

Appendix 6

Energy Analysis

Mirman School

MND

Appendix 6

Energy Analysis Spreadsheets

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 - Peak Electricity Demand Calculations
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Mirman School

Summary of Energy Use During Construction

Electricity	
Water Consumption	1,610 kWh
Temporary Power (lighting, tools)	10,735 kWh
Total:	12,345 kWh
Gasoline	
On Road	5,496 Gallons
Off Road	0 Gallons
Total:	5,496 Gallons
Diesel	
On Road	14,207 Gallons
Off Road	42,143 Gallons
Total:	56,350 Gallons
Total Mobile	61,845

Summary of Energy Use During Operations

	Baseline (Buildout)	Buildout With Project Features	
Electricity			
Electricity (building)	252,654	332,351	kWh/year
Electricity (water)	28,899	30,125	kWh/year
EV Chargers	0	0	kWh/year
Electricity Total	281,553	362,476	kWh/year
Natural Gas	422,715	587,791	cu ft/year
Mobile			
Gasoline	78,719	102,497	Gallons/year
Diesel	15,492	20,172	Gallons/year
Mobile Total	94,211	122,669	Gallons/year

Construction Electricity Usage

Construction Electricity Usage

Caterpillar 40-C4.4 Generator^a

Peak Power Rating - Prime (kW)	36
Typical Load	70%
Average Output (kW)	25.2
Hours per Day	2
Average Daily Output (kWh)	50.4
Building Construction Phase Duration (days)	213
Total Construction (kWh)	10,735
Total Construction (MWh)	10.7

^a<https://www.albancat.com/content/uploads/2014/06/40-C4.4-Spec-Sheet.pdf>

Calculation of Diesel Usage During Construction (Offroad Equipment):

Phase Name	Off Road Equipment Type	Units	Hours	HP	Load Factor	Avg. Daily Factor	Number of Days	Diesel Fuel Usage	
Demolition	Air Compressors	2	8	78	0.48	0.6	18	323	
Demolition	Concrete/Industrial Saws	2	8	81	0.73	0.6	18	511	
Demolition	Excavators	1	8	158	0.38	0.6	18	259	
Demolition	Rubber Tired Dozers	0	8	247	0.4	0.6	18	0	
Demolition	Tractors/Loaders/Backhoes	1	8	97	0.37	0.6	18	155	
Grading	Excavators	1	8	158	0.38	0.6	43	620	
Grading	Graders	1	8	187	0.41	0.6	43	791	
Grading	Rollers	1	8	80	0.38	0.6	43	314	
Grading	Rubber Tired Dozers	0	8	247	0.4	0.6	43	0	
Grading	Rubber Tired Loaders	1	8	203	0.36	0.6	43	754	
Grading	Tractors/Loaders/Backhoes	1	8	97	0.37	0.6	43	370	
Building Foundation	Air Compressors	1	8	78	0.48	0.6	30	270	
Building Foundation	Forklifts	0	8	89	0.2	0.6	30	0	
Building Foundation	Generator Sets	0	8	84	0.74	0.6	30	0	
Building Foundation	Plate Compactors	1	8	8	0.43	0.6	30	25	
Building Foundation	Pumps	1	8	84	0.74	0.6	30	448	
Building Foundation	Rubber Tired Loaders	1	8	203	0.36	0.6	30	526	
Building Foundation	Tractors/Loaders/Backhoes	1	8	97	0.37	0.6	30	258	
Building Foundation	Welders	1	8	46	0.45	0.6	30	149	
Building Construction	Aerial Lifts	2	8	63	0.31	0.6	213	1,997	
Building Construction	Cement and Mortar Mixers	1	8	9	0.56	0.6	213	258	
Building Construction	Cranes	1	8	231	0.29	0.6	213	3,425	
Building Construction	Forklifts	1	8	89	0.2	0.6	213	910	
Building Construction	Generator Sets	1	8	84	0.74	0.6	213	3,178	
Building Construction	Pumps	1	8	84	0.74	0.6	213	3,178	
Building Construction	Rubber Tired Loaders	1	8	203	0.36	0.6	213	3,736	
Building Construction	Tractors/Loaders/Backhoes	1	8	97	0.37	0.6	213	1,835	
Building Construction	Welders	1	8	46	0.45	0.6	213	1,058	
Architectural Coating	Air Compressors	1	6	78	0.48	0.6	86	580	
Paving	Air Compressors	1	8	78	0.48	0.6	79	710	
Paving	Cement and Mortar Mixers	1	8	9	0.56	0.6	79	96	
Paving	Concrete/Industrial Saws	1	8	81	0.73	0.6	79	1,121	
Paving	Pavers	1	8	130	0.42	0.6	79	1,035	
Paving	Paving Equipment	1	8	132	0.36	0.6	79	901	
Paving	Rollers	1	8	80	0.38	0.6	79	576	
Total Diesel Usage for Construction (Offr								42,142.6	gallons of diesel fuel

gallons of diesel fuel per horsepower-hour= 0.05

Notes: Equipment assumptions are provide in the CalEEMod output files 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.

