

Appendix B

Air Quality, Greenhouse Gas, and
Energy Modeling Calculations

GHG Summary

Emissions Sector	MTCO ₂ e/year
2020 (Baseline)	
Mobile	10,513,736
Area	718,228
Energy	5,103,008
Water Consumption and Wastewater Treatment	195,140
Solid Waste Generation	640,132
Refrigerants	1,458,289
Total	18,628,534
2050 (2025 Blueprint Horizon Year)	
Mobile	7,807,327
Area	873,471
Energy	3,509,231
Water Consumption and Wastewater Treatment	172,256
Solid Waste Generation	683,433
Refrigerants	1,185,034
Total	14,230,751
Difference in total emissions between 2020 baseline and 2025 Blueprint's 2050 horizon year	-4,397,783

Summary Building Operational Emission (tons per year)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
2020											
Energy	162	2,875	1,975	18	224	0	224	224	0	224	5,103,008
Water	0	0	0	0	0	0	0	0	0	0	195,140
Waste	0	0	0	0	0	0	0	0	0	0	640,132
Refrig.	0	0	0	0	0	0	0	0	0	0	1,458,289
Hearths	19,073	580	30,588	61	4,204	0	4,204	4,146	0	4,146	718,228
Consumer	9,680	0	0	0	0	0	0	0	0	0	0
Architectur	846	0	0	0	0	0	0	0	0	0	0
Total	29,761	3,455	32,563	78	4,428	0	4,428	4,370	0	4,370	8,114,798
2050											
Energy	178	3,166	2,222	19	246	0	246	246	0	246	3,509,231
Water	0	0	0	0	0	0	0	0	0	0	172,256
Waste	0	0	0	0	0	0	0	0	0	0	683,433
Refrig.	0	0	0	0	0	0	0	0	0	0	1,185,034
Hearths	23,196	706	37,199	74	5,113	0	5,113	5,042	0	5,042	873,471
Consumer	11,623	0	0	0	0	0	0	0	0	0	0
Architectur	1,018	0	0	0	0	0	0	0	0	0	0
Total	36,014	3,871	39,421	93	5,359	0	5,359	5,288	0	5,288	6,423,425

Table X. Emission Summary (lbs/day)

Source	ROG	NO _x	CO	SO _x	PM ₁₀	PM ₁₀	PM _{2.5}	PM _{2.5}
					Exhaust	Dust	Exhaust	Dust
2020								
Mobile	34,740	68,388	275,643	605	884	41,674	836	10,637
Energy	887	15,752	10,822	97	1,225	0	1,225	0
Hearths	104,510	3,180	167,604	332	23,038	0	22,717	0
Consumer Products	53,041	0	0	0	0	0	0	0
Architectural Coatings	4,637	0	0	0	0	0	0	0
Total	197,814	87,320	454,069	1,033	25,147	41,674	24,779	10,637
2050								
Mobile	12,844	20,826	114,602	451	283	48,122	268	12,254
Energy	974	17,346	12,175	106	1,346	0	1,346	0
Hearths	127,100	3,867	203,831	404	28,018	0	27,627	0
Consumer Products	63,687	0	0	0	0	0	0	0
Architectural Coatings	5,578	0	0	0	0	0	0	0
Total	210,183	42,040	330,607	961	29,648	48,122	29,242	12,254
Change in Emissions From 2020 to 2050								
Mobile	-21,896	-47,562	-161,041	-154	-600	6,448	-568	1,617
Energy	88	1,594	1,352	10	121	0	121	0
Hearths	22,590	687	36,227	72	4,980	0	4,910	0
Consumer Products	10,646	0	0	0	0	0	0	0
Architectural Coatings	941	0	0	0	0	0	0	0
Total Change in Emissions	12,369	-45,280	-123,461	-72	4,500	6,448	4,463	1,617

Table X. Maximum daily PM2.5 Exposure

Year	Population Within 500' Buffer	MT % diesel	VTMT Total	M _{2.5} rate g/m ³	M _{2.5} (lbs/day)	exposure (lb/day)
2020	47,250	9%	60,510,080	0.01	836	0.018
2050	70,201	7%	70,222,434	0.002	268	0.004
Net Change	22,951	-2%	9,712,354	-0.008	-568	-0.014

Table X Maximum Daily and Annual Criteria Air Pollutant Emissions from VMT (2020)

	NOX	ROG	CO	SO2	PM10E	PM10D	PM2.5E	PM2.5D
	NO _x	ROG	CO	SO _x	PM ₁₀ (Exhaust)	PM ₁₀ (Dust)	PM _{2.5} (Exhaust)	PM _{2.5} (Dust)
Annual Emissions								
Total (tpy)	12,481	6,340	50,305	110	161	7,606	153	1,941
Daily Emissions								
Maximum (lb/day)	68,388	34,740	275,643	605	884	41,674	836	10,637

Table X Maximum Annual GHG Emissions from VMT (2020)

MTCO ₂ e	
Counties	
El Dorado	670,298
Placer	1,874,668
Sacramento	5,985,143
Sutter	520,183
Yolo	1,146,751
Yuba	316,694
Total	10,513,736

Emission by County, 2020

	tons/day											
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	MT CO2e/day
Counties												
El Dorado	2.29	1.34	10.03	0.02	1982.67	0.11	0.13	1.39	0.03	0.35	0.03	1,836
Placer	6.05	2.82	22.41	0.05	5536.18	0.26	0.40	3.60	0.09	0.92	0.08	5,136
Sacramento	19.22	10.17	81.05	0.17	17706.28	1.11	1.15	12.10	0.23	3.09	0.22	16,398
Sutter	2.06	0.75	5.70	0.01	1528.39	0.06	0.14	0.87	0.03	0.22	0.03	1,425
Yolo	3.45	1.63	13.64	0.03	3386.27	0.19	0.24	2.22	0.05	0.57	0.05	3,142
Yuba	1.13	0.66	5.00	0.01	935.95	0.06	0.06	0.66	0.01	0.17	0.01	868
Total	34.2	17.4	137.8	0.3	31,075.8	1.8	2.1	20.8	0.4	5.3	0.4	28,805

Energy Consumption by County, 2020

Counties	Weighted Energy Consumption Rates			Daily Energy Consumption		
	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile	Diesel Gallons	Gasoline Gallons	MWh
El Dorado	0.00880443	0.0412703	0.0062339	35,518	166,488	25
Placer	0.01340776	0.0400232	0.0070117	139,449	416,266	73
Sacramento	0.00906927	0.0415869	0.0066221	319,938	1,467,066	234
Sutter	0.02280345	0.0381123	0.0047315	56,309	94,111	12
Yolo	0.01283942	0.0397716	0.0067263	82,376	255,170	43
Yuba	0.00855716	0.0412401	0.0038052	16,371	78,896	7
Total				649,960	2,477,996	394

Table X Maximum Daily and Annual Criteria Air Pollutant Emissions from VMT (2050)

	NOX	ROG	CO	SO2	PM10E	PM10D	PM2.5E	PM2.5D
	NO _x	ROG	CO	SO _x	PM ₁₀ (Exhaust)	PM ₁₀ (Dust)	PM _{2.5} (Exhaust)	PM _{2.5} (Dust)
Annual Emissions								
Total (tpy)	3,801	2,344	20,915	82	52	8,782	49	2,236
Daily Emissions								
Maximum (lb/day)	20,826	12,844	114,602	451	283	48,122	268	12,254

Table X Maximum Annual GHG Emissions from VMT (2050)

	MTCO ₂ e
Counties	
El Dorado	421,523
Placer	1,586,964
Sacramento	4,329,705
Sutter	413,086
Yolo	846,232
Yuba	209,817
Total	7,807,327

Emission by County, 2050

	tons/day											
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	MT CO2e/day
Counties												
El Dorado	0.36	0.51	3.75	0.01	1256.25	0.03	0.05	1.45	0.00	0.37	0.00	1,155
Placer	2.70	1.08	10.31	0.05	4691.70	0.08	0.33	4.42	0.04	1.13	0.04	4,348
Sacramento	5.14	3.82	33.31	0.13	12853.24	0.31	0.72	13.83	0.07	3.52	0.06	11,862
Sutter	0.93	0.25	2.34	0.01	1214.93	0.02	0.11	1.01	0.01	0.26	0.01	1,132
Yolo	1.11	0.59	5.90	0.02	2510.68	0.05	0.15	2.61	0.01	0.66	0.01	2,318
Yuba	0.18	0.17	1.68	0.01	625.53	0.01	0.03	0.74	0.00	0.19	0.00	575
Total	10.4	6.4	57.3	0.2	23,152.3	0.5	1.4	24.1	0.1	6.1	0.1	21,390

Energy Consumption by County, 2050

Counties	Weighted Energy Consumption Rates			Daily Energy Consumption		
	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile	Diesel Gallons	Gasoline Gallons	MWh
El Dorado	0.00305409	0.0270147	0.0704078	12,320	108,980	284
Placer	0.01130208	0.0249938	0.0778465	117,548	259,951	810
Sacramento	0.00623955	0.0254366	0.0831164	220,113	897,330	2,932
Sutter	0.01781629	0.0228721	0.0867679	43,994	56,478	214
Yolo	0.00745364	0.0254142	0.080246	47,822	163,054	515
Yuba	0.00316846	0.0257186	0.0677112	6,062	49,202	130
Total				447,859	1,534,995	4,884

Energy Summary

Table x. Per-capita energy consumption for residential and mobile sources

Souce	2020	2050	net change
Building Energy			
Building Electricity (KWh/yr/capita)	21,471	17,895	-3,577
Natural Gas (KBTU/yr/capita)	631	536	-94
Transportation Energy			0
Transportation Electricity (KWh/yr/capita)	57	571	515
Gasoline (Gallons/capita)	356	180	-176
Diesel (Gallons/capita)	93	52	-41

Annual Building Energy

Building		Electricity (MWh/yr)	Natural Gas (MBTU/yr)
2020	Residential	6,892,720	23,024,146
	Non Residential	13,539,500	37,001,958
	Total	20,432,220	60,026,103
2050	Residential	6,711,440	22,898,957
	Non Residential	15,292,292	43,055,144
	Total	22,003,733	65,954,101

Annual Mobile Energy

Mobile	Diesel Gallons	Gasoline Gallons	Electricity MWh
2020	237,235,283	904,468,698	143,737
2050	163,468,643	560,273,299	1,782,817

Annual Energy Consumption		Days/yr	365	
Souce	2020	2050	% change	
Building Energy				
Building Electricity (MWh/yr)	20,432,220	22,003,733	8%	
Natural Gas (MBTU/yr)	60,026,103	65,954,101	10%	
Transportation Energy				
Transportation Electricity (MWh/yr)	143,737	1,782,817	1140%	
Gasoline (Gallons)	904,468,698	560,273,299	-38%	
Diesel (Gallons)	237,235,283	163,468,643	-31%	

Transportation Energy per capita is based on total population
Residential Energy per capita is based on number of households

	2020	2050	% change
# of Households	951,615	1,229,633	29%
Population	2,540,353	3,120,053	23%

Note: Data from MTP2025_EIR_tables_LU.xlsx]14.1 and 14.x
kBTU to Therm 0.01

29.307 kwh per therm

VMT by County

Table 16.xx
County Roadway Vehicle Miles Traveled

County	Daily VMT 1		Changes	
	2020	2050	#	%
El Dorado	4,034,088	4,262,699	228,611	5.7%
Placer	10,400,596	12,761,423	2,360,827	22.7%
Sacramento	35,277,108	40,497,416	5,220,308	14.8%
Sutter	2,469,306	2,885,689	416,383	16.9%
Yolo	6,415,883	7,614,015	1,198,132	18.7%
Yuba	1,913,099	2,201,192	288,093	15.1%
Region	60,510,080	70,222,434	9,712,354	16.1%
Population	2,540,353	3,120,053	579,700	22.8%
VMT per Capita	23.8	22.5	-1.3	-0.1

Source: SACOG, May 2025.

1Includes roadway VMT of the SACOG region, for travel within the region. This is a subset of total VMT. Estimates and forecasts from SACSIM regional travel demand model.

Region: El Dorado

Regional VMT

El Dorado	Daily VMT
2020	4,034,088
2050	4,262,699

Emission from VMT on County Roads

Year	Emission (tons/day)											GHG (MT/day)
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
2020	2.29	1.34	10.03	0.02	1982.67	0.11	0.13	1.39	0.03	0.35	0.03	1836.43
2050	0.36	0.51	3.75	0.01	1256.25	0.03	0.05	1.45	0.00	0.37	0.00	1154.86

PM_D is the sum of breakwear, tirewear, and fugitive dust.

Change in Diesel PM2.5 and PM10 Emissions

Year	VMT on County Road	% diesel	Diesel PM (grams/mile)		Diesel PM (grams/day)	
			PM10	PM2.5	PM10	PM2.5
2020	4,034,088	9.6%	5.03E-03	4.81E-03	1,942	1,858
2050	4,262,699	3.0%	4.33E-04	4.14E-04	56	53
Percent Change		-68.5%			-97.1%	-97.1%

Fugitive Dust Emission Factors

3 Travel on Paved Roads
E(lbs/VMT)=(k)(sL)^.91 (W)^1.02

Where:	PM10	Unit	Source
k= Particle Size Multiplier:	0.0022	lb/VMT	AP-42 Chapter 13.2.1, Table 13.2.1-1, PM10 emissions
sL= road surface silt loading	0.1	g/m^2	CalEEMod default
W= average weight of the vehicles traveling the road	2.4	tons	Statewide average vehicle weight in CA
PM10 Emission factor	0.00066	lbs/VMT	Public roads

3a Correction for Natural Precipitation⁵
E(ext)=E[(1-P/4N)]

Where:		Unit	Source
Eext = annual or other long-term average emission factor		dimensionless	
P=#days/yr with >=0.01 inch precipitation during the	58	days	Note: Sacramento data is used for all counties in the plan region
N=# days in averaging period	365	days	Sacramento data: https://wrcc.dri.edu/Climate/comp_table_show.php?type=ppt_mear
Corrected EF PM10	0.00063	lbs/VMT	Public roads
Corrected EF PM2.5	0.00016	lbs/VMT	Public roads

Sources

EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 1

Fugitive Dust		
Source	PM2.5/PM10	Reference
Paved road	0.25	EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final Report, Oct 2005.

Region: El Dorado

2020 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	3.42E-07	2.004E-08	7.074E-08	9.336E-10	9.856E-05	9.307E-10	1.553E-08	8.693E-09	5.539E-09	2.891E-09	5.299E-09	9.363E-05
EFs (tons/mile)	5.67E-07	3.32E-07	2.49E-06	4.82E-09	4.91E-04	2.72E-08	3.24E-08	2.80E-08	7.65E-09	8.85E-09	7.24E-09	4.55E-04

2050 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	3.31E-08	1.61E-09	1.254E-08	3.238E-10	3.419E-05	7.479E-11	5.386E-09	2.746E-09	4.774E-10	9.01E-10	4.568E-10	3.247E-05
EFs (tons/mile)	8.39E-08	1.19E-07	8.80E-07	2.90E-09	2.95E-04	7.10E-09	1.26E-08	2.29E-08	1.09E-09	7.09E-09	1.02E-09	2.71E-04

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: El Dorado
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

		Mod		129228.03 3902748.703 685876.7057																	
	Calendar	Vehicle	el	Spee						Energy	NOx_RUN	NOx_IDLE	NOx_STR	NOx_TOT	PM2.5_R	PM2.5_ID	PM2.5_ST	PM2.5_T	PM2.5_P		
Region	Year	Category	Year	d	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Consumption	EX	X	EX	EX	UNEX	LEX	REX	OTEX	MTW	
El Dorado	2020	HHDT	Aggre	Aggre	Gasol	1.4894761	39.33516472	39.33516472		0	29.80143786	0	0.000623	0	6.65E-05	0.000689	1.98E-07	0	6.3E-08	2.61E-07	2.17E-07
El Dorado	2020	HHDT	Aggre	Aggre	Diese	525.84839	43312.91203	43312.91203		0	4812.906137	0	0.227803	0.027662	0.011486	0.266951	0.002212	5.24E-05	0	0.002264	0.000403
El Dorado	2020	HHDT	Aggre	Aggre	Natur	2.3623382	151.0261873	151.0261873		0	22.2532257	0	0.000102	3.17E-05	0	0.000134	1.91E-07	5.85E-08	0	2.5E-07	1.5E-06
El Dorado	2020	LDA	Aggre	Aggre	Gasol	43758.278	1422614.879	1422614.879		0	201885.0083	0	0.128832	0	0.079014	0.207846	0.002273	0	0.000517	0.00279	0.003136
El Dorado	2020	LDA	Aggre	Aggre	Diese	376.1893	10831.78783	10831.78783		0	1654.500097	0	0.004951	0	0.004951	0.000258	0	0	0.000258	2.39E-05	
El Dorado	2020	LDA	Aggre	Aggre	Electr	1102.0495	37952.9487		0	37952.9487	5568.88065	14652.97062	0	0	0	0	0	0	0	0	8.37E-05
El Dorado	2020	LDA	Aggre	Aggre	Plug-i	652.38657	26594.98313	14267.05019	12327.93294	2697.618472	3723.403178	0.000112	0	0.000351	0.000463	2.54E-05	0	7.41E-06	3.28E-05	5.86E-05	
El Dorado	2020	LDT1	Aggre	Aggre	Gasol	9220.9421	239052.0764	239052.0764		0	39646.887	0	0.066616	0	0.028122	0.094738	0.00068	0	0.000193	0.000873	0.000527
El Dorado	2020	LDT1	Aggre	Aggre	Diese	7.5207183	53.46524401	53.46524401		0	23.24751499	0	8.67E-05	0	0	8.67E-05	1.35E-05	0	0	1.35E-05	1.18E-07
El Dorado	2020	LDT1	Aggre	Aggre	Electr	6.2894795	183.5684215	0	183.5684215	30.24706471	70.87256142	0	0	0	0	0	0	0	0	0	4.05E-07
El Dorado	2020	LDT1	Aggre	Aggre	Plug-i	0.3271233	14.43499232	7.592498518	6.842493806	1.352654951	2.066637068	6.02E-08	0	1.77E-07	2.38E-07	1.29E-08	0	3.67E-09	1.65E-08	3.18E-08	
El Dorado	2020	LDT2	Aggre	Aggre	Gasol	30851.86	1008644.619	1008644.619		0	143457.1782	0	0.137657	0	0.081358	0.219015	0.001619	0	0.000358	0.001977	0.002224
El Dorado	2020	LDT2	Aggre	Aggre	Diese	119.72338	4274.478181	4274.478181		0	570.6916699	0	0.000323	0	0	0.000323	3.57E-05	0	0	3.57E-05	9.42E-06
El Dorado	2020	LDT2	Aggre	Aggre	Electr	3.9591146	120.8938024	0	120.8938024	20.43257087	46.67498563	0	0	0	0	0	0	0	0	0	2.67E-07
El Dorado	2020	LDT2	Aggre	Aggre	Plug-i	49.814329	2190.205665	1155.390996	1034.814669	205.9822494	312.5448724	9.16E-06	0	2.7E-05	3.62E-05	2.22E-06	0	6.29E-07	2.85E-06	4.83E-06	
El Dorado	2020	LHDT1	Aggre	Aggre	Gasol	3582.5281	97819.73522	97819.73522		0	53374.33049	0	0.04803	0.000161	0.043337	0.091528	0.00027	0	3.35E-05	0.000303	0.000216
El Dorado	2020	LHDT1	Aggre	Aggre	Diese	5273.0596	151869.7164	151869.7164		0	66328.45586	0	0.586955	0.014325	0	0.601279	0.010678	0.000157	0	0.010835	0.000502
El Dorado	2020	LHDT2	Aggre	Aggre	Gasol	288.1225	8655.548943	8655.548943		0	4292.595925	0	0.0026	1.28E-05	0.0034	0.006012	1.68E-05	0	1.77E-06	1.85E-05	1.91E-05
El Dorado	2020	LHDT2	Aggre	Aggre	Diese	1671.0841	54917.05297	54917.05297		0	21020.13608	0	0.123256	0.004317	0	0.127573	0.002671	4.82E-05	0	0.002719	0.000182
El Dorado	2020	MCY	Aggre	Aggre	Gasol	5112.4502	22457.86029	22457.86029		0	10224.90043	0	0.0195	0	0.002372	0.021872	4.78E-05	0	4.69E-05	9.48E-05	2.48E-05
El Dorado	2020	MDV	Aggre	Aggre	Gasol	22223.751	643614.7631	643614.7631		0	100980.1958	0	0.139074	0	0.082272	0.221345	0.001118	0	0.000311	0.001429	0.001419
El Dorado	2020	MDV	Aggre	Aggre	Diese	536.83854	19539.20351	19539.20351		0	2588.000614	0	0.001345	0	0	0.001345	0.000132	0	0	0.000132	4.31E-05
El Dorado	2020	MDV	Aggre	Aggre	Electr	5.8855596	183.0270317	0	183.0270317	30.54605413	70.66354027	0	0	0	0	0	0	0	0	0	4.04E-07
El Dorado	2020	MDV	Aggre	Aggre	Plug-i	61.22053	2615.679113	1406.99161	1208.687503	253.1468913	365.0596505	1.11E-05	0	3.31E-05	4.42E-05	2.9E-06	0	8.27E-07	3.73E-06	5.77E-06	
El Dorado	2020	MH	Aggre	Aggre	Gasol	1107.9444	8381.00678	8381.00678		0	110.8387565	0	0.004838	0	5.02E-05	0.004889	1.65E-05	0	5.48E-08	1.65E-05	2.77E-05
El Dorado	2020	MH	Aggre	Aggre	Diese	495.00351	4047.173314	4047.173314		0	49.50035117	0	0.022411	0	0	0.022411	0.000547	0	0	0.000547	1.78E-05
El Dorado	2020	MHDT	Aggre	Aggre	Gasol	148.02432	4387.384164	4387.384164		0	2961.670574	0	0.006082	1.41E-05	0.00157	0.007666	1E-05	0	3.23E-06	1.32E-05	1.45E-05
El Dorado	2020	MHDT	Aggre	Aggre	Diese	1698.4983	74111.32383	74111.32383		0	18657.05735	0	0.185828	0.038444	0.027905	0.252178	0.003064	0.000135	0	0.003199	0.000245
El Dorado	2020	OBUS	Aggre	Aggre	Gasol	47.783105	1526.161922	1526.161922		0	956.0443611	0	0.001584	3.39E-06	0.000476	0.002063	1.68E-06	0	3.52E-07	2.03E-06	5.05E-06
El Dorado	2020	OBUS	Aggre	Aggre	Diese	63.714257	4221.840553	4221.840553		0	687.1419847	0	0.016308	0.000999	0.00096	0.018268	0.000483	4.98E-06	0	0.000488	1.4E-05
El Dorado	2020	OBUS	Aggre	Aggre	Natur	1.1613496	57.56594153	57.56594153		0	10.33601113	0	1.71E-05	2E-06	0	1.91E-05	4.42E-08	4.24E-09	0	4.84E-08	1.9E-07
El Dorado	2020	SBUS	Aggre	Aggre	Gasol	20.852964	732.3969967	732.3969967		0	83.41185485	0	0.001538	2.04E-05	6.73E-05	0.001626	2.44E-06	0	1.19E-07	2.55E-06	1.61E-06
El Dorado	2020	SBUS	Aggre	Aggre	Diese	171.4823	3778.709773	3778.709773		0	2483.06371	0	0.029339	0.005383	0.000841	0.035563	0.000166	8.46E-06	0	0.000174	1.25E-05
El Dorado	2020	UBUS	Aggre	Aggre	Gasol	11.459197	962.8433377	962.8433377		0	45.83678799	0	0.00019	0	4.48E-05	0.000235	1.24E-06	0	4.95E-08	1.29E-06	3.18E-06
El Dorado	2020	UBUS	Aggre	Aggre	Diese	28.12712	2838.096166	2838.096166		0	112.5084796	0	0.003283	0	0	0.003283	1.82E-05	0	0	1.82E-05	2.06E-05

