71232.53688	8021.515825		0 11.37872872
Ventura	Diesel	84943.43794	7208.111832		0 13.32210703
Ventura	Diesel	30858.44216	3032.803699		0 4.922981557
Ventura	Diesel	16654.51663	1480.348151		0 2.692698715
Ventura	Diesel	1439.99527	181.9700143		0 0.238313281
Ventura	Diesel	15875.62319	1984.17079		0 2.706813107
Ventura	Diesel	4973.728043	693.3232221		0 0.812459136
Ventura	Diesel	14547.34222	2319.061877		0 2.402290141
Ventura	Diesel	33404.63274	5610.067556		0 5.47227665
Ventura	Diesel	6245.384915	442.8522315		0 2.28365732
Ventura	Diesel	55013.29179	10345.25283		0 8.835750043
Ventura	Diesel	1401.920641	399.8643866		0 0.223814651
Ventura	Diesel	6523.003654	147.5438703		0 1.041587512
		1,184,024.52			115.97
					115,969.15
					10.21
Ventura	Gasoline	9541980.21	1102859.945		0 315.619506
Ventura	Gasoline	841042.4619	105175.6415		0 33.74264044
Ventura	Gasoline	4486372.808	505263.7853		0 183.7863405
Ventura	Gasoline	365714.1032	139416.553		0 26.89105953
Ventura	Gasoline	58546.41834	23214.37671		0 4.887497302
Ventura	Gasoline	87390.53014	29473.1594		0 2.125804626
Ventura	Gasoline	2894840.174	358186.1053		0 146.7220327
Ventura	Gasoline	27442.59052	302.4571498		0 5.54580387
Ventura	Gasoline	9481.812048	4854.252674		0 1.842393664
Ventura	Gasoline	5125.159208	475.6367963		0 0.573437767
Ventura	Gasoline	33706.55479	13708.50435		0 6.365614884
Ventura	Gasoline	66.03688309	29.75883763		0 0.016190416
Ventura	Gasoline	3201.536103	147.6701103		0 0.64360521
		18,354,910.39			728.76
					728,761.93
					25.19