EMFAC2014 Emissions Inventory

Region Type: Air Basin

Region: South Coast

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Region	Veh_Class	Fuel	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)	Miles per Gallon
South Coast	LDA	GAS	Aggregate	6,370,883	246,404,319	30,101,253	7,990	0	30.8
South Coast	LDT1	GAS	Aggregate	716,397	26,563,675	3,305,301	1,003	0	26.5
South Coast	LDT2	GAS	Aggregate	2,182,002	82,381,240	10,234,301	3,340	0	24.7
Construction Worker Trip (Composite LDA/LDT1/LDT2):									28.2
South Coast	HHDT	DSL	Aggregate	98,508	11,795,119	994,225	0	1763.0	6.7

Notes: Consistent with CalEEMod, a construction worker trip is assumed to be a composite of 50% LDA , 25% for LDT1, and 25% for LDT2. Used EMFAC 2011 Categories for construction as EMFAC2011 has specific categories for vehicle class T7.

Calculation of Gasoline and Diesel Usage During Construction (Onroad Vehicles):

Phase Name	Daily Woker Trips	Daily Vendor Trips	Days	Total Worker Trips	Total Vendor Trips	Total Haul Trips	Trip Length (miles)			Total Length (miles)			Avg. Daily Factor (worker and vendor)	Gallons of Fuel	
							Worker	Vendor	Haul	Worker	Vendor	Haul		Gasoline	Diesel
Demolition	20	15	18	360	270	0	14.7	75	20	5292	20250	0	0.6	112.6	1,816.0
Grading	20	25	43	860	1075	0	14.7	75	20	12642	80625	0	0.6	268.9	7,230.5
Building Foundation	35	8	30	1050	240	0	14.7	13.8	20	15435	3312	0	0.6	328.3	297.0
Building Construction	55	14	213	11715	2982	0	14.7	13.8	20	172210.5	41151.6	0	0.6	3,663.2	3,690.5
Architectural Coating	5	0	86	430	0	0	14.7	6.9	20	6321	0	0	0.6	134.5	0.0
Paving	40	12	79	3160	948	0	14.7	13.8	20	46452	13082.4	0	0.6	988.1	1,173.2
Total:													5,495.6	14,207.3	

Worker Miles per gallon= 28.21 gasoline
 Vedor/Haul miles per gallon= 6.69 diesel

Notes: Consistent with CalEEMod worker vehicles are assumed to be gasoline and 50% LDA, 25%LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy Duty Trucks (T7).

Water Usage for Control of Fugitive Dust during Construction:

Phase	Days	Average Daily Acreage Disturbed	Gallons Per Year	Electricity (kWhr)
Demolition	18	0.5	27,180	264
Grading	43	0.5	64,930	632
Building Foundation	30	0.1	9,060	88
Building Construction	213	0.1	64,326	626
Architectural Coating	86	0	0	0
Paving	79	0	0	0
Total:			165,496	1,610

Water application rate= 3020 gal/acre/day
 kWhr equivalent= 0.01 kWhr

Notes: 1) Gallons per year of water usage for dust control is calculated based on a minimum control efficiency of 66% (three times daily) with an application rate of 3,020 gal/acre/day (Air & Waste Management Association Air Pollution Engineering Manual (1992 Edition)) and average of 26 construction days per month.
 2) CalEEMod Default: Each gallon of delivered potable water in Southern California is associated with 0.009727 kWhr of electricity).