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: El Dorado

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

2.84E-07

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX
El Dorado	2020	HHDT	1.78E-06	2.26E-06	2.15E-07	0	6.85E-08	2.84E-07	8.67E-07	5.09E-06	6.24E-06	0.118979	0	0.001719	0.120698	2.81E-05	0	7.68E-10	2.81E-05	1.6E-05	0	1.21E-06	1.72E-05	0.000178
El Dorado	2020	HHDT	0.001557	0.004224	0.002312	5.48E-05	0	0.002367	0.001611	0.004447	0.008425	92.71746	4.106493	0	96.82395	0.000178	7.55E-05	0	0.000253	0.014608	0.000647	0	0.015255	0.003824
El Dorado	2020	HHDT	4.68E-06	6.43E-06	2.08E-07	6.37E-08	0	2.71E-07	5.99E-06	1.34E-05	1.96E-05	0.234606	0.024492	0	0.259098	0.000175	9.54E-05	0	0.000271	4.78E-05	4.99E-06	0	5.28E-05	2.5E-06
El Dorado	2020	LDA	0.004487	0.010413	0.002472	0	0.000562	0.003034	0.012545	0.01282	0.028399	478.1459	0	17.35123	495.4971	0.006664	0	0.022534	0.029199	0.0111	0	0.008463	0.019562	0.028656
El Dorado	2020	LDA	3.42E-05	0.000316	0.000269	0	0	0.000269	9.55E-05	9.76E-05	0.000462	2.903994	0	0	2.903994	2.07E-05	0	0	2.07E-05	0.000458	0	0	0.000458	0.000447
El Dorado	2020	LDA	6.39E-05	0.000148	0	0	0	0	0.000335	0.000183	0.000517	0	0	0	0	0	0	0	0	0	0	0	0	0
El Dorado	2020	LDA	4.1E-05	0.000132	2.76E-05	0	8.05E-06	3.57E-05	0.000235	0.000117	0.000387	4.604872	0	0.204042	4.808914	1.52E-05	0	0.000132	0.000147	2E-05	0	6.24E-05	8.24E-05	4.86E-05
El Dorado	2020	LDT1	0.000938	0.002338	0.000739	0	0.00021	0.00095	0.002108	0.002679	0.005736	93.82794	0	4.474771	98.30271	0.003062	0	0.007998	0.01106	0.004205	0	0.002139	0.006344	0.01468
El Dorado	2020	LDT1	2.33E-07	1.38E-05	1.41E-05	0	0	1.41E-05	4.71E-07	6.64E-07	1.52E-05	0.024203	0	0	0.024203	7.72E-07	0	0	7.72E-07	3.81E-06	0	0	3.81E-06	1.66E-05
El Dorado	2020	LDT1	3.11E-07	7.16E-07	0	0	0	0	1.62E-06	8.9E-07	2.51E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
El Dorado	2020	LDT1	2.24E-08	7.08E-08	1.4E-08	0	3.99E-09	1.8E-08	1.27E-07	6.4E-08	2.09E-07	0.002448	0	0.000115	0.002563	8.08E-09	0	6.79E-08	7.6E-08	1.08E-08	0	3.19E-08	4.27E-08	2.57E-08
El Dorado	2020	LDT2	0.003794	0.007995	0.001761	0	0.000389	0.00215	0.008895	0.010841	0.021886	421.3178	0	15.64838	436.9661	0.004832	0	0.018666	0.023498	0.009739	0	0.007257	0.016996	0.020716
El Dorado	2020	LDT2	1.55E-05	6.06E-05	3.73E-05	0	0	3.73E-05	3.77E-05	4.43E-05	0.000119	1.563195	0	0	1.563195	4.16E-06	0	0	4.16E-06	0.000246	0	0	0.000246	8.96E-05
El Dorado	2020	LDT2	2.03E-07	4.7E-07	0	0	0	0	1.07E-06	5.8E-07	1.65E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
El Dorado	2020	LDT2	3.4E-06	1.11E-05	2.41E-06	0	6.85E-07	3.1E-06	1.93E-05	9.7E-06	3.21E-05	0.37258	0	0.018741	0.391321	1.23E-06	0	1.03E-05	1.16E-05	1.65E-06	0	4.85E-06	6.5E-06	3.92E-06
El Dorado	2020	LHDT1	0.002944	0.003463	0.000293	0	3.64E-05	0.00033	0.000863	0.008411	0.009603	105.3013	0.48909	1.508664	107.299	0.002206	0.000461	0.002537	0.005204	0.002478	1.09E-05	0.002949	0.005438	0.011514
El Dorado	2020	LHDT1	0.00457	0.015908	0.011161	0.000164	0	0.011325	0.002009	0.013058	0.026392	105.3236	0.812242	0	106.1358	0.002252	2.96E-05	0	0.002281	0.016594	0.000128	0	0.016722	0.048478
El Dorado	2020	LHDT2	0.000304	0.000341	1.82E-05	0	1.92E-06	2.02E-05	7.63E-05	0.000868	0.000965	10.03023	0.045076	0.125806	10.20111	0.000109	3.82E-05	0.000185	0.000333	0.000145	9.41E-07	0.000247	0.000392	0.000544
El Dorado	2020	LHDT2	0.001928	0.004829	0.002792	5.03E-05	0	0.002842	0.000726	0.005509	0.009077	47.37064	0.406075	0	47.77672	0.000587	9.39E-06	0	0.000596	0.007463	6.4E-05	0	0.007527	0.012636
El Dorado	2020	MCY	0.000104	0.000223	5.08E-05	0	4.95E-05	0.0001	9.9E-05	0.000297	0.000496	4.910912	0	0.709354	5.620265	0.005791	0	0.002922	0.008713	0.001207	0	0.000132	0.001339	0.041958
El Dorado	2020	MDV	0.002475	0.005323	0.001215	0	0.000338	0.001553	0.005676	0.007071	0.014299	326.6484	0	13.57092	340.2193	0.004942	0	0.018177	0.023118	0.008637	0	0.005993	0.01463	0.024342
El Dorado	2020	MDV	7.09E-05	0.000246	0.000138	0	0	0.000138	0.000172	0.000203	0.000513	9.080124	0	0	9.080124	1.43E-05	0	0	1.43E-05	0.001431	0	0	0.001431	0.000307
El Dorado	2020	MDV	3.07E-07	7.1E-07	0	0	0	0	1.61E-06	8.77E-07	2.49E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
El Dorado	2020	MDV	4.05E-06	1.35E-05	3.16E-06	0	9E-07	4.06E-06	2.31E-05	1.16E-05	3.87E-05	0.45375	0	0.028682	0.482431	1.5E-06	0	1.26E-05	1.41E-05	2E-06	0	5.94E-06	7.94E-06	4.77E-06
El Dorado	2020	MH	0.000146	0.00019	1.79E-05	0	5.96E-08	1.8E-05	0.000111	0.000416	0.000545	18.03292	0	0.003981	18.0369	0.000187	0	4.93E-06	0.000192	0.000279	0	5.07E-06	0.000284	0.000873
El Dorado	2020	MH	7E-05	0.000635	0.000571	0	0	0.000571	7.14E-05	0.0002	0.000843	4.820509	0	0	4.820509	2.82E-05	0	0	2.82E-05	0.000759	0	0	0.000759	0.000607
El Dorado	2020	MHDT	7.63E-05	0.000104	1.09E-05	0	3.51E-06	1.44E-05	5.8E-05	0.000218	0.00029	9.071364	0.090127	0.168277	9.329769	0.000234	3.57E-05	0.000169	0.000439	0.000246	8.77E-07	8.99E-05	0.000337	0.00129
El Dorado	2020	MHDT	0.001291	0.004735	0.003202	0.000141	0	0.003344	0.00098	0.003687	0.008011	95.42496	4.622263	0	100.0472	0.000317	3.17E-05	0	0.000348	0.015034	0.000728	0	0.015762	0.00682
El Dorado	2020	OBUS	2.64E-05	3.35E-05	1.82E-06	0	3.83E-07	2.21E-06	2.02E-05	7.55E-05	9.79E-05	3.104611	0.020471	0.035764	3.160846	4.29E-05	9.51E-06	4.09E-05	9.33E-05	6.67E-05	2.39E-07	3.04E-05	9.73E-05	0.00022
El Dorado	2020	OBUS	8.93E-05	0.000591	0.000504	5.2E-06	0	0.00051	5.58E-05	0.000255	0.000821	6.231124	0.143356	0	6.37448	5.5E-05	2.71E-06	0	5.77E-05	0.000982	2.26E-05	0	0.001004	0.001185
El Dorado	2020	OBUS	1.02E-06	1.26E-06	4.8E-08	4.61E-09	0	5.26E-08	7.61E-07	2.93E-06	3.74E-06	0.06913	0.001599	0	0.070729	4.75E-05	5.81E-06	0	5.33E-05	1.41E-05	3.26E-07	0	1.44E-05	6.78E-07
El Dorado	2020	SBUS	1.27E-05	1.69E-05	2.65E-06	0	1.29E-07	2.78E-06	6.46E-06	3.63E-05	4.55E-05	0.683216	0.061212	0.007108	0.751536	4.08E-05	4.92E-05	1E-05	0.0001	6.5E-05	1.44E-06	4.5E-06	7.09E-05	0.000206
El Dorado	2020	SBUS	6.55E-05	0.000252	0.000173	8.84E-06	0	0.000182	5E-05	0.000187	0.000419	4.871532	0.427965	0	5.299498	1.74E-05	1.73E-06	0	1.91E-05	0.000768	6.74E-05	0	0.000835	0.000374
El Dorado	2020	UBUS	4.09E-05	4.53E-05	1.34E-06	0	5.38E-08	1.4E-06	1.27E-05	0.000117	0.000131	1.936479	0	0.006275	1.942754	4.2E-06	0	6.5E-06	1.07E-05	1.82E-05	0	4.35E-06	2.25E-05	1.36E-05
El Dorado	2020	UBUS	0.00012	0.000159	1.9E-05	0	0	1.9E-05	8.25E-05	0.000344	0.000446	3.809678	0	0	3.809678	8.06E-06	0	0	8.06E-06	0.0006	0	0	0.0006	0.000174

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: El Dorado
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category																	Fuel									
			ROG_IDLE	ROG_STR	ROG_TOT	ROG_DIU	ROG_HOT	ROG_RUN	ROG_TOT	TOG_RUN	TOG_IDLE	TOG_STR	TOG_TOT	TOG_DIU	TOG_HOT	TOG_RUN	TOG_TOT	CO_RUNE	CO_TOTE		SOx_RUN	SOx_IDLE	SOx_STRE	SOx_TOTE	NH3_RUN	Consumption		
			EX	EX	RN	SOAK	LOSS	AL	EX	X	EX	EX	RN	SOAK	LOSS	AL	X	CO_IDLEX	CO_STREX	X	EX	X	X	X	EX			
El Dorado	2020	HHDT	0	4.18E-09	0.000178	1.18E-05	5.4E-06	3.09E-05	0.000226	0.00026	0	4.57E-09	0.00026	1.18E-05	5.4E-06	3.09E-05	0.000308	0.006169	0	6.79E-05	0.006236	1.18E-06	0	1.7E-08	1.19E-06	1.68E-06	0.012727	
El Dorado	2020	HHDT	0.001626	0	0.005451	0	0	0	0.005451	0.004354	0.001851	0	0.006205	0	0	0	0.006205	0.014121	0.019048	0	0.033169	0.000878	3.89E-05	0	0.000917	0.008182	8.649245	
El Dorado	2020	HHDT	1.36E-06	0	3.87E-06	0	0	0	3.87E-06	0.000179	9.74E-05	0	0.000276	0	0	0	0.000276	0.001707	0.000103	0	0.00181	0	0	0	0.000176	0.029948		
El Dorado	2020	LDA	0	0.113703	0.142359	0.086772	0.025179	0.067629	0.321939	0.041745	0	0.124489	0.166234	0.086772	0.025179	0.067629	0.345814	1.822113	0	1.070017	2.89213	0.004727	0	0.000172	0.004898	0.048412	52.24955	
El Dorado	2020	LDA	0	0	0.000447	0	0	0	0.000447	0.000508	0	0	0.000508	0	0	0	0.000508	0.005045	0	0	0.005045	2.75E-05	0	0	2.75E-05	3.7E-05	0.259413	
El Dorado	2020	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2020	LDA	0	0.000544	0.000592	0.000357	0.000115	0.000105	0.00117	7.09E-05	0	0.000595	0.000666	0.000357	0.000115	0.000105	0.001243	0.007551	0	0.004224	0.011775	4.55E-05	0	2.02E-06	4.75E-05	0.000561	0.507094	
El Dorado	2020	LDT1	0	0.04677	0.06145	0.04475	0.012046	0.039233	0.157478	0.021402	0	0.051207	0.072609	0.04475	0.012046	0.039233	0.168637	0.670394	0	0.467251	1.137646	0.000928	0	4.42E-05	0.000972	0.009702	10.3659	
El Dorado	2020	LDT1	0	0	1.66E-05	0	0	0	1.66E-05	1.89E-05	0	0	1.89E-05	0	0	0	1.89E-05	0.000105	0	0	0.000105	2.29E-07	0	0	2.29E-07	1.83E-07	0.002162	
El Dorado	2020	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2020	LDT1	0	2.78E-07	3.04E-07	1.36E-07	4.02E-08	4.27E-08	5.23E-07	3.75E-08	0	3.05E-07	3.42E-07	1.36E-07	4.02E-08	4.27E-08	5.61E-07	4.01E-06	0	2.16E-06	6.17E-06	2.42E-08	0	1.14E-09	2.53E-08	3.52E-07	0.00027	
El Dorado	2020	LDT2	0	0.095325	0.116042	0.056245	0.015821	0.043782	0.231889	0.030212	0	0.104368	0.134581	0.056245	0.015821	0.043782	0.250428	1.379732	0	0.887385	2.267116	0.004165	0	0.000155	0.00432	0.035767	46.07753	
El Dorado	2020	LDT2	0	0	8.96E-05	0	0	0	8.96E-05	0.000102	0	0	0.000102	0	0	0	0.000102	0.000755	0	0	0.000755	1.48E-05	0	0	1.48E-05	1.46E-05	0.13964	
El Dorado	2020	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2020	LDT2	0	4.23E-05	4.62E-05	2.12E-05	6.31E-06	6.59E-06	8.04E-05	5.71E-06	0	4.63E-05	5.2E-05	2.12E-05	6.31E-06	6.59E-06	8.62E-05	0.00061	0	0.000329	0.000939	3.68E-06	0	1.85E-07	3.87E-06	5.3E-05	0.041264	
El Dorado	2020	LHDT1	0.001841	0.013668	0.027022	0.015699	0.004211	0.024169	0.071101	0.016732	0.002685	0.014963	0.034381	0.015699	0.004211	0.024169	0.078459	0.255572	0.014687	0.190999	0.461258	0.001041	4.84E-06	1.49E-05	0.001061	0.004829	11.31455	
El Dorado	2020	LHDT1	0.000638	0	0.049116	0	0	0	0.049116	0.055189	0.000726	0	0.055915	0	0	0	0.055915	0.148526	0.005288	0	0.153813	0.000998	7.7E-06	0	0.001006	0.018451	9.48107	
El Dorado	2020	LHDT2	0.000146	0.000961	0.001651	0.000914	0.000239	0.001343	0.004146	0.000794	0.000214	0.001052	0.002059	0.000914	0.000239	0.001343	0.004555	0.014112	0.00119	0.015552	0.030854	9.92E-05	4.46E-07	1.24E-06	0.000101	0.000429	1.075695	
El Dorado	2020	LHDT2	0.000202	0	0.012838	0	0	0	0.012838	0.014385	0.00023	0	0.014615	0	0	0	0.014615	0.034336	0.001676	0	0.036012	0.000449	3.85E-06	0	0.000453	0.009405	4.267875	
El Dorado	2020	MCY	0	0.023016	0.064974	0.028446	0.038565	0.043691	0.175677	0.048843	0	0.025	0.073843	0.028446	0.038565	0.043691	0.184546	0.461965	0	0.10808	0.570044	4.85E-05	0	7.01E-06	5.56E-05	0.000204	0.59265	
El Dorado	2020	MDV	0	0.103166	0.127508	0.053504	0.01525	0.043255	0.239516	0.034377	0	0.112935	0.147313	0.053504	0.01525	0.043255	0.259321	1.182399	0	0.758576	1.940974	0.003229	0	0.000134	0.003363	0.022894	35.8757	
El Dorado	2020	MDV	0	0	0.000307	0	0	0	0.000307	0.00035	0	0	0.00035	0	0	0	0.00035	0.004816	0	0	0.004816	8.6E-05	0	0	8.6E-05	6.68E-05	0.811124	
El Dorado	2020	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2020	MDV	0	5.15E-05	5.63E-05	2.9E-05	8.27E-06	8.92E-06	0.000102	6.97E-06	0	5.64E-05	6.34E-05	2.9E-05	8.27E-06	8.92E-06	0.00011	0.000743	0	0.000401	0.001144	4.49E-06	0	2.84E-07	4.77E-06	6.51E-05	0.050872	
El Dorado	2020	MH	0	2.17E-05	0.000895	0.00565	0.001564	3.65E-05	0.008146	0.001262	0	2.38E-05	0.001285	0.00565	0.001564	3.65E-05	0.008536	0.025425	0	0.000484	0.025909	0.000178	0	3.94E-08	0.000178	0.000412	1.901968	
El Dorado	2020	MH	0	0	0.000607	0	0	0	0.000607	0.000691	0	0	0.000691	0	0	0	0.000691	0.002071	0	0	0.002071	4.57E-05	0	0	4.57E-05	0.000552	0.430614	
El Dorado	2020	MHDT	0.00016	0.001047	0.002497	0.000818	0.000233	0.001918	0.005466	0.001883	0.000233	0.001146	0.003262	0.000818	0.000233	0.001918	0.006231	0.030436	0.002404	0.026382	0.059221	8.97E-05	8.91E-07	1.66E-06	9.22E-05	0.000214	0.983812	
El Dorado	2020	MHDT	0.000681	0	0.007502	0	0	0	0.007502	0.007764	0.000776	0	0.00854	0	0	0	0.00854	0.020553	0.013697	0	0.03425	0.000904	4.38E-05	0	0.000947	0.014629	8.937178	
El Dorado	2020	OBUS	3.88E-05	0.00023	0.000488	0.000166	4.66E-05	0.000197	0.000897	0.00032	5.67E-05	0.000252	0.000629	0.000166	4.66E-05	0.000197	0.001038	0.005214	0.000301	0.005281	0.010796	3.07E-05	2.02E-07	3.54E-07	3.12E-05	7.54E-05	0.333307	
El Dorado	2020	OBUS	5.83E-05	0	0.001243	0	0	0	0.001243	0.001349	6.64E-05	0	0.001415	0	0	0	0.001415	0.003182	0.000666	0	0.003848	5.9E-05	1.36E-06	0	6.04E-05	0.000828	0.56943	
El Dorado	2020	OBUS	8.31E-08	0	7.61E-07	0	0	0	7.61E-07	4.84E-05	5.93E-06	0	5.44E-05	0	0	0	5.44E-05	0.000199	7.72E-06	0	0.000207	0	0	0	0	0	6.73E-05	0.008175
El Dorado	2020	SBUS	0.000232	6.3E-05	0.000501	0.000134	3.67E-05	0.000119	0.00079	0.0003	0.000338	6.9E-05	0.000708	0.000134	3.67E-05	0.000119	0.000997	0.004963	0.001814	0.001935	0.008712	6.75E-06	6.05E-07	7.03E-08	7.43E-06	3.63E-05	0.079249	
El Dorado	2020	SBUS	3.72E-05	0	0.000411	0	0	0	0.000411	0.000426	4.23E-05	0	0.000468	0	0	0	0.000468	0.001093	0.000666	0	0.001759	4.61E-05	4.05E-06	0	5.02E-05	0.000441	0.473402	
El Dorado	2020	UBUS	0	2.71E-05	4.06E-05	6.09E-06	1.61E-06	4.72E-06	5.31E-05	1.98E-05	0	2.96E-05	4.94E-05	6.09E-06	1.61E-06	4.72E-06	6.19E-05	0.00026	0	0.00056	0.00082	1.91E-05	0	6.2E-08	1.92E-05	4.78E-05	0.204861	
El Dorado	2020	UBUS	0	0	0.000174	0	0	0	0.000174	0.000198	0	0	0.000198	0	0	0	0.000198	0.000453	0	0	0.000453	3.61E-05	0	0	3.61E-05	0.000455	0.340317	

Source: EMFAC2021 (v1.0.2) Emission

Region Type: County

Units: tons/mile

Region: El Dorado

Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2020

The emission rates are calculated as follows:

Season: Annual

EF_PM_D = PM_BW+PM_TW

Vehicle Classification: EMFAC2007

EF_PM = PM_TOTEX/Total VMT

Units: miles/day for CVMT and EVI

EF_Gas = Gas_TOTEX/Total VMT

EF_VOC = VOC_TOTLE/Total VMT

Diesel Vehicle Fleet

EMFAC Fleet

Region	Calendar Year	Vehicle Category	PM10_VM	PM10_VMT_Ex	PM2.5_VM	PM2.5_VM	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D
			T_D		T_D	T_Ex																		
El Dorado	2020	HHDT	1.51E-07	7.22E-09	5.08E-08	6.64E-09	1.75E-05	5.76E-06	1.59E-04	3.03E-08	3.07E-03	7.14E-07	4.37E-07	1.00788E-05	1.77E-10	5.80E-11	1.60E-09	3.06E-13	3.09E-08	7.20E-12	4.41E-12	1.53E-12	7.28E-14	5.12E-13
El Dorado	2020	HHDT	1.40E-07	5.46E-08	4.52E-08	5.23E-08	6.16E-06	1.26E-07	7.66E-07	2.12E-08	2.24E-03	5.85E-09	3.52E-07	0.011098053	6.84E-08	1.40E-09	8.50E-09	2.35E-10	2.48E-05	6.49E-11	3.91E-09	1.552E-09	6.06E-10	5.02E-10
El Dorado	2020	HHDT	1.28E-07	1.80E-09	4.09E-08	1.65E-09	8.89E-07	2.56E-08	1.20E-05	0.00E+00	1.72E-03	1.79E-06	3.50E-07	3.86974E-05	3.44E-11	9.91E-13	4.64E-10	0.00E+00	6.64E-08	6.94E-11	1.35E-11	4.963E-12	6.95E-14	1.584E-12
El Dorado	2020	LDA	1.78E-08	2.13E-09	5.36E-09	1.96E-09	1.46E-07	2.26E-07	2.03E-06	3.44E-09	3.48E-04	2.05E-08	1.38E-08	0.364516137	5.33E-08	8.25E-08	7.41E-07	1.26E-09	1.27E-04	7.48E-09	5.01E-09	6.499E-09	7.77E-10	1.953E-09
El Dorado	2020	LDA	1.78E-08	2.49E-08	5.36E-09	2.38E-08	4.57E-07	4.12E-08	4.66E-07	2.54E-09	2.68E-04	1.91E-09	4.22E-08	0.002775425	1.27E-09	1.14E-10	1.29E-09	7.05E-12	7.44E-07	5.31E-12	1.17E-10	4.949E-11	6.90E-11	1.487E-11
El Dorado	2020	LDA	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.009724671	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.325E-10	0.00E+00	3.781E-11
El Dorado	2020	LDA	1.32E-08	1.34E-09	3.75E-09	1.23E-09	1.74E-08	4.40E-08	4.43E-07	1.79E-09	1.81E-04	5.54E-09	3.10E-09	0.006814424	1.19E-10	3.00E-10	3.02E-09	1.22E-11	1.23E-06	3.77E-11	2.11E-11	9.013E-11	9.15E-12	2.554E-11
El Dorado	2020	LDT1	2.00E-08	3.97E-09	6.13E-09	3.65E-09	3.96E-07	6.59E-07	4.76E-06	4.07E-09	4.11E-04	4.63E-08	2.65E-08	0.061252234	2.43E-08	4.04E-08	2.91E-07	2.49E-10	2.52E-05	2.83E-09	1.63E-09	1.226E-09	2.43E-10	3.753E-10
El Dorado	2020	LDT1	2.12E-08	2.63E-07	6.55E-09	2.52E-07	1.62E-06	3.11E-07	1.97E-06	4.29E-09	4.53E-04	1.44E-08	7.13E-08	1.36994E-05	2.22E-11	4.26E-12	2.70E-11	5.88E-14	6.20E-09	1.98E-13	9.77E-13	2.911E-13	3.61E-12	8.979E-14
El Dorado	2020	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.70357E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.427E-13	0.00E+00	1.835E-13
El Dorado	2020	LDT1	1.32E-08	1.25E-09	3.76E-09	1.15E-09	1.65E-08	3.62E-08	4.28E-07	1.76E-09	1.78E-04	5.26E-09	2.96E-09	3.69867E-06	6.09E-14	1.34E-13	1.58E-12	6.49E-15	6.57E-10	1.95E-14	1.09E-14	4.9E-14	4.61E-15	1.389E-14
El Dorado	2020	LDT2	1.96E-08	2.13E-09	5.97E-09	1.96E-09	2.17E-07	2.30E-07	2.25E-06	4.28E-09	4.33E-04	2.33E-08	1.69E-08	0.258444675	5.61E-08	5.94E-08	5.81E-07	1.11E-09	1.12E-04	6.02E-09	4.35E-09	5.057E-09	5.51E-10	1.542E-09
El Dorado	2020	LDT2	1.92E-08	8.72E-09	5.83E-09	8.34E-09	7.56E-08	2.10E-08	1.77E-07	3.47E-09	3.66E-04	9.73E-10	5.76E-08	0.001095248	8.28E-11	2.29E-11	1.93E-10	3.80E-12	4.01E-07	1.07E-12	6.31E-11	2.1E-11	9.55E-12	6.386E-12
El Dorado	2020	LDT2	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.09766E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.218E-13	0.00E+00	1.203E-13
El Dorado	2020	LDT2	1.32E-08	1.41E-09	3.75E-09	1.30E-09	1.65E-08	3.67E-08	4.29E-07	1.77E-09	1.79E-04	5.28E-09	2.97E-09	0.000561196	9.27E-12	2.06E-11	2.41E-10	9.91E-13	1.00E-07	2.96E-12	1.67E-12	7.435E-12	7.94E-13	2.107E-12
El Dorado	2020	LHDT1	9.48E-08	3.37E-09	3.23E-08	3.10E-09	9.36E-07	7.27E-07	4.72E-06	1.08E-08	1.10E-03	5.32E-08	5.56E-08	0.025064318	2.35E-08	1.82E-08	1.18E-07	2.72E-10	2.75E-05	1.33E-09	1.39E-09	2.376E-09	8.45E-11	8.095E-10
El Dorado	2020	LHDT1	9.92E-08	7.46E-08	3.34E-08	7.13E-08	3.96E-06	3.23E-07	1.01E-06	6.62E-09	6.99E-04	1.50E-08	1.10E-07	0.038913527	1.54E-07	1.26E-08	3.94E-08	2.58E-10	2.72E-05	5.85E-10	4.28E-09	3.861E-09	2.90E-09	1.3E-09
El Dorado	2020	LHDT2	1.09E-07	2.33E-09	3.73E-08	2.14E-09	6.95E-07	4.79E-07	3.56E-06	1.17E-08	1.18E-03	3.85E-08	4.53E-08	0.002217808	1.54E-09	1.06E-09	7.91E-09	2.58E-11	2.61E-06	8.53E-11	1.01E-10	2.42E-10	5.16E-12	8.275E-11
El Dorado	2020	LHDT2	1.14E-07	5.17E-08	3.84E-08	4.95E-08	2.32E-06	2.34E-07	6.56E-07	8.24E-09	8.70E-04	1.09E-08	1.37E-07	0.014071378	3.27E-08	3.29E-09	9.23E-09	1.16E-10	1.22E-05	1.53E-10	1.93E-09	1.598E-09	7.28E-10	5.406E-10
El Dorado	2020	MCY	1.76E-08	4.47E-09	5.73E-09	4.22E-09	9.74E-07	7.82E-06	2.54E-05	2.47E-09	2.50E-04	3.88E-07	5.96E-08	0.00575437	5.60E-09	4.50E-08	1.46E-07	1.42E-11	1.44E-06	2.23E-09	3.43E-10	1.015E-10	2.57E-11	3.298E-11
El Dorado	2020	MDV	1.98E-08	2.41E-09	6.05E-09	2.22E-09	3.44E-07	3.72E-07	3.02E-06	5.23E-09	5.29E-04	3.59E-08	2.27E-08	0.164913196	5.67E-08	6.14E-08	4.97E-07	8.62E-10	8.72E-05	5.92E-09	3.75E-09	3.266E-09	3.98E-10	9.977E-10
El Dorado	2020	MDV	1.92E-08	7.05E-09	5.83E-09	6.75E-09	6.88E-08	1.57E-08	2.46E-07	4.40E-09	4.65E-04	7.30E-10	7.32E-08	0.005006524	3.45E-10	7.87E-11	1.23E-09	2.20E-11	2.33E-06	3.65E-12	3.67E-10	9.606E-11	3.53E-11	2.921E-11
El Dorado	2020	MDV	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.6897E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.382E-13	0.00E+00	1.82E-13
El Dorado	2020	MDV	1.32E-08	1.55E-09	3.75E-09	1.43E-09	1.69E-08	3.92E-08	4.37E-07	1.82E-09	1.84E-04	5.38E-09	3.04E-09	0.000670215	1.13E-11	2.63E-11	2.93E-10	1.22E-12	1.24E-07	3.61E-12	2.03E-12	8.874E-12	1.04E-12	2.515E-12
El Dorado	2020	MH	6.29E-08	2.14E-09	2.07E-08	1.97E-09	5.83E-07	9.72E-07	3.09E-06	2.13E-08	2.15E-03	2.29E-08	3.39E-08	0.002147463	1.25E-09	2.09E-09	6.64E-09	4.57E-11	4.62E-06	4.92E-11	7.28E-11	1.35E-10	4.60E-12	4.442E-11
El Dorado	2020	MH	6.71E-08	1.41E-07	2.17E-08	1.35E-07	5.54E-06	1.50E-07	5.12E-07	1.13E-08	1.19E-03	6.97E-09	1.88E-07	0.001037006	5.74E-09	1.56E-10	5.31E-10	1.17E-11	1.24E-06	7.22E-12	1.95E-10	6.955E-11	1.46E-10	2.251E-11
El Dorado	2020	MHDT	6.29E-08	3.28E-09	2.07E-08	3.02E-09	1.75E-06	1.25E-06	1.35E-05	2.10E-08	2.13E-03	1.00E-07	7.69E-08	0.001124178	1.96E-09	1.40E-09	1.52E-08	2.36E-11	2.39E-06	1.12E-10	8.64E-11	7.069E-11	3.69E-12	2.326E-11
El Dorado	2020	MHDT	6.30E-08	4.51E-08	2.07E-08	4.32E-08	3.40E-06	1.01E-07	4.62E-07	1.28E-08	1.35E-03	4.70E-09	2.13E-07	0.01898952	6.46E-08	1.92E-09	8.78E-09	2.43E-10	2.56E-05	8.93E-11	4.04E-09	1.196E-09	8.57E-10	3.935E-10
El Dorado	2020	OBUS	6.27E-08	1.45E-09	2.06E-08	1.33E-09	1.35E-06	5.88E-07	7.07E-06	2.05E-08	2.07E-03	6.12E-08	6.38E-08	0.000391048	5.29E-10	2.30E-10	2.77E-09	8.01E-12	8.10E-07	2.39E-11	2.49E-11	2.452E-11	5.65E-13	8.065E-12
El Dorado	2020	OBUS	7.36E-08	1.21E-07	2.45E-08	1.15E-07	4.33E-06	2.94E-07	9.11E-07	1.43E-08	1.51E-03	1.37E-08	2.38E-07	0.001081761	4.68E-09	3.19E-10	9.86E-10	1.55E-11	1.63E-06	1.48E-11	2.57E-10	7.967E-11	1.31E-10	2.645E-11
El Dorado	2020	OBUS	6.41E-08	9.14E-10	2.11E-08	8.41E-10	3.32E-07	1.32E-08	3.60E-06	0.00E+00	1.23E-03	9.25E-07	2.50E-07	1.47501E-05	4.89E-12	1.95E-13	5.31E-11	0.00E+00	1.81E-08	1.37E-11	3.69E-12	9.453E-13	1.35E-14	3.113E-13
El Dorado	2020	SBUS	5.83E-08	3.79E-09	1.95E-08	3.49E-09	2.22E-06	1.08E-06	1.19E-05	1.01E-08	1.03E-03	1.37E-07	9.68E-08	0.000187662	4.17E-10	2.02E-10	2.23E-09	1.90E-12	1.93E-07	2.56E-11	1.82E-11	1.095E-11	7.12E-13	3.666E-12
El Dorado	2020	SBUS	6.27E-08	4.81E-08	2.06E-08	4.61E-08	9.41E-06	1.09E-07	4.65E-07	1.33E-08	1.40E-03	5.05E-09	2.21E-07	0.000968218	9.11E-09	1.05E-10	4.51E-10	1.29E-11						