EMFAC2014 Emissions Inventory

Region Type: Air Basin

Region: South Coast

Calendar Year: 2025

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)			
South Coast	2025	Annual	HHDT	DSL	Aggregated	Aggregated	104,110	12,515,660	1,062,535	0.00	1,707.97			
South Coast	2025	Annual	HHDT	GAS	Aggregated	Aggregated	73	8,703	1,459	1.95	0.00			
South Coast	2025	Annual	LDA	DSL	Aggregated	Aggregated	66,922	2,593,390	318,756	0.00	49.38			
South Coast	2025	Annual	LDA	GAS	Aggregated	Aggregated	6,623,933	247,134,863	31,282,323	7,386.88	0.00			
South Coast	2025	Annual	LDT1	DSL	Aggregated	Aggregated	307	7,182	1,077	0.00	0.30			
South Coast	2025	Annual	LDT1	GAS	Aggregated	Aggregated	778,182	27,926,963	3,602,143	977.96	0.00			
South Coast	2025	Annual	LDT2	DSL	Aggregated	Aggregated	17,588	702,823	85,874	0.00	18.22			
South Coast	2025	Annual	LDT2	GAS	Aggregated	Aggregated	2,295,149	83,832,765	10,772,144	3,069.91	0.00			
South Coast	2025	Annual	LHDT1	DSL	Aggregated	Aggregated	133,461	5,159,848	1,678,776	0.00	228.71			
South Coast	2025	Annual	LHDT1	GAS	Aggregated	Aggregated	168,882	5,923,526	2,516,094	543.18	0.00			
South Coast	2025	Annual	LHDT2	DSL	Aggregated	Aggregated	53,523	2,005,570	673,257	0.00	98.54			
South Coast	2025	Annual	LHDT2	GAS	Aggregated	Aggregated	29,352	993,571	437,303	104.80	0.00			
South Coast	2025	Annual	MCY	GAS	Aggregated	Aggregated	314,501	2,073,558	629,002	57.47	0.00			
South Coast	2025	Annual	MDV	DSL	Aggregated	Aggregated	40,102	1,517,288	194,655	0.00	51.21			
South Coast	2025	Annual	MDV	GAS	Aggregated	Aggregated	1,560,708	53,567,630	7,229,536	2,429.85	0.00			
South Coast	2025	Annual	MH	DSL	Aggregated	Aggregated	13,231	123,031	1,323	0.00	11.24			
South Coast	2025	Annual	MH	GAS	Aggregated	Aggregated	33,043	315,800	3,306	58.66	0.00			
South Coast	2025	Annual	MHDT	DSL	Aggregated	Aggregated	129,231	8,213,878	1,308,567	0.00	712.54			
South Coast	2025	Annual	MHDT	GAS	Aggregated	Aggregated	25,223	1,297,263	504,661	245.23	0.00			
South Coast	2025	Annual	OBUS	DSL	Aggregated	Aggregated	4,537	338,774	44,085	0.00	37.70			
South Coast	2025	Annual	OBUS	GAS	Aggregated	Aggregated	5,822	228,042	116,485	43.27	0.00			
South Coast	2025	Annual	SBUS	DSL	Aggregated	Aggregated	6,467	204,500	74,625	0.00	25.94			
South Coast	2025	Annual	SBUS	GAS	Aggregated	Aggregated	3,013	116,477	12,051	12.42	0.00			
South Coast	2025	Annual	UBUS	DSL	Aggregated	Aggregated	6	776	25	0.00	0.14			
South Coast	2025	Annual	UBUS	GAS	Aggregated	Aggregated	969	90,836	3,877	16.68	0.00			
												MPG	Gallons Per Mile	
							Totals	456,892,715.68			14,948.24	2,941.88	25.5	0.04
							Total (GAS)	423,509,995.51	0.93				28.3	0.04
							Total (DSL)	33,382,720.17	0.07				11.3	0.09

Baseline Year

Calendar Year: 2019

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)			
South Coast	2019	Annual	HHDT	DSL	Aggregated	Aggregated	92,086	11,035,510	918,238	0.00	1,756.36			
South Coast	2019	Annual	HHDT	GAS	Aggregated	Aggregated	101	7,659	2,026	2.00	0.00			
South Coast	2019	Annual	LDA	DSL	Aggregated	Aggregated	45,875	1,896,329	216,399	0.00	42.12			
South Coast	2019	Annual	LDA	GAS	Aggregated	Aggregated	6,081,048	244,446,391	28,695,373	8,546.80	0.00			
South Coast	2019	Annual	LDT1	DSL	Aggregated	Aggregated	482	11,462	1,689	0.00	0.52			
South Coast	2019	Annual	LDT1	GAS	Aggregated	Aggregated	651,943	24,807,246	2,983,370	1,008.68	0.00			
South Coast	2019	Annual	LDT2	DSL	Aggregated	Aggregated	9,665	445,810	48,035	0.00	13.63			
South Coast	2019	Annual	LDT2	GAS	Aggregated	Aggregated	2,073,197	80,872,282	9,694,322	3,631.58	0.00			
South Coast	2019	Annual	LHDT1	DSL	Aggregated	Aggregated	97,013	4,044,995	1,220,296	0.00	195.55			
South Coast	2019	Annual	LHDT1	GAS	Aggregated	Aggregated	175,207	6,463,196	2,610,330	629.75	0.00			
South Coast	2019	Annual	LHDT2	DSL	Aggregated	Aggregated	37,900	1,552,333	476,734	0.00	83.01			
South Coast	2019	Annual	LHDT2	GAS	Aggregated	Aggregated	28,635	1,024,337	426,614	114.60	0.00			
South Coast	2019	Annual	MCY	GAS	Aggregated	Aggregated	259,354	1,869,286	518,708	51.29	0.00			
South Coast	2019	Annual	MDV	DSL	Aggregated	Aggregated	23,710	1,023,301	117,204	0.00	40.71			
South Coast	2019	Annual	MDV	GAS	Aggregated	Aggregated	1,497,221	54,845,361	6,911,949	2,999.26	0.00			
South Coast	2019	Annual	MH	DSL	Aggregated	Aggregated	11,071	110,800	1,107	0.00	10.76			
South Coast	2019	Annual	MH	GAS	Aggregated	Aggregated	35,590	335,289	3,560	67.31	0.00			
South Coast	2019	Annual	MHDT	DSL	Aggregated	Aggregated	114,051	7,128,971	1,136,926	0.00	714.72			
South Coast	2019	Annual	MHDT	GAS	Aggregated	Aggregated	24,591	1,348,347	492,013	274.04	0.00			
South Coast	2019	Annual	OBUS	DSL	Aggregated	Aggregated	4,004	293,205	39,273	0.00	37.06			
South Coast	2019	Annual	OBUS	GAS	Aggregated	Aggregated	5,873	259,979	117,514	53.24	0.00			
South Coast	2019	Annual	SBUS	DSL	Aggregated	Aggregated	6,233	197,082	71,923	0.00	26.67			
South Coast	2019	Annual	SBUS	GAS	Aggregated	Aggregated	2,128	88,942	8,510	9.98	0.00			
South Coast	2019	Annual	UBUS	DSL	Aggregated	Aggregated	18	1,877	73	0.00	0.30			
South Coast	2019	Annual	UBUS	GAS	Aggregated	Aggregated	931	87,702	3,725	18.65	0.00			
												MPG	Gallons Per Mile	
							Totals	444,197,691.29			17,407.18	2,921.42	21.9	0.05
							Total (GAS)	416,456,015.85	0.94				23.9	0.04
							Total (DSL)	27,741,675.44	0.06				9.5	0.11

Mirman School Project - Existing Operations (Buildout Year)

Los Angeles-South Coast County, Annual

Land Use Details

<i>Land Uses</i>	<i>Size</i>	<i>Metric</i>	<i>Lot Acreage</i>	<i>Floor Surface Area</i>	<i>Population</i>
Elementary School	330.00	Student	5.46	42,678.00	0

Trip Summary Information

<i>Land Uses</i>	<i>Average Daily Trip Rate</i>			<i>Annual VMT</i>
	<i>Weekday</i>	<i>Saturday</i>	<i>Sunday</i>	
Elementary School	0.0	0.0	0.0	0
User Defined Educational	776.0	0.0	0.0	2,406,040
Total	0.00	0.00	0.00	2,406,040

Gasoline and Diesel Usage

	<i>Buildout Year</i>		<i>Existing (Baseline) Year</i>	
	<i>Gasoline</i>	<i>Diesel</i>	<i>Gasoline</i>	<i>Diesel</i>
<i>Miles/Gallon</i>	28.3	11.3	23.9	9.5
<i>% Fleet Mix</i>	92.7%	7.3%	93.8%	6.2%
Total (Gallons):	78,719	15,492	94,288	15,824

Energy by Land Use - Natural Gas

<i>Land Uses</i>	<i>kBTU/yr</i>	<i>cu ft/year</i>
Elementary School	443,851	422,715
Total	443,851	422,715

Energy by Land Use - Electricity

<i>Land Uses</i>	<i>kWH/yr</i>
Elementary School	252,654
Total	252,654

Water Detail

<i>Land Uses</i>	<i>Indoor Use</i>		<i>Electricity</i>
	<i>(Mgal)</i>	<i>Outdoor Use (Mgal)</i>	<i>Use (kWh/yr)</i>
Elementary School	0.80	2.06	28898.59
Total	0.80	2.06	28,899