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: El Dorado

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	Weighted Energy Consumption Rates				
			5.299E-09	9.363E-05			
			7.237E-09	0.0004552	8.80E-03	4.13E-02	6.23E-03
			PM2.5_E	CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
El Dorado	2020	HHDT	6.69E-14	2.941E-08	0	0.32356338	0
El Dorado	2020	HHDT	5.80E-10	2.356E-05	0.19969208	0	0
El Dorado	2020	HHDT	6.39E-14	6.546E-08	0	0	0
El Dorado	2020	LDA	7.15E-10	0.0001167	0	0.03672782	0
El Dorado	2020	LDA	6.60E-11	7.068E-07	0.0239492	0	0
El Dorado	2020	LDA	0.00E+00	0	0	0	0.3860825
El Dorado	2020	LDA	8.41E-12	1.124E-06	0	0	0.3020298
El Dorado	2020	LDT1	2.24E-10	2.335E-05	0	0.04336251	0
El Dorado	2020	LDT1	3.45E-12	5.895E-09	0.04043853	0	0
El Dorado	2020	LDT1	0.00E+00	0	0	0	0.3860825
El Dorado	2020	LDT1	4.24E-15	5.992E-10	0	0	0.3020298
El Dorado	2020	LDT2	5.07E-10	0.0001029	0	0.04568262	0
El Dorado	2020	LDT2	9.14E-12	3.804E-07	0.03266823	0	0
El Dorado	2020	LDT2	0.00E+00	0	0	0	0.3860825
El Dorado	2020	LDT2	7.30E-13	9.148E-08	0	0	0.3020298
El Dorado	2020	LHDT1	7.77E-11	2.535E-05	0	0.11566732	0
El Dorado	2020	LHDT1	2.78E-09	2.584E-05	0.06242897	0	0
El Dorado	2020	LHDT2	4.75E-12	2.4E-06	0	0.12427803	0
El Dorado	2020	LHDT2	6.97E-10	1.163E-05	0.07771494	0	0
El Dorado	2020	MCY	2.43E-11	1.45E-06	0	0.02638942	0
El Dorado	2020	MDV	3.66E-10	8.023E-05	0	0.05574096	0
El Dorado	2020	MDV	3.38E-11	2.21E-06	0.04151264	0	0
El Dorado	2020	MDV	0.00E+00	0	0	0	0.3860825
El Dorado	2020	MDV	9.56E-13	1.128E-07	0	0	0.3020298
El Dorado	2020	MH	4.23E-12	4.213E-06	0	0.22693794	0
El Dorado	2020	MH	1.40E-10	1.173E-06	0.10639875	0	0
El Dorado	2020	MHDT	3.39E-12	2.195E-06	0	0.22423667	0
El Dorado	2020	MHDT	8.20E-10	2.435E-05	0.12059127	0	0
El Dorado	2020	OBUS	5.20E-13	7.42E-07	0	0.21839575	0
El Dorado	2020	OBUS	1.25E-10	1.552E-06	0.13487714	0	0
El Dorado	2020	OBUS	1.24E-14	1.775E-08	0	0	0
El Dorado	2020	SBUS	6.55E-13	1.802E-07	0	0.10820432	0
El Dorado	2020	SBUS	4.46E-11	1.29E-06	0.12528139	0	0
El Dorado	2020	UBUS	3.29E-13	4.532E-07	0	0.21276671	0
El Dorado	2020	UBUS	4.67E-12	9.272E-07	0.11991032	0	0

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: El Dorado
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

				153044.77		5104079.002				765752.1185													
		Mod																					
	Calendar	Vehicle		Spee						Energy	NOx_RUN	NOx_IDLE	NOx_STR	NOx_TOT	PM2.5_R	PM2.5_ID	PM2.5_ST	PM2.5_T	PM2.5_P				
Region	Year	Category	Year	d	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Consumption	EX	X	EX	EX	UNEX	LEX	REX	OTEX	MTW			
El Dorado	2050	HHDT	Aggre	Aggre	Gasol	0.2201913	15.55284452	15.55284452	0	4.405587041	0	4.61E-05	0	7.38E-06	5.34E-05	2.45E-08	0	2.32E-09	2.69E-08	8.57E-08			
El Dorado	2050	HHDT	Aggre	Aggre	Diese	474.22425	42905.15708	42905.15708	0	5247.566681	0	0.060511	0.019487	0.015617	0.095615	0.001038	8.35E-06	0	0.001047	0.000407			
El Dorado	2050	HHDT	Aggre	Aggre	Electr	327.05085	19837.33894	0	19837.33894	2749.762807	37247.85106	0	0	0	0	0	0	0	0	0.000177			
El Dorado	2050	HHDT	Aggre	Aggre	Natur	2.294261	112.9165783	112.9165783	0	21.61193825	0	3.28E-05	2.89E-05	0	6.17E-05	2.33E-07	1.04E-07	0	3.37E-07	1.12E-06			
El Dorado	2050	LDA	Aggre	Aggre	Gasol	53287.846	1974509.045	1974509.045	0	247388.961	0	0.045069	0	0.04569	0.090759	0.001002	0	0.000196	0.001198	0.004353			
El Dorado	2050	LDA	Aggre	Aggre	Diese	37.461366	1174.721005	1174.721005	0	162.5586549	0	1.77E-05	0	0	1.77E-05	1.36E-06	0	0	1.36E-06	2.59E-06			
El Dorado	2050	LDA	Aggre	Aggre	Electr	7425.6561	271733.6101	0	271733.6101	34691.73445	104911.6009	0	0	0	0	0	0	0	0	0.000599			
El Dorado	2050	LDA	Aggre	Aggre	Plug-i	2515.756	93612.78728	38124.84085	55487.94643	10402.65105	16759.01363	0.000305	0	0.001365	0.00167	1.94E-05	0	8.63E-06	2.8E-05	0.000206			
El Dorado	2050	LDT1	Aggre	Aggre	Gasol	4373.2278	135683.1373	135683.1373	0	19153.53965	0	0.003341	0	0.004047	0.007388	7.58E-05	0	1.82E-05	9.4E-05	0.000299			
El Dorado	2050	LDT1	Aggre	Aggre	Diese	0.0472065	1.606635987	1.606635987	0	0.214556796	0	5.35E-08	0	5.35E-08	7.59E-09	0	0	7.59E-09	3.54E-09				
El Dorado	2050	LDT1	Aggre	Aggre	Electr	125.0418	4369.150498	0	4369.150498	575.8501016	1686.852698	0	0	0	0	0	0	0	0	9.63E-06			
El Dorado	2050	LDT1	Aggre	Aggre	Plug-i	95.209166	3356.334386	1365.653364	1990.681023	393.6899034	601.2450007	1.09E-05	0	5.14E-05	6.23E-05	6.94E-07	0	3.21E-07	1.01E-06	7.4E-06			
El Dorado	2050	LDT2	Aggre	Aggre	Gasol	42504.71	1363126.363	1363126.363	0	188551.6074	0	0.036223	0	0.046506	0.082728	0.00074	0	0.000169	0.000908	0.003005			
El Dorado	2050	LDT2	Aggre	Aggre	Diese	166.25318	5258.477474	5258.477474	0	733.8014008	0	0.000176	0	0	0.000176	2.52E-05	0	0	2.52E-05	1.16E-05			
El Dorado	2050	LDT2	Aggre	Aggre	Electr	1597.733	38270.04667	0	38270.04667	7335.625953	14775.39661	0	0	0	0	0	0	0	0	8.44E-05			
El Dorado	2050	LDT2	Aggre	Aggre	Plug-i	1104.0193	37458.29443	15272.70108	22185.59335	4565.11987	6700.710429	0.000122	0	0.000596	0.000718	7.94E-06	0	3.9E-06	1.18E-05	8.26E-05			
El Dorado	2050	LHDT1	Aggre	Aggre	Gasol	2124.638	62443.0356	62443.0356	0	31653.94111	0	0.001343	5.87E-05	0.01531	0.016712	7.83E-05	0	2.99E-06	8.13E-05	0.000138			
El Dorado	2050	LHDT1	Aggre	Aggre	Diese	880.70822	25921.40868	25921.40868	0	11078.20147	0	0.008344	0.001085	0	0.009429	0.000544	2.56E-05	0	0.00057	8.57E-05			
El Dorado	2050	LHDT1	Aggre	Aggre	Electr	2042.154	75907.7753	0	75907.7753	29091.64704	49670.63806	0	0	0	0	0	0	0	0	0.000167			
El Dorado	2050	LHDT2	Aggre	Aggre	Gasol	130.04261	4165.925638	4165.925638	0	1937.441165	0	8.68E-05	2.9E-06	0.000705	0.000795	5.34E-06	0	1.91E-07	5.53E-06	9.18E-06			
El Dorado	2050	LHDT2	Aggre	Aggre	Diese	515.6452	13627.13798	13627.13798	0	6486.167952	0	0.007342	0.00077	0	0.008112	0.000401	1.49E-05	0	0.000416	4.51E-05			
El Dorado	2050	LHDT2	Aggre	Aggre	Electr	373.94839	13960.02854	0	13960.02854	4947.220607	8934.832816	0	0	0	0	0	0	0	0	3.08E-05			
El Dorado	2050	MCY	Aggre	Aggre	Gasol	3898.1756	16818.95749	16818.95749	0	7796.351114	0	0.00922	0	0.000542	0.009761	3.84E-05	0	2.69E-05	6.52E-05	1.85E-05			
El Dorado	2050	MDV	Aggre	Aggre	Gasol	23293.127	708202.7794	708202.7794	0	103131.3213	0	0.019065	0	0.026304	0.045369	0.000376	0	8.97E-05	0.000466	0.001561			
El Dorado	2050	MDV	Aggre	Aggre	Diese	298.44538	7998.938704	7998.938704	0	1264.036458	0	9.95E-05	0	0	9.95E-05	9.89E-06	0	0	9.89E-06	1.76E-05			
El Dorado	2050	MDV	Aggre	Aggre	Electr	1404.9068	33558.89314	0	33558.89314	6443.58922	12956.50252	0	0	0	0	0	0	0	0	7.4E-05			
El Dorado	2050	MDV	Aggre	Aggre	Plug-i	666.95868	21558.12178	8784.152505	12773.96927	2757.874154	3858.119445	7.01E-05	0	0.00036	0.00043	4.54E-06	0	2.37E-06	6.91E-06	4.75E-05			
El Dorado	2050	MH	Aggre	Aggre	Gasol	174.53872	1632.878167	1632.878167	0	17.4608537	0	0.000394	0	8.47E-06	0.000403	2.43E-06	0	6.45E-09	2.44E-06	5.4E-06			
El Dorado	2050	MH	Aggre	Aggre	Diese	149.33009	1109.232959	1109.232959	0	14.93300897	0	0.003186	0	0	0.003186	2.99E-05	0	0	2.99E-05	4.89E-06			
El Dorado	2050	MHDT	Aggre	Aggre	Gasol	163.68188	4706.766899	4706.766899	0	3274.947036	0	0.000405	1.06E-05	0.001687	0.002103	7.15E-06	0	1.7E-06	8.85E-06	1.56E-05			
El Dorado	2050	MHDT	Aggre	Aggre	Diese	1276.2802	51275.16445	51275.16445	0	14342.40767	0	0.01667	0.009369	0.018523	0.044562	0.000172	3.61E-06	0	0.000175	0.00017			
El Dorado	2050	MHDT	Aggre	Aggre	Electr	1501.3694	64079.49053	0	64079.49053	18064.01406	69111.72453	0	0	0	0	0	0	0	0	0.000212			
El Dorado	2050	OBUS	Aggre	Aggre	Gasol	14.917113	430.6666212	430.6666212	0	298.4615872	0	0.000127	7.59E-07	0.00011	0.000238	5.72E-07	0	9.05E-08	6.62E-07	1.42E-06			
El Dorado	2050	OBUS	Aggre	Aggre	Diese	86.952761	4670.703995	4670.703995	0	929.3669913	0	0.004501	0.000357	0.000939	0.005797	5.04E-05	2.68E-07	0	5.07E-05	1.54E-05			
El Dorado	2050	OBUS	Aggre	Aggre	Electr	12.196857	586.5562599	0	586.5562599	244.0347163	650.6575847	0	0	0	0	0	0	0	0	1.94E-06			
El Dorado	2050	OBUS	Aggre	Aggre	Natur	2.4463113	97.93151039	97.93151039	0	21.77217092	0	7.28E-06	3.97E-06	0	1.13E-05	1.78E-07	1.48E-08	0	1.93E-07	3.24E-07			
El Dorado	2050	SBUS	Aggre	Aggre	Gasol	8.3531666	329.1798273	329.1798273	0	33.41266646	0	2.79E-05	4.43E-06	1.32E-05	4.55E-05	4.27E-07	0	2.96E-08	4.57E-07	7.26E-07			
El Dorado	2050	SBUS	Aggre	Aggre	Diese	89.397976	1828.520739	1828.520739	0	1294.482689	0	0.000568	0.000523	0.000775	0.001866	5.9E-06	2.27E-07	0	6.13E-06	6.05E-06			
El Dorado	2050	SBUS	Aggre	Aggre	Electr	90.146471	2284.306952	0	2284.306952	1216.466488	2406.415928	0	0	0	0	0	0	0	0	7.19E-06			
El Dorado	2050	UBUS	Aggre	Aggre	Electr	59.161536	5680.483497	0	5680.483497	236.6461446	9902.469449	0	0	0	0	0	0	0	0	3.56E-05			

Units: miles/day for CVMT and EVMT

Calendar	Vehicle	PM2.5_P	PM2.5_T	PM10_RU	PM10_IDL	PM10_ST	PM10_TO	PM10_P	PM10_P	PM10_TO	CO2_RUN	CO2_IDLE	CO2_STRE	CO2_TOT	CH4_RUN	CH4_IDLE	CH4_STRE	CH4_TOT	N2O_RUN	N2O_IDLE	N2O_STR	N2O_TOT	ROG_RUN	ROG_IDLE	ROG_STR	
Region	Year	Category	MBW	OTAL	NEX	EX	REX	TEX	MTW	MBW	TAL	EX	X	X	EX	EX	X	X	EX	EX	X	EX	EX	X	EX	
El Dorado	2050	HHDT	5.79E-07	6.92E-07	2.67E-08	0	2.53E-09	2.92E-08	3.43E-07	1.65E-06	2.03E-06	0.03093	0	0.000202	0.031132	1.73E-06	0	3.39E-09	1.74E-06	1.91E-06	0	3.22E-07	2.23E-06	8.12E-06	0	2.01E-08
El Dorado	2050	HHDT	0.001474	0.002928	0.001085	8.72E-06	0	0.001094	0.001629	0.004212	0.006935	68.40901	3.886452	0	72.29547	2.83E-05	9.38E-05	0	0.000122	0.010778	0.000612	0	0.01139	0.000609	0.002019	0
El Dorado	2050	HHDT	0.000362	0.000539	0	0	0	0	0.000709	0.001034	0.001743	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	HHDT	3.78E-06	5.23E-06	2.53E-07	1.13E-07	0	3.66E-07	4.48E-06	1.08E-05	1.56E-05	0.14761	0.022409	0	0.17002	0.000132	6.85E-05	0	0.000201	3.01E-05	4.57E-06	0	3.47E-05	1.89E-06	9.78E-07	0
El Dorado	2050	LDA	0.006369	0.01192	0.001089	0	0.000213	0.001303	0.017412	0.018197	0.036912	490.9503	0	14.59883	505.5491	0.002176	0	0.009054	0.01123	0.007229	0	0.007093	0.014321	0.006352	0	0.034338
El Dorado	2050	LDA	3.8E-06	7.75E-06	1.42E-06	0	0	1.42E-06	1.04E-05	1.09E-05	2.26E-05	0.231909	0	0	0.231909	3.06E-07	0	0	3.06E-07	3.65E-05	0	0	3.65E-05	6.59E-06	0	0
El Dorado	2050	LDA	0.000461	0.00106	0	0	0	0	0.002396	0.001316	0.003713	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	LDA	0.00015	0.000385	2.11E-05	0	9.38E-06	3.05E-05	0.000826	0.00043	0.001286	12.34696	0	0.63791	12.98487	3.91E-05	0	0.000494	0.000533	5E-05	0	0.00022	0.00027	0.000131	0	0.002143
El Dorado	2050	LDT1	0.000526	0.000919	8.24E-05	0	1.98E-05	0.000102	0.001197	0.001502	0.002801	39.09193	0	1.333944	40.42587	0.000161	0	0.000771	0.000932	0.000512	0	0.000587	0.001099	0.000483	0	0.003075
El Dorado	2050	LDT1	6.19E-09	1.73E-08	7.93E-09	0	0	7.93E-09	1.42E-08	1.77E-08	3.98E-08	0.000591	0	0	0.000591	1.21E-09	0	0	1.21E-09	9.32E-08	0	0	9.32E-08	2.6E-08	0	0
El Dorado	2050	LDT1	7.42E-06	1.71E-05	0	0	0	0	3.85E-05	2.12E-05	5.97E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	LDT1	5.39E-06	1.38E-05	7.55E-07	0	3.49E-07	1.1E-06	2.96E-05	1.54E-05	4.61E-05	0.442728	0	0.027687	0.470415	1.4E-06	0	1.84E-05	1.98E-05	1.77E-06	0	8.18E-06	9.94E-06	4.69E-06	0	8.01E-05
El Dorado	2050	LDT2	0.005276	0.00919	0.000805	0	0.000183	0.000988	0.012021	0.015074	0.028083	408.8714	0	13.86803	422.7394	0.00206	0	0.009278	0.011339	0.005356	0	0.006608	0.011964	0.006363	0	0.037775
El Dorado	2050	LDT2	2.04E-05	5.71E-05	2.63E-05	0	0	2.63E-05	4.64E-05	5.82E-05	0.000131	1.442053	0	0	1.442053	3.97E-06	0	0	3.97E-06	0.000227	0	0	0.000227	8.55E-05	0	0
El Dorado	2050	LDT2	6.5E-05	0.000149	0	0	0	0	0.000337	0.000186	0.000523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	LDT2	6.02E-05	0.000155	8.64E-06	0	4.24E-06	1.29E-05	0.00033	0.000172	0.000515	4.9509	0	0.338118	5.289018	1.56E-05	0	0.000212	0.000227	1.96E-05	0	9.38E-05	0.000113	5.25E-05	0	0.000929
El Dorado	2050	LHDT1	0.001879	0.002098	8.52E-05	0	3.25E-06	8.84E-05	0.000551	0.005369	0.006008	51.56773	0.2525	0.834848	52.65508	7.82E-05	0.000193	0.000692	0.000964	0.000111	5.43E-06	0.001361	0.001477	0.000267	0.000674	0.003118
El Dorado	2050	LHDT1	0.00078	0.001436	0.000569	2.67E-05	0	0.000596	0.000343	0.002229	0.003167	17.2365	0.114246	0	17.35075	0.000121	4.95E-06	0	0.000126	0.002716	1.8E-05	0	0.002734	0.002595	0.000107	0
El Dorado	2050	LHDT1	0.001142	0.001309	0	0	0	0	0.000669	0.003263	0.003933	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	LHDT2	0.000146	0.000161	5.81E-06	0	2.08E-07	6.01E-06	3.67E-05	0.000418	0.000461	3.833517	0.017571	0.049717	3.900805	4.67E-06	9.97E-06	3.51E-05	4.97E-05	9.11E-06	2.94E-07	7.08E-05	8.02E-05	1.51E-05	3.33E-05	0.000151
El Dorado	2050	LHDT2	0.000478	0.00094	0.00042	1.56E-05	0	0.000435	0.00018	0.001367	0.001982	10.75099	0.111417	0	10.86241	8.42E-05	2.9E-06	0	8.71E-05	0.001694	1.76E-05	0	0.001711	0.001812	6.24E-05	0
El Dorado	2050	LHDT2	0.000245	0.000276	0	0	0	0	0.000123	0.0007	0.000823	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	MCV	7.79E-05	0.000162	4.12E-05	0	2.88E-05	7E-05	7.42E-05	0.000222	0.000367	3.482432	0	0.324284	3.806716	0.002555	0	0.001155	0.00371	0.000683	0	3.57E-05	0.000719	0.01538	0	0.008171
El Dorado	2050	MDV	0.00276	0.004787	0.000409	0	9.75E-05	0.000506	0.006245	0.007885	0.014637	256.5671	0	9.213795	265.7809	0.001076	0	0.005092	0.006168	0.002782	0	0.003641	0.006423	0.003342	0	0.020994
El Dorado	2050	MDV	3.15E-05	5.9E-05	1.03E-05	0	0	1.03E-05	7.05E-05	8.99E-05	0.000171	2.868601	0	0	2.868601	2.3E-06	0	0	2.3E-06	0.000452	0	0	0.000452	4.96E-05	0	0
El Dorado	2050	MDV	5.71E-05	0.000131	0	0	0	0	0.000296	0.000163	0.000459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	MDV	3.47E-05	8.91E-05	4.94E-06	0	2.57E-06	7.51E-06	0.00019	9.91E-05	0.000297	2.847379	0	0.248194	3.095573	8.92E-06	0	0.000127	0.000136	1.12E-05	0	5.57E-05	6.69E-05	3.02E-05	0	0.000561
El Dorado	2050	MH	2.84E-05	3.62E-05	2.64E-06	0	7.02E-09	2.65E-06	2.16E-05	8.11E-05	0.000105	3.505261	0	0.000568	3.505828	5.2E-06	0	6.51E-07	5.85E-06	3.25E-05	0	9.36E-07	3.35E-05	1.47E-05	0	2.25E-06
El Dorado	2050	MH	1.92E-05	5.4E-05	3.13E-05	0	0	3.13E-05	1.96E-05	5.48E-05	0.000106	1.332464	0	0	1.332464	5.25E-06	0	0	5.25E-06	0.00021	0	0	0.00021	0.000113	0	0
El Dorado	2050	MHDT	8.18E-05	0.000106	7.78E-06	0	1.85E-06	9.63E-06	6.23E-05	0.000234	0.000306	7.983968	0.08334	0.134104	8.201411	1.4E-05	4.57E-05	0.000133	0.000193	3.71E-05	9.01E-07	0.000115	0.000152	5.53E-05	0.000186	0.000703
El Dorado	2050	MHDT	0.000892	0.001236	0.000179	3.78E-06	0	0.000183	0.000678	0.002547	0.003409	56.94644	2.724655	0	59.6711	1.58E-05	1.21E-05	0	2.79E-05	0.008972	0.000429	0	0.009401	0.00034	0.00026	0
El Dorado	2050	MHDT	0.000558	0.00077	0	0	0	0	0.000848	0.001594	0.002441	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	OBUS	7.46E-06	9.54E-06	6.22E-07	0	9.84E-08	7.2E-07	5.7E-06	2.13E-05	2.77E-05	0.717232	0.005533	0.008543	0.731308	7.61E-07	3.15E-06	9.18E-06	1.31E-05	7.19E-06	7.29E-08	7.56E-06	1.48E-05	2.84E-06	1.23E-05	4.78E-05
El Dorado	2050	OBUS	0.000102	0.000168	5.27E-05	2.8E-07	0	5.29E-05	6.18E-05	0.000292	0.000407	6.064538	0.145215	0	6.209753	3.63E-06	2.45E-06	0	6.08E-06	0.000955	2.29E-05	0	0.000978	7.81E-05	5.28E-05	0
El Dorado	2050	OBUS	5.08E-06	7.02E-06	0	0	0	0	7.76E-06	1.45E-05	2.23E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	OBUS	1.74E-06	2.26E-06	1.94E-07	1.61E-08	0	2.1E-07	1.3E-06	4.98E-06	6.49E-06	0.096989	0.003115	0	0.100104	9.26E-05	9.21E-06	0	0.000102	1.98E-05	6.35E-07	0	2.04E-05	1.32E-06	1.32E-07	0
El Dorado	2050	SBUS	5.7E-06	6.89E-06	4.65E-07	0	3.22E-08	4.97E-07	2.9E-06	1.63E-05	1.97E-05	0.252523	0.020747	0.001839	0.275109	6.37E-07	2.23E-05	2.64E-06	2.56E-05	2.69E-06	5.63E-07	1.48E-06	4.73E-06	2.8E-06	9.8E-05	1.49E-05
El Dorado	2050	SBUS	3.17E-05	4.39E-05	6.17E-06	2.37E-07	0	6.4E-06	2.42E-05	9.05E-05	0.000121	2.059935	0.17835	0	2.238285	5.71E-07	7.63E-07	0	1.33E-06	0.000325	2.81E-05	0	0.000353	1.23E-05	1.64E-05	0
El Dorado	2050	SBUS	1.98E-05	2.7E-05	0	0	0	0	2.87E-05	5.66E-05	8.53E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El Dorado	2050	UBUS	0.000121	0.000156	0	0	0	0	0.000142	0.000344	0.000487	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Units: miles/day for CVMT and EVMT

[illegible]

Source: EMFAC2021 (v1.0.2) Emission Factors Estimation

Region Type: County Units: tons/mile

Region: El Dorado Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2050 The emission rates are calculated as follows:

Season: Annual EF_PM = (PM_TOTAL - PMTW - PMBW)/Total VMT

Vehicle Classification: EMFAC2007 EF_Gas = Gas_TOTEX/Total VMT

Units: miles/day for CVMT and EVI EF_VOC = VOC_TOTLE/Total VMT

GWP
1 25 298
MTs/ton 0.907185

Vehicle Classification: EMFAC2007			EF_Gas = Gas_TOTEX/Total VMT											Weighted Emission Factors (tons/mile)											
Units: miles/day for CVMT and EVI			EF_VOC = VOC_TOTLE/Total VMT											Diesel Vehicle Fleet											
Region	Calendar Year	Vehicle Category	PM10_VMT_D	PM10_VMT_Ext	PM2.5_VMT_D	PM2.5_VMT_Ext	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	3.308E-08	1.61E-09	1.254E-08	3.238E-10	3.419E-05	7.479E-11	5.386E-09	2.746E-09	4.774E-10	9.01E-10	4.568E-10
															8.39E-08	1.19E-07	8.80E-07	2.90E-09	2.95E-04	7.10E-09	1.26E-08	2.29E-08	1.09E-09	7.09E-09	1.02E-09
El Dorado	2050	HHDT	1.28E-07	1.88E-09	4.27E-08	1.73E-09	3.44E-06	6.48E-07	3.64E-05	1.98E-08	2.00E-03	1.12E-07	1.44E-07	3.047E-06	1.05E-11	1.98E-12	1.11E-10	6.03E-14	6.10E-09	3.40E-13	4.38E-13	3.91E-13	5.72E-15	1.302E-13	5.26E-15
El Dorado	2050	HHDT	1.36E-07	2.55E-08	4.38E-08	2.44E-08	2.23E-06	6.13E-08	7.59E-07	1.60E-08	1.69E-03	2.84E-09	2.65E-07	0.0084061	1.87E-08	5.15E-10	6.38E-09	1.34E-10	1.42E-05	2.39E-11	2.23E-09	1.144E-09	2.14E-10	3.686E-10	2.05E-10
El Dorado	2050	HHDT	8.79E-08	0.00E+00	2.72E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0038866	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.416E-10	0.00E+00	1.057E-10	0.00E+00
El Dorado	2050	HHDT	1.35E-07	3.24E+00	4.34E-08	2.98E-09	5.46E-07	2.54E-08	7.77E-06	0.00E+00	1.51E-03	1.78E-06	3.07E-07	2.212E-05	1.21E-11	5.62E-13	1.72E-10	0.00E+00	3.33E-08	3.94E-11	6.79E-12	2.993E-12	7.17E-14	9.597E-13	6.59E-14
El Dorado	2050	LDA	1.80E-08	6.60E-10	5.43E-09	6.07E-10	4.60E-08	7.33E-08	8.08E-07	2.53E-09	2.56E-04	5.69E-09	7.25E-09	0.3868492	1.78E-08	2.84E-08	3.13E-07	9.79E-10	9.90E-05	2.20E-09	2.81E-09	6.977E-09	2.55E-10	2.101E-09	2.35E-10
El Dorado	2050	LDA	1.81E-08	1.21E-09	5.44E-09	1.15E-09	1.51E-08	5.61E-09	1.73E-07	1.87E-09	1.97E-04	2.61E-10	3.11E-08	0.0002302	3.46E-12	1.29E-12	3.99E-11	4.31E-13	4.54E-08	6.00E-14	7.16E-12	4.158E-12	2.78E-13	1.252E-12	2.66E-13
El Dorado	2050	LDA	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0532385	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.274E-10	0.00E+00	2.076E-10	0.00E+00
El Dorado	2050	LDA	1.34E-08	3.26E-10	3.81E-09	2.99E-10	1.78E-08	6.55E-08	3.94E-07	1.37E-09	1.39E-04	5.70E-09	2.88E-09	0.0183408	3.27E-10	1.20E-09	7.22E-09	2.52E-11	2.54E-06	1.04E-10	5.29E-11	2.46E-10	5.97E-12	6.991E-11	5.49E-12
El Dorado	2050	LDT1	1.99E-08	7.53E-10	6.08E-09	6.93E-10	5.45E-08	1.46E-07	9.06E-07	2.95E-09	2.98E-04	6.87E-09	8.10E-09	0.0265833	1.45E-09	3.88E-09	2.41E-08	7.83E-11	7.92E-06	1.83E-10	2.15E-10	5.288E-10	2.00E-11	1.616E-10	1.84E-11
El Dorado	2050	LDT1	1.98E-08	4.94E-09	6.06E-09	4.72E-09	3.33E-08	1.62E-08	1.75E-07	3.49E-09	3.68E-04	7.51E-10	5.80E-08	3.148E-07	1.05E-14	5.09E-15	5.51E-14	1.10E-15	1.16E-10	2.36E-16	1.83E-14	6.239E-15	1.55E-15	1.906E-15	1.49E-15
El Dorado	2050	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.000856	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-11	0.00E+00	3.341E-12	0.00E+00
El Dorado	2050	LDT1	1.34E-08	3.29E-10	3.81E-09	3.02E-10	1.86E-08	7.66E-08	4.02E-07	1.39E-09	1.40E-04	5.89E-09	2.96E-09	0.0006576	1.22E-11	5.04E-11	2.64E-10	9.11E-13	9.22E-08	3.87E-12	1.95E-12	8.817E-12	2.16E-13	2.506E-12	1.99E-13
El Dorado	2050	LDT2	1.99E-08	7.25E-10	6.08E-09	6.66E-10	6.07E-08	1.37E-07	1.04E-06	3.07E-09	3.10E-04	8.32E-09	8.78E-09	0.2670661	1.62E-08	3.65E-08	2.78E-07	8.19E-10	8.28E-05	2.22E-09	2.34E-09	5.308E-09	1.94E-10	1.622E-09	1.78E-10
El Dorado	2050	LDT2	1.99E-08	5.00E-09	6.08E-09	4.79E-09	3.35E-08	1.63E-08	1.78E-07	2.60E-09	2.74E-04	7.55E-10	4.32E-08	0.0010303	3.46E-11	1.67E-11	1.83E-10	2.68E-12	2.83E-07	7.78E-13	4.45E-11	2.048E-11	5.15E-12	6.261E-12	4.93E-12
El Dorado	2050	LDT2	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0074979	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.025E-10	0.00E+00	2.926E-11	0.00E+00
El Dorado	2050	LDT2	1.34E-08	3.44E-10	3.81E-09	3.16E-10	1.92E-08	8.70E-08	4.09E-07	1.40E-09	1.41E-04	6.07E-09	3.03E-09	0.0073389	1.41E-10	6.39E-10	3.00E-09	1.02E-11	1.04E-06	4.46E-11	2.22E-11	9.841E-11	2.52E-12	2.797E-11	2.32E-12
El Dorado	2050	LHDT1	9.48E-08	1.42E-09	3.23E-08	1.30E-09	2.68E-07	3.35E-07	2.67E-06	8.34E-09	8.43E-04	1.54E-08	2.37E-08	0.0122339	3.27E-09	4.10E-09	3.27E-08	1.02E-10	1.03E-05	1.89E-10	2.89E-10	1.16E-09	1.73E-11	3.951E-10	1.59E-11
El Dorado	2050	LHDT1	9.92E-08	2.30E-08	3.34E-08	2.20E-08	3.64E-07	1.04E-07	2.91E-07	6.34E-09	6.69E-04	4.84E-09	1.05E-07	0.0050786	1.85E-09	5.29E-10	1.48E-09	3.22E-11	3.40E-06	2.46E-11	5.36E-10	5.038E-10	1.17E-10	1.696E-10	1.12E-10
El Dorado	2050	LHDT1	5.18E-08	0.00E+00	1.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.014872	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.705E-10	0.00E+00	2.566E-10	0.00E+00
El Dorado	2050	LHDT2	1.09E-07	1.44E-09	3.73E-08	1.33E-09	1.91E-07	2.51E-07	2.57E-06	9.26E-09	9.36E-04	1.19E-08	1.92E-08	0.0008162	1.56E-10	2.05E-10	2.10E-09	7.56E-12	7.64E-07	9.74E-12	1.57E-11	8.907E-11	1.18E-12	3.045E-11	1.08E-12
El Dorado	2050	LHDT2	1.14E-07	3.19E-08	3.84E-08	3.06E-08	5.95E-07	1.38E-07	3.89E-07	7.55E-09	7.97E-04	6.39E-09	1.26E-07	0.0026699	1.59E-09	3.67E-10	1.04E-09	2.02E-11	2.13E-06	1.71E-11	3.35E-10	3.031E-10	8.53E-11	1.026E-10	8.16E-11
El Dorado	2050	LHDT2	5.90E-08	0.00E+00	1.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0027351	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.613E-10	0.00E+00	5.404E-11	0.00E+00
El Dorado	2050	MCY	1.76E-08	4.16E-09	5.73E-09	3.88E-09	5.80E-07	6.33E-06	1.61E-05	2.24E-09	2.26E-04	2.21E-07	4.27E-08	0.0032952	1.91E-09	2.09E-08	5.32E-08	7.37E-12	7.46E-07	7.27E-10	1.41E-10	5.812E-11	1.37E-11	1.889E-11	1.28E-11
El Dorado	2050	MDV	2.00E-08	7.15E-10	6.10E-09	6.58E-10	6.41E-08	1.45E-07	1.07E-06	3.71E-09	3.75E-04	8.71E-09	9.07E-09	0.1387523	8.89E-09	2.01E-08	1.49E-07	5.15E-10	5.21E-05	1.21E-09	1.26E-09	2.768E-09	9.92E-11	8.466E-10	9.12E-11
El Dorado	2050	MDV	2.01E-08	1.29E-09	6.14E-09	1.24E-09	1.24E-08	6.20E-09	1.93E-07	3.40E-09	3.59E-04	2.88E-10	5.65E-08	0.0015672	1.95E-11	9.71E-12	3.03E-10	5.33E-12	5.62E-07	4.51E-13	8.85E-11	3.143E-11	2.03E-12	9.619E-12	1.94E-12
El Dorado	2050	MDV	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0065749	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.992E-11	0.00E+00	2.568E-11	0.00E+00
El Dorado	2050	MDV	1.34E-08	3.49E-10	3.81E-09	3.20E-10	2.00E-08	9.02E-08	4.19E-07	1.42E-09	1.44E-04	6.30E-09	3.10E-09	0.0042237	8.43E-11	3.81E-10	1.77E-09	6.00E-12	6.06E-07	2.66E-11	1.31E-11	5.665E-11	1.47E-12	1.61E-11	1.35E-12
El Dorado	2050	MH	6.29E-08	1.62E-09	2.07E-08	1.49E-09	2.47E-07	3.45E-07	1.87E-07	2.12E-08	2.15E-03	3.58E-09	2.05E-08	0.0003199	7.89E-11	1.10E-10	5.99E-11	6.79E-12	6.87E-07	1.15E-12	6.56E-12	2.012E-11	5.19E-13	6.618E-12	4.78E-13
El Dorado	2050	MH	6.71E-08	2.82E-08	2.17E-08	2.70E-08	2.87E-06	1.02E-07	2.96E-07	1.14E-08	1.20E-03	4.74E-09	1.89E-07	0.0002173	6.24E-10	2.22E-11	6.43E-11	2.47E-12	2.61E-07	1.03E-12	4.1.				

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: El Dorado
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	3.247E-05	Weighted Energy Consumption Rates		
			2.71E-04	3.05E-03	2.70E-02	7.04E-02
			CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
El Dorado	2050	HHDT	5.659E-09	0	0.2110789	0
El Dorado	2050	HHDT	1.345E-05	0.15052096	0	0
El Dorado	2050	HHDT	0	0	0	1.8776637
El Dorado	2050	HHDT	3.295E-08	0	0	0
El Dorado	2050	LDA	9.066E-05	0	0.02699887	0
El Dorado	2050	LDA	4.316E-08	0.01763509	0	0
El Dorado	2050	LDA	0	0	0	0.3860825
El Dorado	2050	LDA	2.325E-06	0	0	0.3020298
El Dorado	2050	LDT1	7.248E-06	0	0.03141774	0
El Dorado	2050	LDT1	1.1E-10	0.03287375	0	0
El Dorado	2050	LDT1	0	0	0	0.3860825
El Dorado	2050	LDT1	8.422E-08	0	0	0.3020298
El Dorado	2050	LDT2	7.582E-05	0	0.03270228	0
El Dorado	2050	LDT2	2.684E-07	0.0244972	0	0
El Dorado	2050	LDT2	0	0	0	0.3860825
El Dorado	2050	LDT2	9.471E-07	0	0	0.3020298
El Dorado	2050	LHDT1	9.441E-06	0	0.08891963	0
El Dorado	2050	LHDT1	3.229E-06	0.05979364	0	0
El Dorado	2050	LHDT1	0	0	0	0.6543551
El Dorado	2050	LHDT2	6.978E-07	0	0.09873796	0
El Dorado	2050	LHDT2	2.022E-06	0.07120604	0	0
El Dorado	2050	LHDT2	0	0	0	0.6400297
El Dorado	2050	MCY	7.312E-07	0	0.02386673	0
El Dorado	2050	MDV	4.761E-05	0	0.03957378	0
El Dorado	2050	MDV	5.338E-07	0.03203563	0	0
El Dorado	2050	MDV	0	0	0	0.3860825
El Dorado	2050	MDV	5.543E-07	0	0	0.3020298
El Dorado	2050	MH	6.249E-07	0	0.22640099	0
El Dorado	2050	MH	2.48E-07	0.10730702	0	0
El Dorado	2050	MHDT	1.467E-06	0	0.18374153	0
El Dorado	2050	MHDT	1.11E-05	0.10395668	0	0
El Dorado	2050	MHDT	0	0	0	1.0785311
El Dorado	2050	OBUS	1.308E-07	0	0.17906087	0
El Dorado	2050	OBUS	1.156E-06	0.1187647	0	0
El Dorado	2050	OBUS	0	0	0	1.1092842
El Dorado	2050	OBUS	1.933E-08	0	0	0
El Dorado	2050	SBUS	4.926E-08	0	0.08812784	0
El Dorado	2050	SBUS	4.165E-07	0.10934802	0	0
El Dorado	2050	SBUS	0	0	0	1.0534556
El Dorado	2050	UBUS	0	0	0	1.7432441

Region: Placer

Regional VMT

Placer	Daily VMT
2020	10,400,596
2050	12,761,423

Emission from VMT on County Roads

Year	Emission (tons/day)											GHG (MT/day)
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	
2020	6.05	2.82	22.41	0.05	5536.18	0.26	0.40	3.60	0.09	0.92	0.08	5136.08
2050	2.70	1.08	10.31	0.05	4691.70	0.08	0.33	4.42	0.04	1.13	0.04	4347.85

PM_D is the sum of breakwear, tirewear, and fugitive dust.

Change in Diesel PM2.5 and PM10 Emissions

Year	VMT on County Road	% diesel	Diesel PM (grams/mile)		Diesel PM (grams/day)	
			PM10	PM2.5	PM10	PM2.5
2020	10,400,596	10.7%	5.88E-03	5.62E-03	6,565	6,281
2050	12,761,423	9.3%	2.26E-03	2.17E-03	2,692	2,576
Percent Change		-13.2%			-59.0%	-59.0%

Fugitive Dust Emission Factors

3 Travel on Paved Roads
E(lbs/VMT)=(k)(sL)^.91 (W)^1.02

Where:	PM10	Unit	Source
k= Particle Size Multiplier:	0.0022	lb/VMT	AP-42 Chapter 13.2.1, Table 13.2.1-1, PM10 emissions
sL= road surface silt loading	0.1	g/m^2	CalEEMod default
W= average weight of the vehicles traveling the road	2.4	tons	Statewide average vehicle weight in CA
PM10 Emission factor	0.00066	lbs/VMT	Public roads

Correction for Natural Precipitation⁵

3a	E(ext)=E[(1-P/4N)]			
	Where:		Unit	Source
	Ext = annual or other long-term average emission factor		dimensionless	
	P=#days/yr with >=0.01 inch precipitation during	58	days	Note: Sacramento data is used for all counties in the plan region
	N=# days in averaging period	365	days	Sacramento data: https://wrcc.dri.edu/Climate/comp_table_show.php?type=ppt_mean
	Corrected EF PM10	0.00063	lbs/VMT	Public roads
	Corrected EF PM2.5	0.00016	lbs/VMT	Public roads

Sources

EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 1

Fugitive			
Dust			
Source	PM2.5/PM10		Reference
Paved road	0.25		EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final Report, Oct 2005.

Region: Placer

2020 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	3.98E-07	1.809E-08	8.782E-08	1.421E-09	0.0001501	8.404E-10	2.365E-08	1.125E-08	6.478E-09	3.661E-09	6.198E-09	0.0001426
EFs (tons/mile)	5.81E-07	2.71E-07	2.15E-06	5.19E-09	5.32E-04	2.45E-08	3.84E-08	3.01E-08	8.46E-09	9.46E-09	8.02E-09	4.94E-04

2050 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	1.71E-07	5.636E-09	6.334E-08	1.198E-09	0.0001265	2.618E-10	1.993E-08	1.109E-08	2.495E-09	3.566E-09	2.387E-09	0.0001202
EFs (tons/mile)	2.12E-07	8.46E-08	8.08E-07	3.58E-09	3.68E-04	6.04E-09	2.60E-08	3.00E-08	3.04E-09	9.36E-09	2.89E-09	3.41E-04

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Placer
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

		271272.49		8547454.69		1438286.211																		
Region	Calendar Year	Vehicle Category	Mod el		Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumption	NOx_RUN		NOx_IDLE		NOx_STR		NOx_TOT		PM2.5_R	PM2.5_ID	PM2.5_ST	PM2.5_T	PM2.5_P
			Year	Spee								EX	X	EX	EX	UNEX	LEX	REX	OTEX					
Placer	2020	HHDT	Aggre	Aggre	Gasol	2.7743716	52.88578573	52.88578573	0	55.50962633	0	0.001588	0	0.000156	0.001744	5.58E-07	0	1.69E-07	7.27E-07	2.91E-07				
Placer	2020	HHDT	Aggre	Aggre	Diese	2809.5779	444661.9995	444661.9995	0	46635.60172	0	1.579089	0.289132	0.105401	1.973623	0.0276	0.000454	0	0.028055	0.004358				
Placer	2020	HHDT	Aggre	Aggre	Natur	19.482152	1268.891873	1268.891873	0	135.6445934	0	0.001677	0.000222	0	0.0019	1.4E-06	2.73E-07	0	1.67E-06	1.26E-05				
Placer	2020	LDA	Aggre	Aggre	Gasol	109489.5	3348420.664	3348420.664	0	509796.806	0	0.25626	0	0.181602	0.437862	0.005287	0	0.001237	0.006524	0.007382				
Placer	2020	LDA	Aggre	Aggre	Diese	585.98579	15305.43458	15305.43458	0	2552.348346	0	0.006489	0	0	0.006489	0.000412	0	0	0.000412	3.37E-05				
Placer	2020	LDA	Aggre	Aggre	Electr	2760.2221	92644.56488	0 92644.56488	13905.6298	35768.44841	0	0	0	0	0	0	0	0	0	0.000204				
Placer	2020	LDA	Aggre	Aggre	Plug-i	1770.8368	67212.25688	36067.65475	31144.60213	7322.41004	9406.598101	0.000282	0	0.000946	0.001228	6.5E-05	0	2.02E-05	8.52E-05	0.000148				
Placer	2020	LDT1	Aggre	Aggre	Gasol	15434.686	431015.8625	431015.8625	0	67937.41089	0	0.092599	0	0.04124	0.133839	0.001084	0	0.000284	0.001368	0.00095				
Placer	2020	LDT1	Aggre	Aggre	Diese	10.828654	83.92511529	83.92511529	0	32.88982754	0	0.000153	0	0	0.000153	2.3E-05	0	0	2.3E-05	1.85E-07				
Placer	2020	LDT1	Aggre	Aggre	Electr	15.173923	394.2745406	0 394.2745406	70.42841857	152.2225139	0	0	0	0	0	0	0	0	0	8.69E-07				
Placer	2020	LDT1	Aggre	Aggre	Plug-i	0.709483	33.217737	17.38234362	15.83539339	2.933712081	4.782760773	1.36E-07	0	3.8E-07	5.15E-07	2.86E-08	0	7.62E-09	3.62E-08	7.32E-08				
Placer	2020	LDT2	Aggre	Aggre	Gasol	60479.207	2048832.666	2048832.666	0	283941.2812	0	0.218806	0	0.14089	0.359696	0.00331	0	0.000682	0.003993	0.004517				
Placer	2020	LDT2	Aggre	Aggre	Diese	241.4732	8937.78928	8937.78928	0	1167.626622	0	0.000825	0	0	0.000825	5.93E-05	0	0	5.93E-05	1.97E-05				
Placer	2020	LDT2	Aggre	Aggre	Electr	11.202939	325.9551302	0 325.9551302	57.05702493	125.8455828	0	0	0	0	0	0	0	0	0	7.19E-07				
Placer	2020	LDT2	Aggre	Aggre	Plug-i	113.53228	5233.433287	2757.909497	2475.52379	469.4559956	747.6819669	2.15E-05	0	6.06E-05	8.21E-05	5.29E-06	0	1.42E-06	6.71E-06	1.15E-05				
Placer	2020	LHDT1	Aggre	Aggre	Gasol	6578.7902	198270.215	198270.215	0	98014.17162	0	0.063458	0.000293	0.07764	0.141391	0.000409	0	4.51E-05	0.000454	0.000437				
Placer	2020	LHDT1	Aggre	Aggre	Diese	7143.2379	212716.2917	212716.2917	0	89852.94605	0	0.720743	0.019052	0	0.739794	0.013046	0.000211	0	0.013257	0.000703				
Placer	2020	LHDT2	Aggre	Aggre	Gasol	789.01983	24611.33916	24611.33916	0	11755.21989	0	0.005705	3.49E-05	0.009041	0.014781	4.05E-05	0	3.89E-06	4.44E-05	5.43E-05				
Placer	2020	LHDT2	Aggre	Aggre	Diese	2390.1606	78723.23128	78723.23128	0	30065.21374	0	0.158482	0.006156	0	0.164638	0.00342	6.91E-05	0	0.00349	0.00026				
Placer	2020	MCY	Aggre	Aggre	Gasol	8714.1305	40469.44869	40469.44869	0	17428.261	0	0.032507	0	0.003695	0.036202	8.38E-05	0	7.57E-05	0.00016	4.46E-05				
Placer	2020	MDV	Aggre	Aggre	Gasol	45290.364	1329779.602	1329779.602	0	209032.8502	0	0.251636	0	0.142258	0.393894	0.002314	0	0.000579	0.002893	0.002932				
Placer	2020	MDV	Aggre	Aggre	Diese	988.59461	33980.55669	33980.55669	0	4779.94095	0	0.003204	0	0	0.003204	0.000255	0	0	0.000255	7.49E-05				
Placer	2020	MDV	Aggre	Aggre	Electr	17.162033	501.7659542	0 501.7659542	87.65763941	193.7230713	0	0	0	0	0	0	0	0	0	1.11E-06				
Placer	2020	MDV	Aggre	Aggre	Plug-i	150.17176	5929.39372	3190.002024	2739.391696	620.9602378	827.3779392	2.48E-05	0	8E-05	0.000105	6.63E-06	0	2.03E-06	8.65E-06	1.31E-05				
Placer	2020	MH	Aggre	Aggre	Gasol	1461.0081	10930.8347	10930.8347	0	146.1592551	0	0.005816	0	6.5E-05	0.005881	2.08E-05	0	7.61E-08	2.09E-05	3.61E-05				
Placer	2020	MH	Aggre	Aggre	Diese	651.78194	5395.150205	5395.150205	0	65.17819382	0	0.028332	0	0	0.028332	0.000707	0	0	0.000707	2.38E-05				
Placer	2020	MHDT	Aggre	Aggre	Gasol	380.35528	14588.30173	14588.30173	0	7610.148444	0	0.015442	3.68E-05	0.004016	0.019495	2.53E-05	0	5.75E-06	3.11E-05	4.82E-05				
Placer	2020	MHDT	Aggre	Aggre	Diese	2411.2849	103419.6609	103419.6609	0	27063.71961	0	0.312005	0.058313	0.036422	0.406739	0.005557	0.000214	0	0.005771	0.000342				
Placer	2020	OBUS	Aggre	Aggre	Gasol	141.68511	5902.078687	5902.078687	0	2834.835731	0	0.004041	1.02E-05	0.001292	0.005343	5.58E-06	0	7.69E-07	6.34E-06	1.95E-05				
Placer	2020	OBUS	Aggre	Aggre	Diese	86.583466	5924.763057	5924.763057	0	962.9579661	0	0.024272	0.001649	0.001165	0.027085	0.000683	6.22E-06	0	0.000689	1.96E-05				
Placer	2020	SBUS	Aggre	Aggre	Gasol	27.056231	1042.997419	1042.997419	0	108.2249241	0	0.001235	2.71E-05	8.62E-05	0.001348	1.98E-06	0	9.55E-08	2.08E-06	2.3E-06				
Placer	2020	SBUS	Aggre	Aggre	Diese	243.42422	5473.376965	5473.376965	0	3524.782743	0	0.039724	0.008146	0.000936	0.048806	0.000227	1.03E-05	0	0.000237	1.81E-05				
Placer	2020	UBUS	Aggre	Aggre	Gasol	28.265494	1945.771013	1945.771013	0	113.061977	0	0.000385	0	0.000109	0.000494	1.85E-06	0	6.38E-08	1.91E-06	5.81E-06				
Placer	2020	UBUS	Aggre	Aggre	Diese	34.159076	3420.062818	3420.062818	0	136.6363038	0	0.005521	0	0	0.005521	2.2E-05	0	0	2.2E-05	2.4E-05				
Placer	2020	UBUS	Aggre	Aggre	Electr	0.0626703	6.027186453	0 6.027186453	0.250681085	10.50685734	0	0	0	0	0	0	0	0	0	1.99E-08				
Placer	2020	UBUS	Aggre	Aggre	Natur	25.812458	4121.324346	4121.324346	0	103.2498321	0	0.009399	0	0	0.009399	7.32E-06	0	0	7.32E-06	2.99E-05				