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

Mirman School Project - Buildout Operations
Los Angeles-South Coast County, Annual

Land Use Details

<i>Land Uses</i>	<i>Size</i>	<i>Metric</i>	<i>Lot Acreage</i>	<i>Floor Surface Area</i>	<i>Population</i>
Elementary School	430.00	Student	5.46	65,186.00	0

Trip Summary Information

<i>Land Uses</i>	<i>Average Daily Trip Rate</i>			<i>Mitigated</i>
	<i>Weekday</i>	<i>Saturday</i>	<i>Sunday</i>	
User Defined Educational	1,010	0	0	3,132,818
Total	1,010	0	0	3,132,818

Mitigated Gasoline and Diesel Usage

	<i>Gasoline</i>	<i>Diesel</i>
<i>Miles/Gallon</i>	28.3	11.3
<i>% Fleet Mix</i>	92.7%	7.3%
Total (Gallons):	102,497	20,172

Note: Fleet mix is 92.3% gasoline @ 30.6 miles/gallon and 7.7% diesel @ 12.1 miles/gallon.

Energy by Land Use - Natural Gas (Mitigated)

<i>Land Uses</i>	<i>kBTU/yr</i>	<i>cu ft/year</i>
Elementary School	617,181	587,791
Total	617,181	587,791

Energy by Land Use - Electricity (Mitigated)

<i>Land Uses</i>	<i>kWH/yr</i>
Elementary School	332,351
Total	332,351

Note: Reduction in electricity usage reflects implementation of CalGreen and GHG-PDF-1 (Exceed Title 24, Part 6, CEC baseline requirements by 10 percent for energy efficiency, based on 2016 standards and 25% for lighting).

Water Detail (Unmitigated)

<i>Land Uses</i>	<i>Indoor Use (Mgal)</i>	<i>Outdoor Use (Mgal)</i>	<i>Electricity Use (kWh/yr)</i>
Elementary School	0.83	2.14	30,125
Total	0.83	2.14	30,125

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod). The City of Los Angeles Green Building Code (Chapter IX, Article 9, of the LAMC) requires newly constructed non-residential and high-rise residential buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20 percent reduction in baseline water

Peak Electricity Demand Calculations

Electrical Load Factor Equation

$$f_{Load} = \frac{\text{Average load}}{\text{Maximum load in given time period}}$$

Load Factor (%)¹ **52%**

Project Electricity Demand (Operational)

Annual Demand	Baseline	
	(Existing)	Project
Building (MWh)	253	332
Water (MWh)	29	30
Total (MWh)	282	362

Average Daily Demand

Building (kWh)	692	911
Water (kWh)	79	83
Total (kWh)	771	993

Average Load

Building (kW)	29	38
Water (kW)	3	3
Total (kW)	32	41

Peak Load Calculation

Peak Load (kW) ²	59	76
Systemwide Peak Load (MW)		5,854
Percent of Peak		0.001%

¹2017 Report: System Efficiency of California's Electric Grid. California Public Utilities Co 2017. Page 11, Figure 6. Visual estimate.

² Peak Load is conservatively calculated without any reductions from removal of existing uses.

EMFAC Emission inventories for County

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: County

Region: Los Angeles

Calendar Year: **2022** (Construction Start Year)