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Placer

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

7.88E-07

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX
Placer	2020	HHDT	2.3E-06	3.32E-06	6.05E-07	0	1.83E-07	7.88E-07	1.17E-06	6.58E-06	8.53E-06	0.167212	0	0.003296	0.170508	4.53E-05	0	1.95E-09	4.53E-05	3.08E-05	0	2.77E-06	3.35E-05	0.000311
Placer	2020	HHDT	0.01378	0.046193	0.028848	0.000475	0	0.029323	0.017433	0.039372	0.086128	818.7546	54.21217	0	872.9668	0.001652	0.001037	0	0.002689	0.128995	0.008541	0	0.137536	0.035566
Placer	2020	HHDT	7.65E-05	9.08E-05	1.52E-06	2.97E-07	0	1.82E-06	5.04E-05	0.000219	0.000271	2.175477	0.18566	0	2.361137	0.004409	0.000585	0	0.004994	0.000443	3.78E-05	0	0.000481	6.3E-05
Placer	2020	LDA	0.01042	0.024327	0.00575	0	0.001346	0.007095	0.029528	0.029772	0.066396	1121.673	0	42.9298	1164.603	0.013663	0	0.051219	0.064882	0.022976	0	0.020204	0.043181	0.057818
Placer	2020	LDA	4.81E-05	0.000494	0.000431	0	0	0.000431	0.000135	0.000138	0.000703	4.118449	0	0	4.118449	3.22E-05	0	0	3.22E-05	0.000649	0	0	0.000649	0.000692
Placer	2020	LDA	0.000156	0.00036	0	0	0	0	0.000817	0.000446	0.001263	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2020	LDA	0.000103	0.000337	7.07E-05	0	2.2E-05	9.27E-05	0.000593	0.000296	0.000981	11.67159	0	0.55354	12.22513	3.82E-05	0	0.000351	0.00039	4.94E-05	0	0.000166	0.000215	0.000123
Placer	2020	LDT1	0.001633	0.003951	0.001179	0	0.000309	0.001487	0.003801	0.004667	0.009955	168.474	0	7.305202	175.7792	0.004383	0	0.011574	0.015957	0.006115	0	0.003392	0.009507	0.020649
Placer	2020	LDT1	3.66E-07	2.36E-05	2.4E-05	0	0	2.4E-05	7.4E-07	1.05E-06	2.58E-05	0.039147	0	0	0.039147	1.34E-06	0	0	1.34E-06	6.17E-06	0	0	6.17E-06	2.88E-05
Placer	2020	LDT1	6.7E-07	1.54E-06	0	0	0	0	3.48E-06	1.91E-06	5.39E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2020	LDT1	5.11E-08	1.61E-07	3.11E-08	0	8.29E-09	3.93E-08	2.93E-07	1.46E-07	4.78E-07	0.005635	0	0.000248	0.005882	1.88E-08	0	1.44E-07	1.63E-07	2.48E-08	0	6.93E-08	9.41E-08	5.94E-08
Placer	2020	LDT2	0.00747	0.01598	0.0036	0	0.000742	0.004342	0.018068	0.021343	0.043753	852.5893	0	30.18163	882.771	0.008367	0	0.032746	0.041113	0.016612	0	0.013423	0.030035	0.034594
Placer	2020	LDT2	3.25E-05	0.000111	6.19E-05	0	0	6.19E-05	7.88E-05	9.28E-05	0.000234	3.261288	0	0	3.261288	7.74E-06	0	0	7.74E-06	0.000514	0	0	0.000514	0.000167
Placer	2020	LDT2	5.48E-07	1.27E-06	0	0	0	0	2.87E-06	1.57E-06	4.44E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2020	LDT2	8.05E-06	2.63E-05	5.76E-06	0	1.54E-06	7.3E-06	4.62E-05	2.3E-05	7.65E-05	0.894268	0	0.042629	0.936897	2.99E-06	0	2.3E-05	2.6E-05	3.92E-06	0	1.11E-05	1.5E-05	9.43E-06
Placer	2020	LHDT1	0.005967	0.006858	0.000444	0	4.9E-05	0.000493	0.001748	0.017047	0.019289	205.5274	0.891409	2.860604	209.2794	0.002801	0.000871	0.004224	0.007895	0.003392	2.16E-05	0.005646	0.00906	0.014286
Placer	2020	LHDT1	0.006401	0.020361	0.013636	0.00022	0	0.013856	0.002814	0.018289	0.034959	149.118	1.093244	0	150.2112	0.002811	4.01E-05	0	0.002851	0.023494	0.000172	0	0.023666	0.060514
Placer	2020	LHDT2	0.000864	0.000963	4.4E-05	0	4.23E-06	4.83E-05	0.000217	0.002469	0.002734	27.97151	0.122974	0.341746	28.43623	0.000248	0.000106	0.000469	0.000823	0.000328	2.68E-06	0.000681	0.001012	0.001225
Placer	2020	LHDT2	0.002764	0.006514	0.003575	7.22E-05	0	0.003647	0.001041	0.007897	0.012585	68.33579	0.57991	0	68.9157	0.00077	1.34E-05	0	0.000783	0.010766	9.14E-05	0	0.010858	0.016568
Placer	2020	MCY	0.000187	0.000392	8.92E-05	0	8.01E-05	0.000169	0.000178	0.000535	0.000883	8.777357	0	1.142165	9.919522	0.009695	0	0.004581	0.014276	0.002062	0	0.000208	0.00227	0.068928
Placer	2020	MDV	0.005001	0.010826	0.002515	0	0.000629	0.003144	0.011727	0.014287	0.029158	675.1324	0	27.25401	702.3864	0.009492	0	0.03213	0.041622	0.016079	0	0.011251	0.02733	0.046266
Placer	2020	MDV	0.000123	0.000453	0.000266	0	0	0.000266	0.0003	0.000351	0.000917	15.93212	0	0	15.93212	2.71E-05	0	0	2.71E-05	0.00251	0	0	0.00251	0.000583
Placer	2020	MDV	8.43E-07	1.95E-06	0	0	0	0	4.42E-06	2.41E-06	6.83E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2020	MDV	9.13E-06	3.08E-05	7.21E-06	0	2.2E-06	9.41E-06	5.23E-05	2.61E-05	8.78E-05	1.033976	0	0.070321	1.104296	3.4E-06	0	2.98E-05	3.32E-05	4.4E-06	0	1.42E-05	1.86E-05	1.09E-05
Placer	2020	MH	0.00019	0.000247	2.26E-05	0	8.23E-08	2.27E-05	0.000145	0.000543	0.00071	23.52627	0	0.00526	23.53153	0.000246	0	6.54E-06	0.000252	0.000343	0	6.66E-06	0.000349	0.001221
Placer	2020	MH	9.33E-05	0.000824	0.000739	0	0	0.000739	9.52E-05	0.000267	0.001101	6.428796	0	0	6.428796	3.59E-05	0	0	3.59E-05	0.001013	0	0	0.001013	0.000772
Placer	2020	MHDT	0.000254	0.000333	2.75E-05	0	6.25E-06	3.38E-05	0.000193	0.000724	0.000951	30.17569	0.230997	0.41806	30.82475	0.000533	9.99E-05	0.000437	0.00107	0.000654	2.61E-06	0.000258	0.000915	0.00282
Placer	2020	MHDT	0.001805	0.007917	0.005808	0.000224	0	0.006031	0.001368	0.005156	0.012556	132.8291	6.558969	0	139.3881	0.000572	4.65E-05	0	0.000619	0.020927	0.001033	0	0.021961	0.012321
Placer	2020	OBUS	0.000102	0.000128	6.06E-06	0	8.36E-07	6.9E-06	7.81E-05	0.000292	0.000377	11.88592	0.060165	0.101636	12.04772	0.000109	3.01E-05	0.000118	0.000256	0.000189	8.05E-07	9.63E-05	0.000286	0.000527
Placer	2020	OBUS	0.000128	0.000837	0.000714	6.5E-06	0	0.00072	7.84E-05	0.000366	0.001165	8.995193	0.219243	0	9.214436	8.74E-05	3.99E-06	0	9.14E-05	0.001417	3.45E-05	0	0.001452	0.001882
Placer	2020	SBUS	1.81E-05	2.25E-05	2.16E-06	0	1.04E-07	2.26E-06	9.2E-06	5.16E-05	6.31E-05	0.972892	0.080072	0.008296	1.06126	3.26E-05	6.79E-05	1.11E-05	0.000112	5.68E-05	2.2E-06	6.75E-06	6.58E-05	0.000163
Placer	2020	SBUS	9.49E-05	0.00035	0.000237	1.08E-05	0	0.000248	7.24E-05	0.000271	0.000591	7.135282	0.629156	0	7.764438	2.65E-05	2.33E-06	0	2.88E-05	0.001124	9.91E-05	0	0.001223	0.00057
Placer	2020	UBUS	7.84E-05	8.62E-05	2.01E-06	0	6.94E-08	2.08E-06	2.32E-05	0.000224	0.000249	3.378331	0	0.012285	3.390615	7.39E-06	0	1.43E-05	2.17E-05	3.54E-05	0	1.06E-05	4.6E-05	2.39E-05
Placer	2020	UBUS	0.000145	0.000191	2.3E-05	0	0	2.3E-05	9.6E-05	0.000415	0.000534	4.673329	0	0	4.673329	1.68E-05	0	0	1.68E-05	0.000736	0	0	0.000736	0.000363
Placer	2020	UBUS	1.28E-07	1.48E-07	0	0	0	0	7.97E-08	3.65E-07	4.45E-07	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2020	UBUS	0.000175	0.000212	7.65E-06	0	0	7.65E-06	0.00012	0.0005	0.000627	6.015754	0	0	6.015754	0.00863	0	0	0.00863	0.001226	0	0	0.001226	0.000868

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Placer
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	Fuel																											
			ROG_IDLE	ROG_STR	ROG_TOT	ROG_DIU	ROG_HOT	ROG_RUN	ROG_TOT	TOG_RUN	TOG_IDLE	TOG_STR	TOG_TOT	TOG_DIU	TOG_HOT	TOG_RUN	TOG_TOT	CO_RUNE			CO_TOTE	SOX_RUN	SOX_IDLE	SOX_STRE	SOX_TOTE	NH3_RUN	Consumption			
			EX	EX	RN	SOAK	LOSS	AL	EX	X	EX	EX	RN	SOAK	LOSS	AL	X	CO_IDLEX	CO_STREX	X	EX	X	X	X	EX	EX	ion			
Placer	2020	HHDT	0	1.06E-08	0.000311	3.68E-05	1.41E-05	9.21E-05	0.000454	0.000444	0	1.16E-08	0.000444	3.68E-05	1.41E-05	9.21E-05	0.000587	0.013793	0	6.09E-05	0.013854	1.65E-06	0	3.26E-08	1.69E-06	1.7E-06	0.01798			
Placer	2020	HHDT	0.022331	0	0.057897	0	0	0	0.057897	0.040489	0.025423	0	0.065912	0	0	0	0.065912	0.141349	0.286999	0	0.428348	0.007753	0.000513	0	0.008266	0.094559	77.98178			
Placer	2020	HHDT	8.36E-06	0	7.14E-05	0	0	0	7.14E-05	0.0045	0.000597	0	0.005097	0	0	0	0.005097	0.024677	0.001272	0	0.025949	0	0	0	0	0.001108	0.272911			
Placer	2020	LDA	0	0.253965	0.311784	0.195069	0.056872	0.145557	0.709282	0.08426	0	0.278057	0.362317	0.195069	0.056872	0.145557	0.759815	3.900073	0	2.429464	6.329537	0.011089	0	0.000424	0.011513	0.114003	122.8059			
Placer	2020	LDA	0	0	0.000692	0	0	0	0.000692	0.000788	0	0	0.000788	0	0	0	0.000788	0.007201	0	0	0.007201	3.9E-05	0	0	3.9E-05	5.23E-05	0.367899			
Placer	2020	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Placer	2020	LDA	0	0.001456	0.00158	0.000994	0.000314	0.000287	0.003174	0.00018	0	0.001595	0.001774	0.000994	0.000314	0.000287	0.003369	0.019267	0	0.011287	0.030554	0.000115	0	5.47E-06	0.000121	0.001426	1.289124			
Placer	2020	LDT1	0	0.065708	0.086357	0.062953	0.016896	0.053078	0.219283	0.030099	0	0.071941	0.10204	0.062953	0.016896	0.053078	0.234966	0.991576	0	0.649601	1.641177	0.001666	0	7.22E-05	0.001738	0.01668	18.5357			
Placer	2020	LDT1	0	0	2.88E-05	0	0	0	2.88E-05	3.28E-05	0	0	3.28E-05	0	0	0	3.28E-05	0.000147	0	0	0.000147	3.71E-07	0	0	3.71E-07	2.87E-07	0.003497			
Placer	2020	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Placer	2020	LDT1	0	5.85E-07	6.45E-07	2.94E-07	8.71E-08	9.03E-08	1.12E-06	8.66E-08	0	6.41E-07	7.27E-07	2.94E-07	8.71E-08	9.03E-08	1.2E-06	9.34E-06	0	4.54E-06	1.39E-05	5.57E-08	0	2.45E-09	5.82E-08	8.05E-07	0.00062			
Placer	2020	LDT2	0	0.162131	0.196724	0.098332	0.027974	0.072887	0.395917	0.050455	0	0.177512	0.227967	0.098332	0.027974	0.072887	0.42716	2.491302	0	1.530037	4.021339	0.008429	0	0.000298	0.008727	0.073607	93.08709			
Placer	2020	LDT2	0	0	0.000167	0	0	0	0.000167	0.00019	0	0	0.00019	0	0	0	0.00019	0.001599	0	0	0.001599	3.09E-05	0	0	3.09E-05	3.05E-05	0.29133			
Placer	2020	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Placer	2020	LDT2	0	9.34E-05	0.000103	5E-05	1.46E-05	1.5E-05	0.000182	1.38E-05	0	0.000102	0.000116	5E-05	1.46E-05	1.5E-05	0.000196	0.001483	0	0.000723	0.002206	8.84E-06	0	4.21E-07	9.26E-06	0.000127	0.098795			
Placer	2020	LHDT1	0.003354	0.022025	0.039665	0.021948	0.005904	0.032233	0.09975	0.020679	0.004893	0.024112	0.049684	0.021948	0.005904	0.032233	0.10977	0.340951	0.027131	0.344779	0.712861	0.002032	8.81E-06	2.83E-05	0.002069	0.00981	22.06825			
Placer	2020	LHDT1	0.000864	0	0.061378	0	0	0	0.061378	0.068891	0.000984	0	0.069875	0	0	0	0.069875	0.183405	0.007163	0	0.190569	0.001413	1.04E-05	0	0.001423	0.029281	13.41831			
Placer	2020	LHDT2	0.0004	0.002375	0.004	0.002	0.000537	0.002819	0.009357	0.001787	0.000584	0.002601	0.004972	0.002	0.000537	0.002819	0.010328	0.034629	0.003267	0.041852	0.079748	0.000277	1.22E-06	3.38E-06	0.000281	0.00122	2.998565			
Placer	2020	LHDT2	0.000289	0	0.016857	0	0	0	0.016857	0.018861	0.000329	0	0.019191	0	0	0	0.019191	0.044143	0.002397	0	0.04654	0.000648	5.49E-06	0	0.000653	0.014256	6.156212			
Placer	2020	MCY	0	0.035679	0.104608	0.045857	0.066165	0.073424	0.290053	0.0807	0	0.038761	0.119461	0.045857	0.066165	0.073424	0.304907	0.762238	0	0.176052	0.93829	8.68E-05	0	1.13E-05	9.81E-05	0.000374	1.046001			
Placer	2020	MDV	0	0.175315	0.221581	0.091189	0.026179	0.069963	0.408912	0.064959	0	0.191922	0.256881	0.091189	0.026179	0.069963	0.444212	2.283007	0	1.320585	3.603593	0.006674	0	0.000269	0.006944	0.047411	74.06577			
Placer	2020	MDV	0	0	0.000583	0	0	0	0.000583	0.000664	0	0	0.000664	0	0	0	0.000664	0.008947	0	0	0.008947	0.000151	0	0	0.000151	0.000116	1.42321			
Placer	2020	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Placer	2020	MDV	0	0.000123	0.000134	7.41E-05	2.08E-05	2.21E-05	0.000251	1.59E-05	0	0.000134	0.00015	7.41E-05	2.08E-05	2.21E-05	0.000267	0.001713	0	0.00095	0.002663	1.02E-05	0	6.95E-07	1.09E-05	0.000148	0.116447			
Placer	2020	MH	0	2.95E-05	0.00125	0.007103	0.00201	4.47E-05	0.010408	0.001703	0	3.22E-05	0.001735	0.007103	0.00201	4.47E-05	0.010892	0.037485	0	0.000607	0.038092	0.000233	0	5.2E-08	0.000233	0.000538	2.48137			
Placer	2020	MH	0	0	0.000772	0	0	0	0.000772	0.000879	0	0	0.000879	0	0	0	0.000879	0.00264	0	0	0.00264	6.09E-05	0	0	6.09E-05	0.000775	0.574282			
Placer	2020	MHDT	0.00042	0.002588	0.005828	0.001504	0.000392	0.003114	0.010837	0.004115	0.000613	0.002833	0.007561	0.001504	0.000392	0.003114	0.012571	0.061673	0.006283	0.059691	0.127647	0.000298	2.28E-06	4.13E-06	0.000305	0.000719	3.250431			
Placer	2020	MHDT	0.001001	0	0.013322	0	0	0	0.013322	0.014027	0.00114	0	0.015167	0	0	0	0.015167	0.036633	0.0191	0	0.055733	0.001258	6.21E-05	0	0.00132	0.019306	12.45148			
Placer	2020	OBUS	0.000116	0.000629	0.001272	0.000321	8.5E-05	0.000351	0.002029	0.000768	0.00017	0.000689	0.001627	0.000321	8.5E-05	0.000351	0.002383	0.011864	0.000901	0.01341	0.026176	0.000118	5.95E-07	1E-06	0.000119	0.000293	1.270417			
Placer	2020	OBUS	8.59E-05	0	0.001968	0	0	0	0.001968	0.002143	9.78E-05	0	0.002241	0	0	0	0.002241	0.005058	0.001012	0	0.00607	8.52E-05	2.08E-06	0	8.73E-05	0.001085	0.823122			
Placer	2020	SBUS	0.000309	6.71E-05	0.000539	0.00011	3.03E-05	8.82E-05	0.000768	0.000238	0.000451	7.34E-05	0.000762	0.00011	3.03E-05	8.82E-05	0.000991	0.004013	0.002402	0.001935	0.00835	9.62E-06	7.92E-07	8.2E-08	1.05E-05	5.17E-05	0.111909			
Placer	2020	SBUS	5.03E-05	0	0.00062	0	0	0	0.00062	0.000649	5.72E-05	0	0.000706	0	0	0	0.000706	0.001631	0.000815	0	0.002447	6.76E-05	5.96E-06	0	7.35E-05	0.000505	0.693594			
Placer	2020	UBUS	0	6.06E-05	8.45E-05	2.16E-05	6.19E-06	1.19E-05	0.000124	3.49E-05	0	6.63E-05	0.000101	2.16E-05	6.19E-06	1.19E-05	0.000141	0.000797	0	0.001149	0.001946	3.34E-05	0	1.21E-07	3.35E-05	9.65E-05	0.357536			
Placer	2020	UBUS	0	0	0.000363	0	0	0	0.000363	0.000413	0	0	0.000413	0	0	0	0.000413	0.000421	0	0	0.000421	4.43E-05	0	0	4.43E-05	0.000521	0.417467			
Placer	2020	UBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Placer	2020	UBUS	0	0	0.000868	0	0	0	0.000868	0.009656	0	0	0.009656	0	0	0	0.009656	0.061837	0	0	0.061837	0	0	0	0	0	0.004407	0.695329		

Source: EMFAC2021 (v1.0.2) Emission

Region Type: County

Units: tons/mile

Region: Placer

Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2020

The emission rates are calculated as follows:

Season: Annual

EF_PM_D = PM_BW+PM_TW

Vehicle Classification: EMFAC2007

EF_PM = PM_TOTEX/Total VMT

Units: miles/day for CVMT and EVT

EF_Gas = Gas_TOTEX/Total VMT

EF_VOC = VOC_TOTLE/Total VMT

GWP

1

25

298

MTs/ton

0.907185

Vehicle Classification: EMFAC2007			EF_PM = PM_TOTEX/Total VMT											Weighted Emission Factors (tons/mile)										
Units: miles/day for CVMT and EVI			EF_Gas = Gas_TOTEX/Total VMT											Diesel Vehicle Fleet										
			EF_VOC = VOC_TOTLE/Total VMT											EMFAC Fleet										
Region	Calendar Year	Vehicle Category	PM10_VMT_T_D	PM10_VMT_Ex	PM2.5_VMT_T_D	PM2.5_VMT_T_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D
Placer	2020	HHDT	1.46E-07	1.49E-08	4.90E-08	1.37E-08	3.30E-05	8.58E-06	2.62E-04	3.19E-08	3.22E-03	8.56E-07	6.34E-07	6.18731E-06	2.04E-10	5.31E-11	1.62E-09	1.97E-13	1.99E-08	5.30E-12	3.92E-12	9.06E-13	9.22E-14	3.03E-13
Placer	2020	HHDT	1.28E-07	6.59E-08	4.08E-08	6.31E-08	4.44E-06	1.30E-07	9.63E-07	1.86E-08	1.96E-03	6.05E-09	3.09E-07	0.052022738	2.31E-07	6.77E-09	5.01E-08	9.67E-10	1.02E-04	3.15E-10	1.61E-08	6.65E-09	3.43E-09	2.12E-09
Placer	2020	HHDT	2.12E-07	1.43E-09	7.02E-08	1.32E-09	1.50E-06	5.62E-08	2.05E-05	0.00E+00	1.86E-03	3.94E-06	3.79E-07	0.000148453	2.22E-10	8.35E-12	3.04E-09	0.00E+00	2.76E-07	5.84E-10	5.63E-11	3.15E-11	2.13E-13	1.04E-11
Placer	2020	LDA	1.77E-08	2.12E-09	5.32E-09	1.95E-09	1.31E-07	2.12E-07	1.89E-06	3.44E-09	3.48E-04	1.94E-08	1.29E-08	0.391744769	5.12E-08	8.30E-08	7.41E-07	1.35E-09	1.36E-04	7.59E-09	5.05E-09	6.94E-09	8.30E-10	2.08E-09
Placer	2020	LDA	1.78E-08	2.81E-08	5.35E-09	2.69E-08	4.24E-07	4.52E-08	4.71E-07	2.55E-09	2.69E-04	2.10E-09	4.24E-08	0.001790642	7.59E-10	8.10E-11	8.43E-10	4.57E-12	4.82E-07	3.76E-12	7.59E-11	3.19E-11	5.04E-11	9.58E-12
Placer	2020	LDA	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.010838848	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-10	0.00E+00	4.21E-11
Placer	2020	LDA	1.32E-08	1.38E-09	3.74E-09	1.27E-09	1.83E-08	4.72E-08	4.55E-07	1.80E-09	1.82E-04	5.80E-09	3.20E-09	0.007863424	1.44E-10	3.71E-10	3.57E-09	1.41E-11	1.43E-06	4.56E-11	2.52E-11	1.04E-10	1.08E-11	2.94E-11
Placer	2020	LDT1	1.96E-08	3.45E-09	5.99E-09	3.17E-09	3.11E-07	5.09E-07	3.81E-06	4.03E-09	4.08E-04	3.70E-08	2.21E-08	0.050426224	1.57E-08	2.57E-08	1.92E-07	2.03E-10	2.06E-05	1.87E-09	1.11E-09	9.91E-10	1.74E-10	3.02E-10
Placer	2020	LDT1	2.13E-08	2.87E-07	6.57E-09	2.74E-07	1.82E-06	3.43E-07	1.75E-06	4.42E-09	4.66E-04	1.59E-08	7.35E-08	9.81873E-06	1.78E-11	3.37E-12	1.72E-11	4.34E-14	4.58E-09	1.56E-13	7.22E-13	2.09E-13	2.81E-12	6.45E-14
Placer	2020	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.61277E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.31E-13	0.00E+00	1.80E-13
Placer	2020	LDT1	1.32E-08	1.18E-09	3.74E-09	1.09E-09	1.55E-08	3.36E-08	4.18E-07	1.75E-09	1.77E-04	4.91E-09	2.83E-09	3.88627E-06	6.03E-14	1.31E-13	1.62E-12	6.80E-15	6.88E-10	1.91E-14	1.10E-14	5.14E-14	4.60E-15	1.45E-14
Placer	2020	LDT2	1.92E-08	2.12E-09	5.85E-09	1.95E-09	1.76E-07	1.93E-07	1.96E-06	4.26E-09	4.31E-04	2.01E-08	1.47E-08	0.23970091	4.21E-08	4.63E-08	4.70E-07	1.02E-09	1.03E-04	4.81E-09	3.51E-09	4.61E-09	5.08E-10	1.40E-09
Placer	2020	LDT2	1.92E-08	6.93E-09	5.84E-09	6.63E-09	9.22E-08	1.86E-08	1.79E-07	3.46E-09	3.65E-04	8.66E-10	5.75E-08	0.001045667	9.65E-11	1.95E-11	1.87E-10	3.62E-12	3.82E-07	9.05E-13	6.01E-11	2.01E-11	7.25E-12	6.11E-12
Placer	2020	LDT2	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81348E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.19E-13	0.00E+00	1.48E-13
Placer	2020	LDT2	1.32E-08	1.40E-09	3.74E-09	1.28E-09	1.57E-08	3.49E-08	4.22E-07	1.77E-09	1.79E-04	4.97E-09	2.86E-09	0.00061228	9.61E-12	2.13E-11	2.58E-10	1.08E-12	1.10E-07	3.04E-12	1.75E-12	8.09E-12	8.54E-13	2.29E-12
Placer	2020	LHDT1	9.48E-08	2.49E-09	3.23E-08	2.29E-09	7.13E-07	5.03E-07	3.60E-06	1.04E-08	1.06E-03	3.98E-08	4.57E-08	0.023196404	1.65E-08	1.17E-08	8.34E-08	2.42E-10	2.45E-05	9.24E-10	1.06E-09	2.20E-09	5.77E-11	7.49E-10
Placer	2020	LHDT1	9.92E-08	6.51E-08	3.34E-08	6.23E-08	3.48E-06	2.89E-07	8.96E-07	6.69E-09	7.06E-04	1.34E-08	1.11E-07	0.024886507	8.66E-08	7.18E-09	2.23E-08	1.67E-10	1.76E-05	3.34E-10	2.77E-09	2.47E-09	1.62E-09	8.31E-10
Placer	2020	LHDT2	1.09E-07	1.96E-09	3.73E-08	1.80E-09	6.01E-07	3.80E-07	3.24E-06	1.14E-08	1.16E-03	3.34E-08	4.11E-08	0.002879376	1.73E-09	1.09E-09	9.33E-09	3.29E-11	3.33E-06	9.62E-11	1.18E-10	3.14E-10	5.65E-12	1.07E-10
Placer	2020	LHDT2	1.14E-07	4.63E-08	3.84E-08	4.43E-08	2.09E-06	2.14E-07	5.91E-07	8.30E-09	8.75E-04	9.95E-09	1.38E-07	0.009210137	1.93E-08	1.97E-09	5.44E-09	7.64E-11	8.06E-06	9.16E-11	1.27E-09	1.05E-09	4.27E-10	3.54E-10
Placer	2020	MCY	1.76E-08	4.18E-09	5.73E-09	3.94E-09	8.95E-07	7.17E-06	2.32E-05	2.42E-09	2.45E-04	3.53E-07	5.61E-08	0.004734678	4.24E-09	3.39E-08	1.10E-07	1.15E-11	1.16E-06	1.67E-09	2.66E-10	8.35E-11	1.98E-11	2.71E-11
Placer	2020	MDV	1.96E-08	2.36E-09	5.97E-09	2.18E-09	2.96E-07	3.08E-07	2.71E-06	5.22E-09	5.28E-04	3.13E-08	2.06E-08	0.155576093	4.61E-08	4.78E-08	4.22E-07	8.12E-10	8.22E-05	4.87E-09	3.20E-09	3.04E-09	3.68E-10	9.28E-10
Placer	2020	MDV	1.91E-08	7.84E-09	5.82E-09	7.50E-09	9.43E-08	1.72E-08	2.63E-07	4.44E-09	4.69E-04	7.97E-10	7.39E-08	0.003975518	3.75E-10	6.82E-11	1.05E-09	1.77E-11	1.86E-06	3.17E-12	2.94E-10	7.61E-11	3.12E-11	2.31E-11
Placer	2020	MDV	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.87036E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.99E-13	0.00E+00	2.28E-13
Placer	2020	MDV	1.32E-08	1.59E-09	3.74E-09	1.46E-09	1.77E-08	4.23E-08	4.49E-07	1.84E-09	1.86E-04	5.60E-09	3.13E-09	0.000693703	1.23E-11	2.93E-11	3.12E-10	1.28E-12	1.29E-07	3.88E-12	2.17E-12	9.17E-12	1.10E-12	2.60E-12
Placer	2020	MH	6.29E-08	2.07E-09	2.07E-08	1.91E-09	5.38E-07	9.52E-07	3.48E-06	2.13E-08	2.15E-03	2.31E-08	3.20E-08	0.001278841	6.88E-10	1.22E-09	4.46E-09	2.72E-11	2.75E-06	2.95E-11	4.09E-11	8.04E-11	2.65E-12	2.65E-11
Placer	2020	MH	6.71E-08	1.37E-07	2.17E-08	1.31E-07	5.25E-06	1.43E-07	4.89E-07	1.13E-08	1.19E-03	6.65E-09	1.88E-07	0.0006312	3.31E-09	9.04E-11	3.09E-10	7.13E-12	7.52E-07	4.20E-12	1.18E-10	4.23E-11	8.65E-11	1.37E-11
Placer	2020	MHDT	6.29E-08	2.32E-09	2.07E-08	2.13E-09	1.34E-06	7.43E-07	8.75E-06	2.09E-08	2.11E-03	7.34E-08	6.27E-08	0.001706742	2.28E-09	1.27E-09	1.49E-08	3.57E-11	3.61E-06	1.25E-10	1.07E-10	1.07E-10	3.95E-12	3.53E-11
Placer	2020	MHDT	6.31E-08	5.83E-08	2.08E-08	5.58E-08	3.93E-06	1.29E-07	5.39E-07	1.28E-08	1.35E-03	5.98E-09	2.12E-07	0.012099469	4.76E-08	1.56E-09	6.52E-09	1.54E-10	1.63E-05	7.24E-11	2.57E-09	7.63E-10	7.06E-10	2.51E-10
Placer	2020	OBUS	6.27E-08	1.17E-09	2.06E-08	1.07E-09	9.05E-07	3.44E-07	4.43E-06	2.02E-08	2.04E-03	4.35E-08	4.85E-08	0.000690507	6.25E-10	2.37E-10	3.06E-09	1.39E-11	1.41E-06	3.00E-11	3.35E-11	4.33E-11	8.07E-13	1.42E-11
Placer	2020	OBUS	7.50E-08	1.22E-07	2.49E-08	1.16E-07	4.57E-06	3.32E-07	1.02E-06	1.47E-08	1.56E-03	1.54E-08	2.45E-07	0.000693161	3.17E-09	2.30E-10	7.10E-10	1.02E-11	1.08E-06	1.07E-11	1.70E-10	5.20E-11	8.43E-11	1.73E-11
Placer	2020	SBUS	5.83E-08	2.17E-09	1.95E-08	1.99E-09	1.29E-06	7.36E-07	8.01E-06	1.01E-08	1.02E-03	1.07E-07	6.31E-08	0.000122024	1.58E-10	8.98E-11	9.77E-10	1.23E-12	1.24E-07	1.31E-11	7.70E-12	7.12E-12	2.65E-13	2.38E-12
Placer	2020	SBUS	6.27E-08	4.53E-08	2.06E-08	4.33E-08	8.92E-06	1.13E-07	4.47E-07	1.34E-08	1.42E-03	5.26E-09	2.23E-07	0.000640352	5.71E-09	7.26E-11	2.86E-10	8.60E-12	9.08E-07	3.37E-12	1.43E-10	4.02E-11	2.90E-11	1.32E-11
Placer	2020	UBUS	1.27E-07	1.07E-09	4.33E-08	9.82E-10	2.54E-07	6.38E-08	1.00E-06	1.72E-08	1.74E-03	1.12E-08	2.36E-08	0.000227643	5.78E-11	1.45E-11	2.28E-10	3.92E-12	3.97E-07	2.54E-12	5.38E-			

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Placer

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	Weighted Energy Consumption Rates				
			6.198E-09	0.0001426			
			8.02E-09	4.94E-04	1.34E-02	4.00E-02	7.01E-03
			PM2.5_E	CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Placer	2020	HHDT	8.50E-14	1.928E-08	0	0.33997482	0
Placer	2020	HHDT	3.28E-09	9.701E-05	0.17537316	0	0
Placer	2020	HHDT	1.96E-13	2.791E-07	0	0	0
Placer	2020	LDA	7.63E-10	0.0001251	0	0.03667577	0
Placer	2020	LDA	4.82E-11	4.577E-07	0.02403718	0	0
Placer	2020	LDA	0.00E+00	0	0	0	0.3860825
Placer	2020	LDA	9.97E-12	1.305E-06	0	0	0.3020298
Placer	2020	LDT1	1.60E-10	1.9E-05	0	0.04300467	0
Placer	2020	LDT1	2.69E-12	4.353E-09	0.04166744	0	0
Placer	2020	LDT1	0.00E+00	0	0	0	0.3860825
Placer	2020	LDT1	4.23E-15	6.277E-10	0	0	0.3020298
Placer	2020	LDT2	4.67E-10	9.475E-05	0	0.04543421	0
Placer	2020	LDT2	6.93E-12	3.624E-07	0.03259526	0	0
Placer	2020	LDT2	0.00E+00	0	0	0	0.3860825
Placer	2020	LDT2	7.85E-13	9.998E-08	0	0	0.3020298
Placer	2020	LHDT1	5.31E-11	2.252E-05	0	0.11130391	0
Placer	2020	LHDT1	1.55E-09	1.67E-05	0.06308077	0	0
Placer	2020	LHDT2	5.19E-12	3.052E-06	0	0.12183671	0
Placer	2020	LHDT2	4.08E-10	7.66E-06	0.07820071	0	0
Placer	2020	MCY	1.87E-11	1.162E-06	0	0.02584669	0
Placer	2020	MDV	3.39E-10	7.552E-05	0	0.05569778	0
Placer	2020	MDV	2.98E-11	1.77E-06	0.04188308	0	0
Placer	2020	MDV	0.00E+00	0	0	0	0.3860825
Placer	2020	MDV	1.01E-12	1.179E-07	0	0	0.3020298
Placer	2020	MH	2.44E-12	2.509E-06	0	0.22700647	0
Placer	2020	MH	8.27E-11	7.145E-07	0.10644408	0	0
Placer	2020	MHDT	3.63E-12	3.303E-06	0	0.2228108	0
Placer	2020	MHDT	6.75E-10	1.549E-05	0.12039764	0	0
Placer	2020	OBUS	7.42E-13	1.288E-06	0	0.21524912	0
Placer	2020	OBUS	8.06E-11	1.024E-06	0.13892908	0	0
Placer	2020	SBUS	2.43E-13	1.15E-07	0	0.10729515	0
Placer	2020	SBUS	2.77E-11	8.628E-07	0.12672142	0	0
Placer	2020	UBUS	2.24E-13	3.614E-07	0	0.18375038	0
Placer	2020	UBUS	2.57E-12	5.193E-07	0.12206402	0	0
Placer	2020	UBUS	0.00E+00	0	0	0	1.7432441
Placer	2020	UBUS	8.57E-13	7.002E-07	0	0	0

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

											355875.8137										14773920.11										1874847.533									
		Mod																																						
		Calendar	Vehicle	el	Spee						Energy	NOx_RUN		NOx_IDLE		NOx_STR		NOx_TOT		PM2.5_R		PM2.5_ID		PM2.5_ST		PM2.5_T		PM2.5_P												
Region	Year	Category	Year	d	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Consumption	EX	X	EX	EX	EX	UNEX	LEX	REX	OTEX	MTW																			
Placer	2050	HHDT	Aggre	Aggre	Gasol	0.286932761	36.00796458	36.00796458	0	5.740950673	0	0.000102	0	1.31E-05	0.000115	5.68E-08	0	3.02E-09	5.98E-08	1.98E-07																				
Placer	2050	HHDT	Aggre	Aggre	Diese	5889.316679	1083438.457	1083438.457	0	110628.3903	0	1.519686	0.558693	0.284192	2.362571	0.031773	0.000224	0	0.031997	0.010695																				
Placer	2050	HHDT	Aggre	Aggre	Electr	1511.494262	163773.3796	0	163773.3796	19933.41412	301807.5676	0	0	0	0	0	0	0	0	0.001564																				
Placer	2050	HHDT	Aggre	Aggre	Natur	24.46574275	1433.904245	1433.904245	0	201.6246688	0	0.0004	0.000247	0	0.000647	2.65E-06	8.89E-07	0	3.54E-06	1.42E-05																				
Placer	2050	LDA	Aggre	Aggre	Gasol	123499.6549	5015040.191	5015040.191	0	577610.6258	0	0.110565	0	0.101858	0.212423	0.00257	0	0.000456	0.003026	0.011056																				
Placer	2050	LDA	Aggre	Aggre	Diese	79.79288833	2939.827863	2939.827863	0	357.7068403	0	3.74E-05	0	0	3.74E-05	2.97E-06	0	0	2.97E-06	6.48E-06																				
Placer	2050	LDA	Aggre	Aggre	Electr	17207.76154	733092.6405	0	733092.6405	81004.33815	283034.2647	0	0	0	0	0	0	0	0	0.001616																				
Placer	2050	LDA	Aggre	Aggre	Plug-i	5824.781078	239393.6854	97486.27019	141907.4152	24085.46976	42860.2689	0.000771	0	0.003117	0.003888	5.01E-05	0	1.99E-05	6.99E-05	0.000528																				
Placer	2050	LDT1	Aggre	Aggre	Gasol	10925.01631	425182.5719	425182.5719	0	49397.63229	0	0.009913	0	0.009646	0.019559	0.000228	0	4.23E-05	0.00027	0.000937																				
Placer	2050	LDT1	Aggre	Aggre	Diese	0.126239038	5.127626977	5.127626977	0	0.581457433	0	1.7E-07	0	0	1.7E-07	2.35E-08	0	0	2.35E-08	1.13E-08																				
Placer	2050	LDT1	Aggre	Aggre	Electr	341.7838814	13890.04226	0	13890.04226	1589.47484	5362.702719	0	0	0	0	0	0	0	0	3.06E-05																				
Placer	2050	LDT1	Aggre	Aggre	Plug-i	260.0197915	10814.5777	4399.195242	6415.382456	1075.181838	1937.636711	3.46E-05	0	0.000139	0.000173	2.24E-06	0	8.66E-07	3.11E-06	2.38E-05																				
Placer	2050	LDT2	Aggre	Aggre	Gasol	95181.38892	3844667.881	3844667.881	0	436917.8464	0	0.095967	0	0.099928	0.195895	0.00201	0	0.000358	0.002368	0.008476																				
Placer	2050	LDT2	Aggre	Aggre	Diese	367.8308773	14782.23339	14782.23339	0	1685.035375	0	0.000493	0	0	0.000493	6.77E-05	0	0	6.77E-05	3.26E-05																				
Placer	2050	LDT2	Aggre	Aggre	Electr	3858.321368	108899.5822	0	108899.5822	17979.90655	42044.22671	0	0	0	0	0	0	0	0	0.00024																				
Placer	2050	LDT2	Aggre	Aggre	Plug-i	2623.511768	107526.8739	43774.87353	63752.00041	10848.22116	19255.00424	0.000344	0	0.001397	0.001741	2.25E-05	0	8.9E-06	3.14E-05	0.000237																				
Placer	2050	LHDT1	Aggre	Aggre	Gasol	3075.728975	116052.7545	116052.7545	0	45823.7789	0	0.001988	8.22E-05	0.020401	0.022471	0.000148	0	4.45E-06	0.000152	0.000256																				
Placer	2050	LHDT1	Aggre	Aggre	Diese	2219.228895	79651.1399	79651.1399	0	27915.10771	0	0.02075	0.002409	0	0.023159	0.001511	6.45E-05	0	0.001575	0.000263																				
Placer	2050	LHDT1	Aggre	Aggre	Electr	4231.664633	188061.0481	0	188061.0481	59182.12935	122424.4198	0	0	0	0	0	0	0	0	0.000415																				
Placer	2050	LHDT2	Aggre	Aggre	Gasol	373.50464	13739.66639	13739.66639	0	5564.662614	0	0.000286	8.44E-06	0.002038	0.002333	1.76E-05	0	5.47E-07	1.81E-05	3.03E-05																				
Placer	2050	LHDT2	Aggre	Aggre	Diese	1179.913957	39136.63055	39136.63055	0	14841.83325	0	0.015714	0.001504	0	0.017218	0.00098	3.42E-05	0	0.001015	0.000129																				
Placer	2050	LHDT2	Aggre	Aggre	Electr	1084.107946	46518.11758	0	46518.11758	14343.41491	29773.59293	0	0	0	0	0	0	0	0	0.000103																				
Placer	2050	MCY	Aggre	Aggre	Gasol	8744.040713	48631.95474	48631.95474	0	17488.08143	0	0.025583	0	0.001141	0.026724	0.000113	0	6.3E-05	0.000176	5.36E-05																				
Placer	2050	MDV	Aggre	Aggre	Gasol	53997.05865	1983932.844	1983932.844	0	246113.9405	0	0.051689	0	0.059006	0.110695	0.001053	0	0.000204	0.001257	0.004374																				
Placer	2050	MDV	Aggre	Aggre	Diese	624.5491106	21902.6037	21902.6037	0	2787.850394	0	0.000265	0	0	0.000265	2.37E-05	0	0	2.37E-05	4.83E-05																				
Placer	2050	MDV	Aggre	Aggre	Electr	3452.667477	96593.64047	0	96593.64047	16032.52966	37293.11753	0	0	0	0	0	0	0	0	0.000213																				
Placer	2050	MDV	Aggre	Aggre	Plug-i	1628.205058	60806.5323	24768.98159	36037.5507	6732.627915	10884.4144	0.000195	0	0.000867	0.001062	1.29E-05	0	5.6E-06	1.85E-05	0.000134																				
Placer	2050	MH	Aggre	Aggre	Gasol	451.3805365	5143.753936	5143.753936	0	45.15610887	0	0.001248	0	1.82E-05	0.001266	7.75E-06	0	1.71E-08	7.77E-06	1.7E-05																				
Placer	2050	MH	Aggre	Aggre	Diese	330.6366799	3121.466686	3121.466686	0	33.06366799	0	0.008649	0	0	0.008649	6.84E-05	0	0	6.84E-05	1.38E-05																				
Placer	2050	MHDT	Aggre	Aggre	Gasol	205.1498202	10423.62396	10423.62396	0	4104.637602	0	0.000776	1.25E-05	0.002263	0.003051	1.58E-05	0	2.14E-06	1.8E-05	3.45E-05																				
Placer	2050	MHDT	Aggre	Aggre	Diese	2869.736215	124177.6012	124177.6012	0	33629.94174	0	0.038097	0.020086	0.04099	0.099174	0.000415	7.92E-06	0	0.000423	0.000411																				
Placer	2050	MHDT	Aggre	Aggre	Electr	3587.254384	159453.975	0	159453.975	43723.91442	171936.5252	0	0	0	0	0	0	0	0	0.000527																				
Placer	2050	OBUS	Aggre	Aggre	Gasol	46.17028825	1635.246234	1635.246234	0	923.7751274	0	0.000474	2.42E-06	0.000341	0.000817	2.16E-06	0	2.79E-07	2.43E-06	5.41E-06																				
Placer	2050	OBUS	Aggre	Aggre	Diese	143.6683963	7812.07943	7812.07943	0	1527.728562	0	0.006215	0.000564	0.00141	0.00819	8.69E-05	4.68E-07	0	8.74E-05	2.58E-05																				
Placer	2050	OBUS	Aggre	Aggre	Electr	35.59421383	2208.447463	0	2208.447463	712.1690302	2449.795852	0	0	0	0	0	0	0	0	7.3E-06																				
Placer	2050	SBUS	Aggre	Aggre	Gasol	23.26970068	1161.750645	1161.750645	0	93.07880272	0	0.000104	1.24E-05	3.8E-05	0.000154	1.51E-06	0	8.25E-08	1.59E-06	2.56E-06																				
Placer	2050	SBUS	Aggre	Aggre	Diese	126.2492845	2597.335773	2597.335773	0	1828.089639	0	0.000797	0.000731	0.001082	0.00261	8.32E-06	3.21E-07	0	8.65E-06	8.59E-06																				
Placer	2050	SBUS	Aggre	Aggre	Electr	145.1137887	4082.1421	0	4082.1421	1846.53527	4300.355415	0	0	0	0	0	0	0	0	1.22E-05																				
Placer	2050	UBUS	Aggre	Aggre	Gasol	12.45506024	844.6206745	844.6206745	0	49.82024096	0	1.68E-05	0	1.69E-05	3.37E-05	1.11E-06	0	7.34E-09	1.11E-06	1.86E-06																				
Placer	2050	UBUS	Aggre	Aggre	Electr	119.5083608	13342.89342	0	13342.89342	478.0334432	23259.92049	0	0	0	0	0	0	0	0	8.75E-05																				

Units: miles/day for CVMT and EVMT

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX	ROG_IDLE X	ROG_STR EX
Placer	2050	HHDT	1.34E-06	1.6E-06	6.17E-08	0	3.28E-09	6.5E-08	7.94E-07	3.84E-06	4.7E-06	0.07128	0	0.00027	0.07155	3.67E-06	0	7.88E-09	3.68E-06	4.22E-06	0	6.01E-07	4.82E-06	1.7E-05	0	4.66E-08
Placer	2050	HHDT	0.034704	0.077396	0.03321	0.000234	0	0.033444	0.04278	0.099154	0.175378	1510.153	103.2717	0	1613.424	0.000623	0.002553	0	0.003176	0.237925	0.016271	0	0.254196	0.01341	0.054961	0
Placer	2050	HHDT	0.002742	0.004306	0	0	0	0	0.006255	0.007834	0.014089	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	HHDT	7.59E-05	9.37E-05	2.88E-06	9.67E-07	0	3.85E-06	5.69E-05	0.000217	0.000278	1.936473	0.241472	0	2.177945	0.001617	0.000583	0	0.0022	0.000395	4.92E-05	0	0.000444	2.31E-05	8.32E-06	0
Placer	2050	LDA	0.015857	0.02994	0.002795	0	0.000496	0.003292	0.044225	0.045305	0.092822	1257.716	0	33.99336	1291.709	0.005549	0	0.020604	0.026153	0.018178	0	0.016181	0.034359	0.015995	0	0.077062
Placer	2050	LDA	9.32E-06	1.88E-05	3.1E-06	0	0	3.1E-06	2.59E-05	2.66E-05	5.56E-05	0.582055	0	0	0.582055	7.26E-07	0	0	7.26E-07	9.17E-05	0	0	9.17E-05	1.56E-05	0	0
Placer	2050	LDA	0.001242	0.002858	0	0	0	0	0.006465	0.003549	0.010013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	LDA	0.000382	0.00098	5.44E-05	0	2.16E-05	7.61E-05	0.002111	0.001093	0.00328	31.71261	0	1.473815	33.18642	0.000102	0	0.001126	0.001229	0.00013	0	0.000516	0.000646	0.000337	0	0.004807
Placer	2050	LDT1	0.001607	0.002815	0.000248	0	4.6E-05	0.000294	0.003749	0.004592	0.008635	122.7542	0	3.378674	126.1328	0.000501	0	0.001859	0.002361	0.001594	0	0.00148	0.003074	0.001458	0	0.007092
Placer	2050	LDT1	1.93E-08	5.41E-08	2.46E-08	0	0	2.46E-08	4.52E-08	5.52E-08	1.25E-07	0.001895	0	0	0.001895	3.85E-09	0	0	3.85E-09	2.99E-07	0	0	2.99E-07	8.29E-08	0	0
Placer	2050	LDT1	2.36E-05	5.42E-05	0	0	0	0	0.000122	6.73E-05	0.00019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	LDT1	1.73E-05	4.42E-05	2.44E-06	0	9.42E-07	3.38E-06	9.54E-05	4.94E-05	0.000148	1.433232	0	0.075461	1.508693	4.65E-06	0	4.99E-05	5.46E-05	5.88E-06	0	2.3E-05	2.89E-05	1.52E-05	0	0.000213
Placer	2050	LDT2	0.014459	0.025304	0.002186	0	0.00039	0.002576	0.033904	0.041313	0.077793	1155.009	0	31.545	1186.554	0.00577	0	0.02028	0.02605	0.014939	0	0.015008	0.029947	0.017302	0	0.079225
Placer	2050	LDT2	5.56E-05	0.000156	7.08E-05	0	0	7.08E-05	0.00013	0.000159	0.00036	4.046248	0	0	4.046248	1.11E-05	0	0	1.11E-05	0.000637	0	0	0.000637	0.000239	0	0
Placer	2050	LDT2	0.000185	0.000425	0	0	0	0	0.00096	0.000528	0.001488	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	LDT2	0.000172	0.00044	2.45E-05	0	9.68E-06	3.41E-05	0.000948	0.000491	0.001474	14.26459	0	0.799643	15.06423	4.62E-05	0	0.000502	0.000548	5.83E-05	0	0.000231	0.000289	0.000152	0	0.002143
Placer	2050	LHDT1	0.003492	0.0039	0.000161	0	4.83E-06	0.000166	0.001023	0.000978	0.011167	95.02531	0.362723	1.201586	96.58962	0.000147	0.000282	0.000978	0.001408	0.000193	8.35E-06	0.002019	0.00222	0.000481	0.000944	0.004236
Placer	2050	LHDT1	0.002397	0.004236	0.001579	6.75E-05	0	0.001647	0.001054	0.006848	0.009549	52.56692	0.283108	0	52.85003	0.000349	1.25E-05	0	0.000361	0.008282	4.46E-05	0	0.008327	0.007505	0.000269	0
Placer	2050	LHDT1	0.00283	0.003244	0	0	0	0	0.001658	0.008085	0.009743	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	LHDT2	0.000482	0.000531	1.91E-05	0	5.95E-07	1.97E-05	0.000121	0.001378	0.001519	12.65461	0.05056	0.142715	12.84788	1.59E-05	2.95E-05	0.000103	0.000148	3.12E-05	8.84E-07	0.000211	0.000243	5.07E-05	9.69E-05	0.000437
Placer	2050	LHDT2	0.001374	0.002518	0.001025	3.58E-05	0	0.00106	0.000518	0.003926	0.005504	30.39607	0.248632	0	30.64471	0.000217	6.63E-06	0	0.000223	0.004789	3.92E-05	0	0.004828	0.004665	0.000143	0
Placer	2050	LHDT2	0.000817	0.000919	0	0	0	0	0.00041	0.002333	0.002743	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	MCV	0.000225	0.000455	0.000122	0	6.76E-05	0.000189	0.000214	0.000643	0.001047	10.06682	0	0.699326	10.76614	0.007277	0	0.002488	0.009765	0.001926	0	7.79E-05	0.002004	0.04314	0	0.017233
Placer	2050	MDV	0.007599	0.01323	0.001145	0	0.000222	0.001367	0.017495	0.021711	0.040573	722.0498	0	21.6264	743.6762	0.003054	0	0.011628	0.014682	0.007815	0	0.008635	0.01645	0.009299	0	0.046025
Placer	2050	MDV	8.43E-05	0.000156	2.48E-05	0	0	2.48E-05	0.000193	0.000241	0.000459	7.833983	0	0	7.833983	5.96E-06	0	0	5.96E-06	0.001234	0	0	0.001234	0.000128	0	0
Placer	2050	MDV	0.000164	0.000377	0	0	0	0	0.000852	0.000469	0.001321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	MDV	9.74E-05	0.00025	1.4E-05	0	6.09E-06	2.01E-05	0.000536	0.000278	0.000834	8.067752	0	0.603751	8.671503	2.58E-05	0	0.000308	0.000334	3.22E-05	0	0.00014	0.000173	8.58E-05	0	0.00133
Placer	2050	MH	8.94E-05	0.000114	8.43E-06	0	1.86E-08	8.45E-06	6.8E-05	0.000255	0.000332	11.04194	0	0.00146	11.0434	1.59E-05	0	1.66E-06	1.76E-05	0.000102	0	2.06E-06	0.000104	4.47E-05	0	5.64E-06
Placer	2050	MH	5.4E-05	0.000136	7.15E-05	0	0	7.15E-05	5.51E-05	0.000154	0.000281	3.75076	0	0	3.75076	1.37E-05	0	0	1.37E-05	0.000591	0	0	0.000591	0.000296	0	0
Placer	2050	MHDT	0.000181	0.000234	1.72E-05	0	2.32E-06	1.96E-05	0.000138	0.000518	0.000675	17.58858	0.103275	0.16451	17.85637	3.21E-05	6.19E-05	0.000172	0.000266	8.07E-05	1.22E-06	0.00017	0.000252	0.00012	0.000233	0.000841
Placer	2050	MHDT	0.002158	0.002992	0.000434	8.28E-06	0	0.000442	0.001643	0.006166	0.008251	136.6835	5.943498	0	142.627	3.68E-05	2.65E-05	0	6.32E-05	0.021535	0.000936	0	0.022471	0.000792	0.00057	0
Placer	2050	MHDT	0.001392	0.001919	0	0	0	0	0.002109	0.003976	0.006085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	OBUS	2.83E-05	3.62E-05	2.34E-06	0	3.03E-07	2.65E-06	2.16E-05	8.09E-05	0.000105	2.73536	0.017276	0.026575	2.779212	3.06E-06	9.95E-06	2.86E-05	4.16E-05	2.74E-05	2.38E-07	2.45E-05	5.21E-05	1.12E-05	3.82E-05	0.000145
Placer	2050	OBUS	0.00017	0.000283	9.08E-05	4.89E-07	0	9.13E-05	0.000103	0.000485	0.00068	10.0401	0.233549	0	10.27365	6.65E-06	3.94E-06	0	1.06E-05	0.001582	3.68E-05	0	0.001619	0.000143	8.49E-05	0
Placer	2050	OBUS	1.91E-05	2.64E-05	0	0	0	0	2.92E-05	5.46E-05	8.38E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	SBUS	2.01E-05	2.43E-05	1.64E-06	0	8.98E-08	1.73E-06	1.02E-05	5.75E-05	6.95E-05	0.892451	0.057841	0.005078	0.95537	2.31E-06	6.39E-05	7.46E-06	7.37E-05	1.01E-05	1.62E-06	4.32E-06	1.6E-05	9.8E-06	0.000273	4.09E-05
Placer	2050	SBUS	4.5E-05	6.22E-05	8.7E-06	3.35E-07	0	9.04E-06	3.44E-05	0.000129	0.000172	2.926593	0.251945	0	3.178539	8.09E-07	1.08E-06	0	1.89E-06	0.000461	3.97E-05	0	0.000501	1.74E-05	2.32E-05	0
Placer	2050	SBUS	3.54E-05	4.75E-05	0	0	0	0	4.87E-05	0.000101	0.00015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Placer	2050	UBUS	2.97E-05	3.26E-05	1.2E-06	0	7.99E-09	1.21E-06	7.45E-06	8.47E-05	9.34E-05	0.783005	0	0.00195	0.784955	1.29E-06	0	1.56E-06	2.84E-06	2.81E-06	0	2.82E-06	5.63E-06	3.46E-06	0	5.38E-06
Placer	2050	UBUS	0.000283	0.000371	0	0	0	0	0.00035	0.000809	0.001159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Units: miles/day for CVMT and EVMT