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Fuel_Gasoline (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2022	HHDT	Aggregatec	Aggregatec	DSL	0.00	1762.99
Los Angeles	2022	HHDT	Aggregatec	Aggregatec	GAS	1.88	0.00
Los Angeles	2022	LDA	Aggregatec	Aggregatec	DSL	0.00	47.39
Los Angeles	2022	LDA	Aggregatec	Aggregatec	GAS	7989.70	0.00
Los Angeles	2022	LDT1	Aggregatec	Aggregatec	DSL	0.00	0.39
Los Angeles	2022	LDT1	Aggregatec	Aggregatec	GAS	1003.18	0.00
Los Angeles	2022	LDT2	Aggregatec	Aggregatec	DSL	0.00	16.65
Los Angeles	2022	LDT2	Aggregatec	Aggregatec	GAS	3339.89	0.00
Los Angeles	2022	LHDT1	Aggregatec	Aggregatec	DSL	0.00	217.11
Los Angeles	2022	LHDT1	Aggregatec	Aggregatec	GAS	583.23	0.00
Los Angeles	2022	LHDT2	Aggregatec	Aggregatec	DSL	0.00	92.89
Los Angeles	2022	LHDT2	Aggregatec	Aggregatec	GAS	110.13	0.00
Los Angeles	2022	MCY	Aggregatec	Aggregatec	GAS	54.92	0.00
Los Angeles	2022	MDV	Aggregatec	Aggregatec	DSL	0.00	47.80
Los Angeles	2022	MDV	Aggregatec	Aggregatec	GAS	2704.45	0.00
Los Angeles	2022	MH	Aggregatec	Aggregatec	DSL	0.00	11.12
Los Angeles	2022	MH	Aggregatec	Aggregatec	GAS	62.96	0.00
Los Angeles	2022	MHDT	Aggregatec	Aggregatec	DSL	0.00	720.16
Los Angeles	2022	MHDT	Aggregatec	Aggregatec	GAS	259.39	0.00
Los Angeles	2022	OBUS	Aggregatec	Aggregatec	DSL	0.00	37.46
Los Angeles	2022	OBUS	Aggregatec	Aggregatec	GAS	47.77	0.00
Los Angeles	2022	SBUS	Aggregatec	Aggregatec	DSL	0.00	26.42
Los Angeles	2022	SBUS	Aggregatec	Aggregatec	GAS	11.27	0.00
Los Angeles	2022	UBUS	Aggregatec	Aggregatec	DSL	0.00	0.25
Los Angeles	2022	UBUS	Aggregatec	Aggregatec	GAS	18.40	0.00
						5,908,313,954	1,087,928,967
Fuel Usage for Project Construction						5,496	56,350
Percentage of County for Construction						0.0001%	0.005%

EMFAC Emission inventories for County

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: County

Region: Los Angeles

Calendar Year: **2025** (Operational Start Year)

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Fuel_Gasoline (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2025	HHDT	Aggregatec	Aggregatec	DSL	0.00	1707.97
Los Angeles	2025	HHDT	Aggregatec	Aggregatec	GAS	1.95	0.00
Los Angeles	2025	LDA	Aggregatec	Aggregatec	DSL	0.00	49.38
Los Angeles	2025	LDA	Aggregatec	Aggregatec	GAS	7386.88	0.00
Los Angeles	2025	LDT1	Aggregatec	Aggregatec	DSL	0.00	0.30
Los Angeles	2025	LDT1	Aggregatec	Aggregatec	GAS	977.96	0.00
Los Angeles	2025	LDT2	Aggregatec	Aggregatec	DSL	0.00	18.22
Los Angeles	2025	LDT2	Aggregatec	Aggregatec	GAS	3069.91	0.00
Los Angeles	2025	LHDT1	Aggregatec	Aggregatec	DSL	0.00	228.71
Los Angeles	2025	LHDT1	Aggregatec	Aggregatec	GAS	543.18	0.00
Los Angeles	2025	LHDT2	Aggregatec	Aggregatec	DSL	0.00	98.54
Los Angeles	2025	LHDT2	Aggregatec	Aggregatec	GAS	104.80	0.00
Los Angeles	2025	MCY	Aggregatec	Aggregatec	GAS	57.47	0.00
Los Angeles	2025	MDV	Aggregatec	Aggregatec	DSL	0.00	51.21
Los Angeles	2025	MDV	Aggregatec	Aggregatec	GAS	2429.85	0.00
Los Angeles	2025	MH	Aggregatec	Aggregatec	DSL	0.00	11.24
Los Angeles	2025	MH	Aggregatec	Aggregatec	GAS	58.66	0.00
Los Angeles	2025	MHDT	Aggregatec	Aggregatec	DSL	0.00	712.54
Los Angeles	2025	MHDT	Aggregatec	Aggregatec	GAS	245.23	0.00
Los Angeles	2025	OBUS	Aggregatec	Aggregatec	DSL	0.00	37.70
Los Angeles	2025	OBUS	Aggregatec	Aggregatec	GAS	43.27	0.00
Los Angeles	2025	SBUS	Aggregatec	Aggregatec	DSL	0.00	25.94
Los Angeles	2025	SBUS	Aggregatec	Aggregatec	GAS	12.42	0.00
Los Angeles	2025	UBUS	Aggregatec	Aggregatec	DSL	0.00	0.14
Los Angeles	2025	UBUS	Aggregatec	Aggregatec	GAS	16.68	0.00
						5,456,109,145	1,073,785,458
Net Fuel Usage for Project Operation						102,497	20,172
Percentage of County for Operation						0.0019%	0.0019%