																												Fuel
Region	Calendar Year	Vehicle Category	ROG_TOT EX	ROG_DIU RN	ROG_HOT SOAK	ROG_RUN LOSS	ROG_TOT AL	ROG_RUN EX	TOG_IDLE X	TOG_STR EX	TOG_TOT EX	TOG_DIU RN	TOG_HOT SOAK	TOG_RUN LOSS	TOG_TOT AL	CO_RUNE X	CO_IDLEX	CO_STREX X	CO_TOTE X	SOX_RUN EX	SOX_IDLE X	SOX_STRE X	SOX_TOTE X	NH3_RUN EX	Consumption			
Placer	2050	HHDT	1.71E-05	5.65E-07	6.63E-08	1.12E-06	1.88E-05	2.48E-05	0	5.1E-08	2.49E-05	5.65E-07	6.63E-08	1.12E-06	2.66E-05	0.001152	0	3.26E-05	0.001185	7.05E-07	0	2.67E-09	7.07E-07	1.79E-06	0.007545			
Placer	2050	HHDT	0.068371	0	0	0	0.068371	0.015266	0.062569	0	0.077835	0	0	0	0.077835	0.048677	0.811972	0	0.860649	0.0143	0.000978	0	0.015278	0.262659	144.1266			
Placer	2050	HHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	HHDT	3.14E-05	0	0	0	3.14E-05	0.001651	0.000595	0	0.002245	0	0	0	0.002245	0.011442	0.002127	0	0.013568	0	0	0	0	0.001374	0.251737			
Placer	2050	LDA	0.093056	0.116129	0.020959	0.087243	0.317387	0.023339	0	0.084373	0.107712	0.116129	0.020959	0.087243	0.332043	2.803561	0	1.071365	3.874926	0.012434	0	0.000336	0.01277	0.231838	136.2091			
Placer	2050	LDA	1.56E-05	0	0	0	1.56E-05	1.78E-05	0	0	1.78E-05	0	0	0	1.78E-05	0.000493	0	0	0.000493	5.52E-06	0	0	5.52E-06	1E-05	0.051995			
Placer	2050	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	LDA	0.005144	0.005287	0.000959	0.002004	0.013394	0.000492	0	0.005263	0.005755	0.005287	0.000959	0.002004	0.014005	0.052311	0	0.037249	0.08956	0.000314	0	1.46E-05	0.000328	0.004511	3.499467			
Placer	2050	LDT1	0.00855	0.016217	0.002547	0.011935	0.039249	0.002128	0	0.007764	0.009892	0.016217	0.002547	0.011935	0.040591	0.252717	0	0.095739	0.348456	0.001214	0	3.34E-05	0.001247	0.019601	13.30055			
Placer	2050	LDT1	8.29E-08	0	0	0	8.29E-08	9.44E-08	0	0	9.44E-08	0	0	0	9.44E-08	8.72E-07	0	0	8.72E-07	1.8E-08	0	0	1.8E-08	1.75E-08	0.000169			
Placer	2050	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	LDT1	0.000228	0.000268	4.55E-05	0.0001	0.000642	2.22E-05	0	0.000233	0.000255	0.000268	4.55E-05	0.0001	0.000669	0.002371	0	0.001647	0.004018	1.42E-05	0	7.46E-07	1.49E-05	0.000204	0.15909			
Placer	2050	LDT2	0.096527	0.116098	0.018907	0.086835	0.318368	0.025248	0	0.086741	0.111989	0.116098	0.018907	0.086835	0.333829	2.564285	0	1.048197	3.612482	0.011418	0	0.000312	0.01173	0.17769	125.1207			
Placer	2050	LDT2	0.000239	0	0	0	0.000239	0.000272	0	0	0.000272	0	0	0	0.000272	0.002505	0	0	0.002505	3.83E-05	0	0	3.83E-05	5.05E-05	0.36145			
Placer	2050	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	LDT2	0.002294	0.002721	0.000462	0.001028	0.006505	0.000221	0	0.002346	0.002567	0.002721	0.000462	0.001028	0.006778	0.023611	0	0.016584	0.040195	0.000141	0	7.91E-06	0.000149	0.002027	1.588504			
Placer	2050	LHDT1	0.005661	0.007642	0.000991	0.010361	0.024655	0.000702	0.001378	0.004638	0.006718	0.007642	0.000991	0.010361	0.025712	0.075614	0.01282	0.172163	0.260597	0.000939	3.59E-06	1.19E-05	0.000955	0.005757	10.18526			
Placer	2050	LHDT1	0.007773	0	0	0	0.007773	0.008544	0.000306	0	0.008849	0	0	0	0.008849	0.018728	0.002225	0	0.020953	0.000498	2.68E-06	0	0.000501	0.01917	4.721072			
Placer	2050	LHDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	LHDT2	0.000584	0.000962	0.00012	0.001305	0.002972	7.39E-05	0.000141	0.000478	0.000694	0.000962	0.00012	0.001305	0.003081	0.009062	0.001557	0.021155	0.031773	0.000125	5E-07	1.41E-06	0.000127	0.000682	1.354793			
Placer	2050	LHDT2	0.004808	0	0	0	0.004808	0.005311	0.000163	0	0.005473	0	0	0	0.005473	0.011928	0.001183	0	0.013111	0.000288	2.36E-06	0	0.00029	0.009234	2.737479			
Placer	2050	LHDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	MCY	0.060373	0.037643	0.066582	0.076031	0.240628	0.054058	0	0.018772	0.07283	0.037643	0.066582	0.076031	0.253085	0.545389	0	0.15802	0.703408	9.95E-05	0	6.91E-06	0.000106	0.000493	1.135276			
Placer	2050	MDV	0.055324	0.072834	0.011667	0.053794	0.193619	0.013568	0	0.050392	0.06396	0.072834	0.011667	0.053794	0.202255	1.36989	0	0.601526	1.971416	0.007138	0	0.000214	0.007352	0.091483	78.41973			
Placer	2050	MDV	0.000128	0	0	0	0.000128	0.000146	0	0	0.000146	0	0	0	0.000146	0.004091	0	0	0.004091	7.42E-05	0	0	7.42E-05	7.48E-05	0.699807			
Placer	2050	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	MDV	0.001416	0.00179	0.000297	0.000683	0.004187	0.000125	0	0.001457	0.001582	0.00179	0.000297	0.000683	0.004352	0.013342	0	0.010299	0.023641	7.98E-05	0	5.97E-06	8.57E-05	0.001147	0.914399			
Placer	2050	MH	5.04E-05	0.000991	0.000138	5.62E-06	0.001185	6.53E-05	0	6.17E-06	7.15E-05	0.000991	0.000138	5.62E-06	0.001206	0.000812	0	0.000106	0.000918	0.000109	0	1.44E-08	0.000109	0.000255	1.164513			
Placer	2050	MH	0.000296	0	0	0	0.000296	0.000337	0	0	0.000337	0	0	0	0.000337	0.000849	0	0	0.000849	3.55E-05	0	0	3.55E-05	0.000743	0.335054			
Placer	2050	MHDT	0.001193	0.000494	5.76E-05	0.000962	0.002707	0.000175	0.000339	0.000921	0.001435	0.000494	5.76E-05	0.000962	0.002949	0.001825	0.00346	0.01435	0.019634	0.000174	1.02E-06	1.63E-06	0.000177	0.000517	1.882932			
Placer	2050	MHDT	0.001362	0	0	0	0.001362	0.000901	0.000649	0	0.00155	0	0	0	0.00155	0.005802	0.024101	0	0.029903	0.001294	5.63E-05	0	0.001351	0.0301	12.74081			
Placer	2050	MHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	OBUS	0.000195	0.000181	2.58E-05	0.000205	0.000607	1.63E-05	5.57E-05	0.000159	0.000231	0.000181	2.58E-05	0.000205	0.000644	0.000284	0.000295	0.002361	0.00294	2.7E-05	1.71E-07	2.63E-07	2.75E-05	8.11E-05	0.293064			
Placer	2050	OBUS	0.000228	0	0	0	0.000228	0.000163	9.66E-05	0	0.00026	0	0	0	0.00026	0.000712	0.00144	0	0.002152	9.51E-05	2.21E-06	0	9.73E-05	0.001883	0.917741			
Placer	2050	OBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	SBUS	0.000324	8.76E-05	9.19E-06	6.45E-05	0.000485	1.43E-05	0.000398	4.48E-05	0.000457	8.76E-05	9.19E-06	6.45E-05	0.000619	0.000225	0.00211	0.000871	0.003206	8.82E-06	5.72E-07	5.02E-08	9.44E-06	5.76E-05	0.100743			
Placer	2050	SBUS	4.06E-05	0	0	0	4.06E-05	1.98E-05	2.64E-05	0	4.62E-05	0	0	0	4.62E-05	0.000147	0.000982	0	0.001129	2.77E-05	2.39E-06	0	3.01E-05	0.00063	0.283938			
Placer	2050	SBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Placer	2050	UBUS	8.84E-06	4.87E-06	1.35E-06	5.14E-06	2.02E-05	5.05E-06	0	5.89E-06	1.09E-05	4.87E-06	1.35E-06	5.14E-06	2.23E-05	0.00054	0	0.000358	0.000898	7.74E-06	0	1.93E-08	7.76E-06	4.19E-05	0.082773			
Placer	2050	UBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Source: EMFAC2021 (v1.0.2) Emission Factors Estimation

Region Type: County Units: tons/mile
Region: Placer Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.
Calendar Year: 2050 The emission rates are calculated as follows:
Season: Annual EF_PM = (PM_TOTAL - PMTW - PMBW)/Total VMT
Vehicle Classification: EMFAC2007 EF_Gas = Gas_TOTEX/Total VMT
Units: miles/day for CVMT and EVI EF_VOC = VOC_TOTLE/Total VMT

GWP
1 25 298
MTs/ton 0.907185

Vehicle Classification: EMFAC2007			EF_Gas = Gas_TOTEX/Total VMT											Weighted Emission Factors (tons/mile)											
Units: miles/day for CVMT and EVI			EF_VOC = VOC_TOTLE/Total VMT											Diesel Vehicle Fleet											
			EMFAC Fleet											1.707E-07	5.636E-09	6.334E-08	1.198E-09	0.0001265	2.618E-10	1.993E-08	1.109E-08	2.495E-09	3.566E-09	2.387E-09	
														2.12E-07	8.46E-08	8.08E-07	3.58E-09	3.68E-04	6.04E-09	2.60E-08	3.00E-08	3.04E-09	9.36E-09	2.89E-09	
Region	Calendar Year	Vehicle Category	PM10_VM T_D	PM10_VM T_Ex	PM2.5_VM T_D	PM2.5_VM T_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E
Placer	2050	HHDT	1.29E-07	1.81E-09	4.28E-08	1.66E-09	3.18E-06	5.23E-07	3.29E-05	1.96E-08	1.99E-03	1.02E-07	1.34E-07	2.437E-06	7.75E-12	1.27E-12	8.02E-11	4.79E-14	4.84E-09	2.49E-13	3.26E-13	3.14E-13	4.40E-15	1.04E-13	4.05E-15
Placer	2050	HHDT	1.31E-07	3.09E-08	4.19E-08	2.95E-08	2.18E-06	6.31E-08	7.94E-07	1.41E-08	1.49E-03	2.93E-09	2.35E-07	0.0733345	1.60E-07	4.63E-09	5.83E-08	1.03E-09	1.09E-04	2.15E-10	1.72E-08	9.607E-09	2.26E-09	3.073E-09	2.17E-09
Placer	2050	HHDT	8.60E-08	0.00E+00	2.63E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0110853	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.537E-10	0.00E+00	2.914E-10	0.00E+00
Placer	2050	HHDT	1.91E-07	2.68E-09	6.29E-08	2.47E-09	4.51E-07	2.19E-08	9.46E-06	0.00E+00	1.52E-03	1.53E-06	3.10E-07	9.706E-05	4.38E-11	2.13E-12	9.18E-10	0.00E+00	1.47E-07	1.49E-10	3.01E-11	1.853E-11	2.60E-13	6.1E-12	2.40E-13
Placer	2050	LDA	1.79E-08	6.56E-10	5.37E-09	6.03E-10	4.24E-08	6.33E-08	7.73E-07	2.55E-09	2.58E-04	5.21E-09	6.85E-09	0.3394522	1.44E-08	2.15E-08	2.62E-07	8.64E-10	8.74E-05	1.77E-09	2.33E-09	6.06E-09	2.23E-10	1.822E-09	2.05E-10
Placer	2050	LDA	1.79E-08	1.06E-09	5.37E-09	1.01E-09	1.27E-08	5.32E-09	1.68E-07	1.88E-09	1.98E-04	2.47E-10	3.12E-08	0.000199	2.53E-12	1.06E-12	3.33E-11	3.73E-13	3.94E-08	4.91E-14	6.21E-12	3.556E-12	2.10E-13	1.069E-12	2.01E-13
Placer	2050	LDA	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0496207	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.778E-10	0.00E+00	1.935E-10	0.00E+00
Placer	2050	LDA	1.34E-08	3.18E-10	3.80E-09	2.92E-10	1.62E-08	5.59E-08	3.74E-07	1.37E-09	1.39E-04	5.13E-09	2.70E-09	0.0162038	2.63E-10	9.07E-10	6.06E-09	2.22E-11	2.25E-06	8.32E-11	4.37E-11	2.169E-10	5.15E-12	6.161E-11	4.73E-12
Placer	2050	LDT1	1.96E-08	6.91E-10	5.98E-09	6.35E-10	4.60E-08	9.23E-08	8.20E-07	2.93E-09	2.97E-04	5.55E-09	7.23E-09	0.0287793	1.32E-09	2.66E-09	2.36E-08	8.44E-11	8.54E-06	1.60E-10	2.08E-10	5.646E-10	1.99E-11	1.722E-10	1.83E-11
Placer	2050	LDT1	1.96E-08	4.79E-09	5.97E-09	4.59E-09	3.31E-08	1.62E-08	1.70E-07	3.50E-09	3.70E-04	7.51E-10	5.82E-08	3.471E-07	1.15E-14	5.61E-15	5.90E-14	1.22E-15	1.28E-10	2.61E-16	2.02E-14	6.797E-15	1.66E-15	2.073E-15	1.59E-15
Placer	2050	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0009402	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.285E-11	0.00E+00	3.668E-12	0.00E+00
Placer	2050	LDT1	1.34E-08	3.13E-10	3.80E-09	2.87E-10	1.60E-08	5.93E-08	3.72E-07	1.38E-09	1.40E-04	5.05E-09	2.67E-09	0.000732	1.17E-11	4.34E-11	2.72E-10	1.01E-12	1.02E-07	3.69E-12	1.95E-12	9.799E-12	2.29E-13	2.784E-12	2.10E-13
Placer	2050	LDT2	1.96E-08	6.70E-10	5.97E-09	6.16E-10	5.10E-08	8.28E-08	9.40E-07	3.05E-09	3.09E-04	6.78E-09	7.79E-09	0.2602334	1.33E-08	2.15E-08	2.45E-07	7.94E-10	8.03E-05	1.76E-09	2.03E-09	5.091E-09	1.74E-10	1.552E-09	1.60E-10
Placer	2050	LDT2	1.96E-08	4.79E-09	5.97E-09	4.58E-09	3.34E-08	1.62E-08	1.69E-07	2.59E-09	2.74E-04	7.51E-10	4.31E-08	0.0010006	3.34E-11	1.62E-11	1.70E-10	2.60E-12	2.74E-07	7.51E-13	4.31E-11	1.958E-11	4.79E-12	5.97E-12	4.58E-12
Placer	2050	LDT2	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0073711	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.007E-10	0.00E+00	2.876E-11	0.00E+00
Placer	2050	LDT2	1.34E-08	3.17E-10	3.80E-09	2.92E-10	1.62E-08	6.05E-08	3.74E-07	1.39E-09	1.40E-04	5.10E-09	2.69E-09	0.0072782	1.18E-10	4.40E-10	2.72E-09	1.01E-11	1.02E-06	3.71E-11	1.96E-11	9.743E-11	2.31E-12	2.768E-11	2.12E-12
Placer	2050	LHDT1	9.48E-08	1.43E-09	3.23E-08	1.31E-09	1.94E-07	2.12E-07	2.25E-06	8.23E-09	8.32E-04	1.21E-08	1.91E-08	0.0078552	1.52E-09	1.67E-09	1.76E-08	6.46E-11	6.54E-06	9.53E-11	1.50E-10	7.447E-10	1.12E-11	2.537E-10	1.03E-11
Placer	2050	LHDT1	9.92E-08	2.07E-08	3.34E-08	1.98E-08	2.91E-07	9.76E-08	2.63E-07	6.29E-09	6.64E-04	4.53E-09	1.05E-07	0.0053913	1.57E-09	5.26E-10	1.42E-09	3.39E-11	3.58E-06	2.44E-11	5.64E-10	5.349E-10	1.11E-10	1.801E-10	1.07E-10
Placer	2050	LHDT1	5.18E-08	0.00E+00	1.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0127293	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.595E-10	0.00E+00	2.196E-10	0.00E+00
Placer	2050	LHDT2	1.09E-07	1.44E-09	3.73E-08	1.32E-09	1.70E-07	2.16E-07	2.31E-06	9.24E-09	9.35E-04	1.08E-08	1.77E-08	0.00093	1.58E-10	2.01E-10	2.15E-09	8.60E-12	8.70E-07	1.00E-11	1.65E-11	1.015E-10	1.34E-12	3.47E-11	1.23E-12
Placer	2050	LHDT2	1.14E-07	2.71E-08	3.84E-08	2.59E-08	4.40E-07	1.23E-07	3.35E-07	7.42E-09	7.83E-04	5.71E-09	1.23E-07	0.002649	1.17E-09	3.25E-10	8.87E-10	1.97E-11	2.07E-06	1.51E-11	3.27E-10	3.008E-10	7.18E-11	1.018E-10	6.87E-11
Placer	2050	LHDT2	5.90E-08	0.00E+00	1.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0031487	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.857E-10	0.00E+00	6.221E-11	0.00E+00
Placer	2050	MCY	1.76E-08	3.89E-09	5.73E-09	3.63E-09	5.50E-07	4.95E-06	1.45E-05	2.19E-09	2.21E-04	2.01E-07	4.12E-08	0.0032917	1.81E-09	1.63E-08	4.76E-08	7.20E-12	7.29E-07	6.61E-10	1.36E-10	5.806E-11	1.28E-11	1.887E-11	1.19E-11
Placer	2050	MDV	1.98E-08	6.89E-10	6.03E-09	6.34E-10	5.58E-08	9.76E-08	9.94E-07	3.71E-09	3.75E-04	7.40E-09	8.29E-09	0.1342861	7.49E-09	1.31E-08	1.33E-07	4.98E-10	5.03E-05	9.94E-10	1.11E-09	2.654E-09	9.25E-11	8.104E-10	8.51E-11
Placer	2050	MDV	1.98E-08	1.13E-09	6.05E-09	1.08E-09	1.21E-08	5.85E-09	1.87E-07	3.39E-09	3.58E-04	2.72E-10	5.64E-08	0.0014825	1.79E-11	8.68E-12	2.77E-10	5.02E-12	5.30E-07	4.03E-13	8.35E-11	2.938E-11	1.68E-12	8.976E-12	1.61E-12
Placer	2050	MDV	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0065381	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.939E-11	0.00E+00	2.552E-11	0.00E+00
Placer	2050	MDV	1.34E-08	3.30E-10	3.81E-09	3.04E-10	1.75E-08	6.89E-08	3.89E-07	1.41E-09	1.43E-04	5.50E-09	2.84E-09	0.0041158	7.19E-11	2.83E-10	1.60E-09	5.80E-12	5.87E-07	2.26E-11	1.17E-11	5.512E-11	1.36E-12	1.566E-11	1.25E-12
Placer	2050	MH	6.29E-08	1.64E-09	2.07E-08	1.51E-09	2.46E-07	2.30E-07	1.78E-07	2.12E-08	2.15E-03	3.41E-09	2.03E-08	0.0003482	8.57E-11	8.02E-11	6.21E-11	7.39E-12	7.47E-07	1.19E-12	7.06E-12	2.189E-11	5.72E-13	7.202E-12	5.26E-13
Placer	2050	MH	6.71E-08	2.29E-08	2.17E																				

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Placer

Calendar Year: 2050

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category		Weighted Energy Consumption Rates			
			0.0001202				
			3.41E-04	1.13E-02	2.50E-02	7.78E-02	
			CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile	
Placer	2050	HHDT	4.487E-09	0	0.20953215	0	
Placer	2050	HHDT	0.0001037	0.133027	0	0	
Placer	2050	HHDT	0	0	0	1.8428365	
Placer	2050	HHDT	1.452E-07	0	0	0	
Placer	2050	LDA	7.999E-05	0	0.02716013	0	
Placer	2050	LDA	3.742E-08	0.01768632	0	0	
Placer	2050	LDA	0	0	0	0.3860825	
Placer	2050	LDA	2.052E-06	0	0	0.3020298	
Placer	2050	LDT1	7.805E-06	0	0.03128197	0	
Placer	2050	LDT1	1.218E-10	0.03301437	0	0	
Placer	2050	LDT1	0	0	0	0.3860825	
Placer	2050	LDT1	9.325E-08	0	0	0.3020298	
Placer	2050	LDT2	7.345E-05	0	0.03254394	0	
Placer	2050	LDT2	2.601E-07	0.02445163	0	0	
Placer	2050	LDT2	0	0	0	0.3860825	
Placer	2050	LDT2	9.311E-07	0	0	0.3020298	
Placer	2050	LHDT1	5.974E-06	0	0.08776401	0	
Placer	2050	LHDT1	3.398E-06	0.05927188	0	0	
Placer	2050	LHDT1	0	0	0	0.6509823	
Placer	2050	LHDT2	7.936E-07	0	0.09860453	0	
Placer	2050	LHDT2	1.97E-06	0.06994673	0	0	
Placer	2050	LHDT2	0	0	0	0.6400429	
Placer	2050	MCY	7.128E-07	0	0.02334424	0	
Placer	2050	MDV	4.599E-05	0	0.03952741	0	
Placer	2050	MDV	5.036E-07	0.03195084	0	0	
Placer	2050	MDV	0	0	0	0.3860825	
Placer	2050	MDV	5.361E-07	0	0	0.3020298	
Placer	2050	MH	6.8E-07	0	0.22639361	0	
Placer	2050	MH	2.411E-07	0.10733861	0	0	
Placer	2050	MHDT	1.101E-06	0	0.18064079	0	
Placer	2050	MHDT	9.169E-06	0.10260153	0	0	
Placer	2050	MHDT	0	0	0	1.0782831	
Placer	2050	OBUS	1.717E-07	0	0.17921729	0	
Placer	2050	OBUS	6.605E-07	0.11747722	0	0	
Placer	2050	OBUS	0	0	0	1.1092842	
Placer	2050	SBUS	5.907E-08	0	0.08671619	0	
Placer	2050	SBUS	2.043E-07	0.10931878	0	0	
Placer	2050	SBUS	0	0	0	1.0534556	
Placer	2050	UBUS	4.831E-08	0	0.09799965	0	
Placer	2050	UBUS	0	0	0	1.7432441	

Region: Sacramento

Regional VMT

Sacramento	Daily VMT
2020	35,277,108
2050	40,497,416

Emission from VMT on County Roads

Year	Emission (tons/day)											GHG (MT/day)
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
2020	19.22	10.17	81.05	0.17	17706.28	1.11	1.15	12.10	0.23	3.09	0.22	16397.65
2050	5.14	3.82	33.31	0.13	12853.24	0.31	0.72	13.83	0.07	3.52	0.06	11862.21

PM_D is the sum of breakwear, tirewear, and fugitive dust.

Change in Diesel PM2.5 and PM10 Emissions

Year	VMT on County Road	% diesel	Diesel PM (grams/mile)		Diesel PM (grams/day)	
			PM10	PM2.5	PM10	PM2.5
2020	35,277,108	7.3%	4.03E-03	3.85E-03	10,327	9,880
2050	40,497,416	5.5%	9.95E-04	9.52E-04	2,218	2,122
Percent Change		-24.3%			-78.5%	-78.5%

Fugitive Dust Emission Factors

3 Travel on Paved Roads
E(lbs/VMT)=(k)(sL)^.91 (W)^1.02

Where:	PM10	Unit	Source
k= Particle Size Multiplier:	0.0022	lb/VMT	AP-42 Chapter 13.2.1, Table 13.2.1-1, PM10 emissions
sL= road surface silt loading	0.1	g/m^2	CalEEMod default
W= average weight of the vehicles traveling the road	2.4	tons	Statewide average vehicle weight in CA
PM10 Emission factor	0.00066	lbs/VMT	Public roads

Correction for Natural Precipitation⁵

3a	E(ext)=E[(1-P/4N)]			
	Where:	Unit	Source	
	Ext = annual or other long-term average emission factor	dimensionless		
	P=#days/yr with >=0.01 inch precipitation during	58 days	Note: Sacramento data is used for all counties in the plan region	
	N=# days in averaging period	365 days	Sacramento data: https://wrcc.dri.edu/Climate/comp_table_show.php?type=ppt_mean	
	Corrected EF PM10	0.00063 lbs/VMT	Public roads	PM10 3.16216E-07 tons/mi
	Corrected EF PM2.5	0.00016 lbs/VMT	Public roads	PM2.5 7.90539E-08 tons/mi

Sources

EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 1

Fugitive Dust		
Source	PM2.5/PM10	Reference
Paved road	0.25	EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final Report, Oct 2005.

Region: Sacramento

2020 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	3.46E-07	1.245E-08	5.307E-08	9.615E-10	0.0001015	5.782E-10	1.6E-08	7.158E-09	4.439E-09	2.343E-09	4.247E-09	9.644E-05
EFs (tons/mile)	5.45E-07	2.88E-07	2.30E-06	4.88E-09	5.02E-04	3.15E-08	3.25E-08	2.69E-08	6.49E-09	8.42E-09	6.13E-09	4.65E-04

2050 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	8.34E-08	2.879E-09	3.026E-08	6.615E-10	6.985E-05	1.337E-10	1.1E-08	5.775E-09	1.097E-09	1.87E-09	1.05E-09	6.634E-05
EFs (tons/mile)	1.27E-07	9.43E-08	8.23E-07	3.09E-09	3.17E-04	7.56E-09	1.78E-08	2.53E-08	1.67E-09	7.84E-09	1.58E-09	2.93E-04

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

		Mod		1065371.6 32006636.72 5457588.841																			
Region	Calendar Year	Vehicle Category	Year	Spee	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumption	NOx_RUN EX	NOx_IDLE X	NOx_STR EX	NOx_TOT EX	PM2.5_R UNEX	PM2.5_ID LEX	PM2.5_ST REX	PM2.5_T OTEX	PM2.5_P MTW			
Sacramento	2020	HHDT	Aggre	Aggre	Gasol	31.785752	507.4837292	507.4837292	0	635.9693349	0	0.012247	0	0.000317	0.012565	8.39E-06	0	4.04E-06	1.24E-05	2.8E-06			
Sacramento	2020	HHDT	Aggre	Aggre	Diese	8981.665	854761.1528	854761.1528	0	94487.78395	0	4.548502	0.591011	0.220092	5.359605	0.051339	0.00111	0	0.052449	0.008257			
Sacramento	2020	HHDT	Aggre	Aggre	Natur	556.36576	37463.72183	37463.72183	0	3061.411859	0	0.088502	0.006115	0	0.094617	0.000113	5.36E-06	0	0.000118	0.000372			
Sacramento	2020	LDA	Aggre	Aggre	Gasol	507638.24	15324520.44	15324520.44	0	2345716.641	0	1.234522	0	0.858605	2.093127	0.023963	0	0.005908	0.029871	0.033785			
Sacramento	2020	LDA	Aggre	Aggre	Diese	2051.8195	52238.99167	52238.99167	0	8900.885053	0	0.021408	0	0	0.021408	0.001183	0	0	0.001183	0.000115			
Sacramento	2020	LDA	Aggre	Aggre	Electr	8694.3882	298588.6796		0	298588.6796	43871.83324	115279.8742	0	0	0	0	0	0	0	0.000658			
Sacramento	2020	LDA	Aggre	Aggre	Plug-i	7421.3446	281609.7475	151328.6127	130281.1348	30687.25976	39348.78572	0.001144	0	0.003866	0.005011	0.000273	0	8.46E-05	0.000358	0.000621			
Sacramento	2020	LDT1	Aggre	Aggre	Gasol	57114.56	1513405.497	1513405.497	0	251747.4477	0	0.326309	0	0.146349	0.472659	0.003783	0	0.000988	0.00477	0.003336			
Sacramento	2020	LDT1	Aggre	Aggre	Diese	31.051384	283.8003406	283.8003406	0	96.23761938	0	0.000505	0	0	0.000505	7.28E-05	0	0	7.28E-05	6.26E-07			
Sacramento	2020	LDT1	Aggre	Aggre	Electr	119.48205	3063.19437		0	3063.19437	548.0654473	1182.645846	0	0	0	0	0	0	0	6.75E-06			
Sacramento	2020	LDT1	Aggre	Aggre	Plug-i	2.2435006	93.09635074	48.69609302	44.40025771	9.276874856	13.41020117	3.68E-07	0	1.17E-06	1.54E-06	8.01E-08	0	2.4E-08	1.04E-07	2.05E-07			
Sacramento	2020	LDT2	Aggre	Aggre	Gasol	216349.24	6648584.726	6648584.726	0	1007049.722	0	0.841442	0	0.531017	1.37246	0.010647	0	0.002388	0.013035	0.014658			
Sacramento	2020	LDT2	Aggre	Aggre	Diese	567.75516	19315.55992	19315.55992	0	2731.799972	0	0.001718	0	0	0.001718	0.000155	0	0	0.000155	4.26E-05			
Sacramento	2020	LDT2	Aggre	Aggre	Electr	31.796496	916.7561875		0	916.7561875	160.0463108	353.9435524	0	0	0	0	0	0	0	2.02E-06			
Sacramento	2020	LDT2	Aggre	Aggre	Plug-i	356.95262	14596.36518	7693.548621	6902.816556	1475.999102	2084.856337	5.82E-05	0	0.000186	0.000244	1.48E-05	0	4.46E-06	1.93E-05	3.22E-05			
Sacramento	2020	LHDT1	Aggre	Aggre	Gasol	23864.694	724767.21	724767.21	0	355548.3864	0	0.226424	0.001068	0.277317	0.504809	0.001455	0	0.000158	0.001613	0.001598			
Sacramento	2020	LHDT1	Aggre	Aggre	Diese	15494.942	471830.612	471830.612	0	194906.8745	0	1.531716	0.041261	0	1.572978	0.029242	0.000471	0	0.029713	0.00156			
Sacramento	2020	LHDT2	Aggre	Aggre	Gasol	3263.1699	104547.7269	104547.7269	0	48616.36914	0	0.025566	0.000144	0.035936	0.061646	0.000178	0	1.67E-05	0.000194	0.00023			
Sacramento	2020	LHDT2	Aggre	Aggre	Diese	5249.0572	173877.3816	173877.3816	0	66026.53625	0	0.38481	0.013479	0	0.398289	0.008318	0.000152	0	0.008471	0.000575			
Sacramento	2020	MCY	Aggre	Aggre	Gasol	26451.558	124091.4419	124091.4419	0	52903.11615	0	0.098531	0	0.01112	0.109651	0.000253	0	0.000218	0.000471	0.000137			
Sacramento	2020	MDV	Aggre	Aggre	Gasol	153582.01	4371437.585	4371437.585	0	700690.0384	0	0.933926	0	0.519404	1.45333	0.007518	0	0.001955	0.009474	0.009637			
Sacramento	2020	MDV	Aggre	Aggre	Diese	2425.4925	82856.8512	82856.8512	0	11712.8655	0	0.008222	0	0	0.008222	0.000654	0	0	0.000654	0.000183			
Sacramento	2020	MDV	Aggre	Aggre	Electr	56.074076	1654.008506		0	1654.008506	284.9374258	638.5837961	0	0	0	0	0	0	0	3.65E-06			
Sacramento	2020	MDV	Aggre	Aggre	Plug-i	422.76041	16564.94813	8907.16648	7657.781647	1748.114294	2312.878296	6.74E-05	0	0.00022	0.000288	1.85E-05	0	5.68E-06	2.42E-05	3.65E-05			
Sacramento	2020	MH	Aggre	Aggre	Gasol	3593.9058	27059.62099	27059.62099	0	359.5343315	0	0.016229	0	0.000157	0.016386	5.55E-05	0	1.96E-07	5.57E-05	8.95E-05			
Sacramento	2020	MH	Aggre	Aggre	Diese	1108.4934	8653.096771	8653.096771	0	110.8493406	0	0.051709	0	0	0.051709	0.00133	0	0	0.00133	3.82E-05			
Sacramento	2020	MHDT	Aggre	Aggre	Gasol	2603.1604	101771.991	101771.991	0	52084.03289	0	0.095569	0.000251	0.02647	0.12229	0.000152	0	3.8E-05	0.00019	0.000337			
Sacramento	2020	MHDT	Aggre	Aggre	Diese	14314.456	603782.2821	603782.2821	0	144049.8496	0	2.668573	0.429539	0.175396	3.273508	0.034512	0.001432	0	0.035944	0.001997			
Sacramento	2020	MHDT	Aggre	Aggre	Natur	160.85794	8196.658273	8196.658273	0	905.2818337	0	0.001292	0.001384	0	0.002676	1.13E-05	3.7E-06	0	1.5E-05	2.71E-05			
Sacramento	2020	OBUS	Aggre	Aggre	Gasol	671.10561	27224.64182	27224.64182	0	13427.48096	0	0.022211	4.8E-05	0.006232	0.028491	2.47E-05	0	4.32E-06	2.91E-05	9E-05			
Sacramento	2020	OBUS	Aggre	Aggre	Diese	567.21789	37003.36626	37003.36626	0	6322.830629	0	0.178637	0.010877	0.007629	0.197143	0.005139	4.81E-05	0	0.005187	0.000122			
Sacramento	2020	OBUS	Aggre	Aggre	Natur	40.237545	2468.606428	2468.606428	0	358.1141461	0	0.000763	6.98E-05	0	0.000833	1.73E-06	1.34E-07	0	1.86E-06	8.16E-06			
Sacramento	2020	SBUS	Aggre	Aggre	Gasol	114.30176	4902.441069	4902.441069	0	457.2070332	0	0.003599	0.000115	0.000337	0.004052	8.22E-06	0	3.79E-07	8.6E-06	1.08E-05			
Sacramento	2020	SBUS	Aggre	Aggre	Diese	952.37675	21801.57311	21801.57311	0	13790.4153	0	0.143356	0.029199	0.00485	0.177405	0.000749	3.48E-05	0	0.000784	7.21E-05			
Sacramento	2020	SBUS	Aggre	Aggre	Natur	15.033775	409.3150515	409.3150515	0	217.6890676	0	5.07E-05	8.22E-05	0	0.000133	1.52E-06	3.11E-07	0	1.84E-06	1.35E-06			
Sacramento	2020	UBUS	Aggre	Aggre	Gasol	159.55584	12103.89823	12103.89823	0	638.2233557	0	0.003654	0	0.000774	0.004427	6.53E-06	0	2.96E-07	6.83E-06	4E-05			
Sacramento	2020	UBUS	Aggre	Aggre	Diese	6.4079023	308.7276784	308.7276784	0	25.63160933	0	7.52E-05	0	0	7.52E-05	1.36E-06	0	0	1.36E-06	1.76E-06			
Sacramento	2020	UBUS	Aggre	Aggre	Electr	0.0051121	0.381084536		0	0.381084536	0.020448289	0.664323376	0	0	0	0	0	0	0	1.26E-09			
Sacramento	2020	UBUS	Aggre	Aggre	Natur	306.01561	29373.14103	29373.14103	0	1224.062436	0	0.014578	0	0	0.014578	7.94E-06	0	0	7.94E-06	0.000267			

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Sacramento

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

1.32E-05

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX				
Sacramento	2020	HHDT	2.3E-05	3.82E-05	8.95E-06		0	4.27E-06	1.32E-05	6.57E-05	9.01E-05	1.636559		0	0.06509	1.701649	0.000562		0	6.16E-09	0.000563	0.000276		0	6.19E-06	0.000282	0.004689	
Sacramento	2020	HHDT	0.029256	0.089962	0.05366	0.00116	0	0.054821	0.033029	0.083588	0.171438	1682.486	92.0962	0	1774.582	0.003762	0.001706	0	0.005468	0.265076	0.01451	0	0.279586	0.081				
Sacramento	2020	HHDT	0.002635	0.003125	0.000122	5.82E-06		0	0.000128	0.001487	0.00753	0.009145	68.60065	4.964174		0	73.56483	0.173101	0.014201		0	0.187303	0.013985	0.001012		0	0.014997	0.004482
Sacramento	2020	LDA	0.04744	0.111095	0.026061	0	0	0.006425	0.032486	0.135139	0.135542	0.303167	5204.7		0	199.0259	5403.726	0.068119	0	0.237689	0.305807	0.109538		0	0.093633	0.203171	0.288494	
Sacramento	2020	LDA	0.000163	0.001461	0.001237		0		0	0.001237	0.000461	0.000465	0.002162	14.02617		0	14.02617	9.67E-05		0	9.67E-05	0.00221		0		0	0.00221	0.002082
Sacramento	2020	LDA	0.000503	0.001161		0	0	0	0	0.002633	0.001436	0.004069		0		0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2020	LDA	0.000432	0.001411	0.000297		0	9.2E-05	0.000389	0.002483	0.001235	0.004108	49.19861		0	2.317995	51.5166	0.000163	0	0.001404	0.001567	0.000202		0	0.000683	0.000886	0.000521	
Sacramento	2020	LDT1	0.005726	0.013833	0.004114		0	0.001074	0.005188	0.013346	0.016361	0.034895	601.608		0	26.61944	628.2274	0.016684	0	0.040159	0.056843	0.022022		0	0.012299	0.034321	0.077773	
Sacramento	2020	LDT1	1.23E-06	7.47E-05	7.61E-05		0		7.61E-05	2.5E-06	3.52E-06	8.22E-05	0.133715		0	0	0.133715	4.32E-06		0	0	4.32E-06	2.11E-05		0	0	2.11E-05	9.3E-05
Sacramento	2020	LDT1	5.21E-06	1.2E-05	0		0	0		0	2.7E-05	1.49E-05	4.19E-05		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2020	LDT1	1.43E-07	4.52E-07	8.72E-08		0	2.61E-08	1.13E-07	8.21E-07	4.08E-07	1.34E-06	0.015854		0	0.000781	0.016635	5.27E-08		0	4.28E-07	4.8E-07	6.61E-08		0	2.1E-07	2.76E-07	1.68E-07
Sacramento	2020	LDT2	0.024333	0.052025	0.011579		0	0.002597	0.014176	0.05863	0.069522	0.142329	2839.53		0	108.2513	2947.781	0.031854	0	0.116205	0.14806	0.06112		0	0.048494	0.109614	0.133953	
Sacramento	2020	LDT2	6.85E-05	0.000267	0.000162		0	0	0.000162	0.00017	0.000196	0.000529	7.115625		0	0	7.115625	1.87E-05		0	0	1.87E-05	0.001121		0	0	0.001121	0.000403
Sacramento	2020	LDT2	1.54E-06	3.56E-06	0		0	0		0	8.08E-06	4.4E-06	1.25E-05		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2020	LDT2	2.24E-05	7.38E-05	1.61E-05		0	4.85E-06	2.1E-05	0.000129	6.39E-05	0.000214	2.504229		0	0.133807	2.638036	8.33E-06		0	6.8E-05	7.63E-05	1.04E-05		0	3.33E-05	4.37E-05	2.65E-05
Sacramento	2020	LHDT1	0.02181	0.025021	0.001582		0	0.000172	0.001754	0.006391	0.062316	0.070461	753.2068	3.239561	10.17072	766.6171	0.010252	0.003189	0.014895	0.028336	0.012246	7.92E-05	0.020341	0.032666	0.051878			
Sacramento	2020	LHDT1	0.014199	0.045472	0.030564	0.000492		0	0.031056	0.006241	0.040568	0.077866	331.388	2.370119	0	333.7581	0.006166	8.71E-05	0	0.006253	0.05221	0.000373	0	0.052584	0.132748			
Sacramento	2020	LHDT2	0.003671	0.004095	0.000193		0	1.82E-05	0.000211	0.000922	0.010487	0.011621	118.4573	0.507803	1.406392	120.3714	0.001218	0.000439	0.00191	0.003566	0.001438	1.11E-05	0.002759	0.004208	0.006176			
Sacramento	2020	LHDT2	0.006105	0.01515	0.008695	0.000159		0	0.008854	0.0023	0.017442	0.028596	149.7379	1.273044		0	151.011	0.001837	2.95E-05	0	0.001867	0.023591	0.000201		0	0.023792	0.039554	
Sacramento	2020	MCY	0.000575	0.001182	0.00027		0	0.00023	0.0005	0.000547	0.001641	0.002688	26.97423		0	3.421939	30.39617	0.029982	0	0.013019	0.043002	0.006275		0	0.000631	0.006906	0.21238	
Sacramento	2020	MDV	0.016525	0.035636	0.00817		0	0.002124	0.010294	0.038549	0.047214	0.096058	2270.106		0	92.65625	2362.763	0.035509	0	0.111899	0.147407	0.058908		0	0.039471	0.098379	0.171489	
Sacramento	2020	MDV	0.000294	0.001131	0.000683		0	0	0.000683	0.000731	0.000841	0.002255	39.17831		0	0	39.17831	6.89E-05		0	0	6.89E-05	0.006173		0	0	0.006173	0.001484
Sacramento	2020	MDV	2.78E-06	6.42E-06	0		0	0	0	1.46E-05	7.94E-06	2.25E-05	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2020	MDV	2.54E-05	8.61E-05	2.01E-05		0	6.17E-06	2.63E-05	0.000146	7.26E-05	0.000245	2.897451		0	0.197603	3.095054	9.61E-06		0	8.03E-05	8.99E-05	1.2E-05		0	3.92E-05	5.12E-05	3.07E-05
Sacramento	2020	MH	0.00047	0.000616	6.03E-05		0	2.13E-07	6.05E-05	0.000358	0.001344	0.001762	58.22396		0	0.012905	58.23687	0.00065	0	1.59E-05	0.000666	0.000923		0	1.57E-05	0.000939	0.003114	
Sacramento	2020	MH	0.00015	0.001518	0.00139		0	0	0.00139	0.000153	0.000428	0.00197	10.28892		0	0	10.28892	6.47E-05		0	0	6.47E-05	0.001621		0	0	0.001621	0.001393
Sacramento	2020	MHDT	0.001769	0.002295	0.000165		0	4.13E-05	0.000207	0.001346	0.005054	0.006606	213.1423	1.596197	2.811118	217.5496	0.003512	0.000689	0.002859	0.007059	0.004145	1.82E-05	0.001758	0.005921	0.0187			
Sacramento	2020	MHDT	0.0106	0.048541	0.036073	0.001497		0	0.037569	0.007987	0.030286	0.075842	788.5471	42.22694	0	830.774	0.003606	0.000291	0	0.003897	0.124236	0.006653	0	0.130889	0.077635			
Sacramento	2020	MHDT	0.000146	0.000188	1.23E-05	4.02E-06		0	1.63E-05	0.000108	0.000416	0.000541	9.446541	1.132471		0	10.57901	0.007489	0.003747		0	0.011236	0.001926	0.000231		0	0.002157	0.000107
Sacramento	2020	OBUS	0.000471	0.000591	2.69E-05		0	4.7E-06	3.16E-05	0.00036	0.001347	0.001739	55.39712	0.287448	0.481932	56.1665	0.000638	0.000141	0.00054	0.001318	0.00098	3.67E-06	0.000448	0.001431	0.003227			
Sacramento	2020	OBUS	0.000809	0.006118	0.005371	5.03E-05		0	0.005421	0.000489	0.00231	0.008221	56.22047	1.4518	0	57.67227	0.00064	2.74E-05	0	0.000668	0.008858	0.000229		0	0.009086	0.013784		
Sacramento	2020	OBUS	4.39E-05	5.4E-05	1.88E-06	1.45E-07		0	2.02E-06	3.27E-05	0.000126	0.00016	2.862456	0.052885		0	2.915342	0.002016	0.000208	0	0.002224	0.000584	1.08E-05		0	0.000594	2.88E-05	
Sacramento	2020	SBUS	8.5E-05	0.000104	8.94E-06		0	4.12E-07	9.35E-06	4.32E-05	0.000243	0.000295	4.455885	0.330781	0.030733	4.817399	9.29E-05	0.000298	3.72E-05	0.000428	0.000176	1.06E-05	3E-05	0.000217	0.000461			
Sacramento	2020	SBUS	0.000378	0.001234	0.000783	3.64E-05		0	0.00082	0.000288	0.001079	0.002188	28.16901	2.431389		0	30.6004	9.04E-05	8.88E-06	0	9.93E-05	0.004438	0.000383		0	0.004821	0.001947	
Sacramento	2020	SBUS	7.09E-06	1.03E-05	1.66E-06	3.39E-07		0	2E-06	5.41E-06	2.03E-05	2.77E-05	0.515204	0.078277		0	0.59348	0.000985	0.000189	0	0.001174	0.000105	1.6E-05		0	0.000121	1.41E-05	
Sacramento	2020	UBUS	0.000514	0.000561	7.1E-06		0	3.22E-07	7.43E-06	0.00016	0.001468	0.001635	24.34511		0	0.086951	24.43207	5.17E-05	0	0.00011	0.000161	0.00031		0	6.65E-05	0.000376	0.000172	
Sacramento	2020	UBUS	1.31E-05	1.62E-05	1.42E-06		0	0	1.42E-06	7.03E-06	3.74E-05	4.59E-05	0.362073		0	0	0.362073	7.3E-07		0	0	7.3E-07	5.7E-05		0	0	5.7E-05	1.57E-05
Sacramento	2020	UBUS	8.09E-09	9.35E-09	0		0	0	0	5.04E-09	2.31E-08	2.81E-08	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2020	UBUS	0.001245	0.001519	8.29E-06		0	0	8.29E-06	0.001067	0.003556	0.004632	47.56193		0	0	47.56193	0.043087	0	0	0.043087	0.009696		0	0	0.009696	0.000641	

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Sacramento
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category																		Fuel									
			ROG_IDLE	ROG_STR	ROG_TOT	ROG_DIU	ROG_HOT	ROG_RUN	ROG_TOT	TOG_RUN	TOG_IDLE	TOG_STR	TOG_TOT	TOG_DIU	TOG_HOT	TOG_RUN	TOG_TOT	CO_RUNE	CO_IDLEX	CO_TOTE		SOx_RUN	SOx_IDLE	SOx_STRE	SOx_TOTE	NH3_RUN	Consumption		
			X	EX	EX	RN	SOAK	LOSS	AL	EX	X	EX	EX	RN	SOAK	LOSS	AL	X		X	X	X	X	X	X	EX	ion		
Sacramento	2020	HHDT	0	3.36E-08	0.004689	0.000468	0.000183	0.001065	0.006406	0.005788	0	3.67E-08	0.005788	0.000468	0.000183	0.001065	0.007504	0.138405	0	0.002915	0.14132	1.62E-05	0	6.43E-07	1.68E-05	1.77E-05	0.179437		
Sacramento	2020	HHDT	0.036731	0	0.117731	0	0	0	0.117731	0.092212	0.041815	0	0.134028	0	0	0	0.134028	0.299935	0.441337	0	0.741272	0.015932	0.000872	0	0.016804	0.16292	158.5227		
Sacramento	2020	HHDT	0.000257	0	0.004739	0	0	0	0.004739	0.178952	0.014555	0	0.193507	0	0	0	0.193507	0.823872	0.044466	0	0.868338	0	0	0	0.028385	8.502972			
Sacramento	2020	LDA	0	1.192216	1.48071	1.035952	0.303206	0.753066	3.572935	0.420821	0	1.30531	1.726131	1.035952	0.303206	0.753066	3.818355	18.99098	0	11.21242	30.2034	0.051454	0	0.001968	0.053421	0.516344	569.8162		
Sacramento	2020	LDA	0	0	0.002082	0	0	0	0.002082	0.00237	0	0	0.00237	0	0	0	0.00237	0.023938	0	0	0.023938	0.000133	0	0	0.000133	0.000179	1.252952		
Sacramento	2020	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2020	LDA	0	0.005779	0.0063	0.004435	0.0014	0.001226	0.013361	0.00076	0	0.006327	0.007087	0.004435	0.0014	0.001226	0.014149	0.081828	0	0.044465	0.126292	0.000486	0	2.29E-05	0.000509	0.005895	5.432361		
Sacramento	2020	LDT1	0	0.224591	0.302364	0.239776	0.06351	0.18901	0.794661	0.113411	0	0.245896	0.359307	0.239776	0.06351	0.18901	0.851604	3.662003	0	2.138891	5.800894	0.005948	0	0.000263	0.006211	0.058758	66.24579		
Sacramento	2020	LDT1	0	0	9.3E-05	0	0	0	9.3E-05	0.000106	0	0	0.000106	0	0	0	0.000106	0.000502	0	0	0.000502	1.27E-06	0	0	1.27E-06	9.7E-07	0.011945		
Sacramento	2020	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2020	LDT1	0	1.75E-06	1.91E-06	9.66E-07	2.87E-07	2.86E-07	3.45E-06	2.45E-07	0	1.91E-06	2.16E-06	9.66E-07	2.87E-07	2.86E-07	3.7E-06	2.64E-05	0	1.34E-05	3.99E-05	1.57E-07	0	7.72E-09	1.64E-07	2.25E-06	0.001754		
Sacramento	2020	LDT2	0	0.580343	0.714296	0.397277	0.112922	0.28644	1.510935	0.195411	0	0.635401	0.830812	0.397277	0.112922	0.28644	1.62745	9.143399	0	5.338734	14.48213	0.028072	0	0.00107	0.029142	0.235855	310.8398		
Sacramento	2020	LDT2	0	0	0.000403	0	0	0	0.000403	0.000458	0	0	0.000458	0	0	0	0.000458	0.003514	0	0	0.003514	6.74E-05	0	0	6.74E-05	6.6E-05	0.635636		
Sacramento	2020	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2020	LDT2	0	0.000278	0.000304	0.000164	4.8E-05	4.75E-05	0.000564	3.87E-05	0	0.000304	0.000343	0.000164	4.8E-05	4.75E-05	0.000602	0.004176	0	0.002139	0.006314	2.48E-05	0	1.32E-06	2.61E-05	0.000353	0.278178		
Sacramento	2020	LHDT1	0.012232	0.077029	0.141139	0.081844	0.022446	0.114374	0.359804	0.075448	0.017847	0.084333	0.177628	0.081844	0.022446	0.114374	0.396293	1.189833	0.09845	1.191445	2.479729	0.007446	3.2E-05	0.000101	0.007579	0.035849	80.83882		
Sacramento	2020	LHDT1	0.001875	0	0.134623	0	0	0	0.134623	0.151125	0.002134	0	0.153259	0	0	0.153259	0.397577	0.015539	0	0.413116	0.00314	2.25E-05	0	0.003163	0.065976	29.81448			
Sacramento	2020	LHDT2	0.001647	0.009687	0.01751	0.00882	0.002412	0.01201	0.040751	0.009012	0.002404	0.010606	0.022021	0.00882	0.002412	0.01201	0.045263	0.155448	0.013504	0.170869	0.339821	0.001171	5.02E-06	1.39E-05	0.00119	0.005175	12.69302		
Sacramento	2020	LHDT2	0.000635	0	0.040189	0	0	0	0.040189	0.045029	0.000723	0	0.045752	0	0	0	0.045752	0.107145	0.005264	0	0.112409	0.001419	1.21E-05	0	0.001431	0.029899	13.48975		
Sacramento	2020	MCY	0	0.100582	0.312962	0.149607	0.210168	0.222067	0.894804	0.248492	0	0.109269	0.357761	0.149607	0.210168	0.222067	0.939604	2.325523	0	0.499242	2.824765	0.000267	0	3.38E-05	0.0003	0.001143	3.205238		
Sacramento	2020	MDV	0	0.615919	0.787408	0.353262	0.102036	0.264026	1.506732	0.242223	0	0.674268	0.916491	0.353262	0.102036	0.264026	1.635815	8.227144	0	4.470883	12.69803	0.022442	0	0.000916	0.023358	0.153508	249.1504		
Sacramento	2020	MDV	0	0	0.001484	0	0	0	0.001484	0.00169	0	0	0.00169	0	0	0	0.00169	0.02242	0	0	0.02242	0.000371	0	0	0.000371	0.000283	3.499783		
Sacramento	2020	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2020	MDV	0	0.000329	0.00036	0.000216	6.08E-05	6.25E-05	0.000699	4.47E-05	0	0.00036	0.000405	0.000216	6.08E-05	6.25E-05	0.000744	0.004825	0	0.002533	0.007358	2.86E-05	0	1.95E-06	3.06E-05	0.000412	0.32637		
Sacramento	2020	MH	0	7.21E-05	0.003186	0.020368	0.005662	0.000122	0.029338	0.004428	0	7.89E-05	0.004507	0.020368	0.005662	0.000122	0.030659	0.082292	0	0.001494	0.083787	0.000576	0	1.28E-07	0.000576	0.001331	6.141005		
Sacramento	2020	MH	0	0	0.001393	0	0	0	0.001393	0.001585	0	0	0.001585	0	0	0	0.001585	0.004821	0	0	0.004821	9.75E-05	0	0	9.75E-05	0.001051	0.919105		
Sacramento	2020	MHDT	0.002869	0.01674	0.038308	0.010856	0.002956	0.022052	0.074172	0.027286	0.004187	0.018328	0.049801	0.010856	0.002956	0.022052	0.085664	0.404904	0.042951	0.365132	0.812987	0.002107	1.58E-05	2.78E-05	0.002151	0.00501	22.94034		
Sacramento	2020	MHDT	0.006256	0	0.083891	0	0	0	0.083891	0.088382	0.007122	0	0.095503	0	0	0	0.095503	0.218259	0.10556	0	0.323819	0.007467	0.0004	0	0.007867	0.100623	74.21271		
Sacramento	2020	MHDT	5.35E-05	0	0.000161	0	0	0	0.000161	0.007643	0.003824	0	0.011467	0	0	0	0.011467	0.02764	0.007038	0	0.034678	0	0	0	0	0.009577	1.222773		
Sacramento	2020	OBUS	0.00055	0.002909	0.006685	0.001987	0.00054	0.002129	0.011342	0.004708	0.000802	0.003185	0.008695	0.001987	0.00054	0.002129	0.013352	0.073688	0.004257	0.062119	0.140065	0.000548	2.84E-06	4.76E-06	0.000555	0.001345	5.922687		
Sacramento	2020	OBUS	0.00059	0	0.014375	0	0	0	0.014375	0.015692	0.000672	0	0.016364	0	0	0	0.016364	0.036472	0.006764	0	0.043236	0.000532	1.37E-05	0	0.000546	0.006646	5.151841		
Sacramento	2020	OBUS	2.97E-06	0	3.18E-05	0	0	0	3.18E-05	0.002058	0.000212	0	0.00227	0	0	0	0.00227	0.008497	0.000238	0	0.008735	0	0	0	0	0.002884	0.336969		
Sacramento	2020	SBUS	0.001316	0.000218	0.001994	0.000327	9.03E-05	0.000255	0.002667	0.000672	0.00192	0.000238	0.002831	0.000327	9.03E-05	0.000255	0.003504	0.010256	0.010212	0.005916	0.026384	4.41E-05	3.27E-06	3.04E-07	4.76E-05	0.000243	0.507989		
Sacramento	2020	SBUS	0.000191	0	0.002138	0	0	0	0.002138	0.002216	0.000218	0	0.002434	0	0	0	0.002434	0.005729	0.003771	0	0.0095	0.000267	2.3E-05	0	0.00029	0.002573	2.733522		
Sacramento	2020	SBUS	2.7E-06	0	1.68E-05	0	0	0	1.68E-05	0.001005	0.000193	0	0.001198	0	0	0	0.001198	0.002594	0.000622	0	0.003215	0	0	0	0	0.000478	0.068597		
Sacramento	2020	UBUS	0	0.000471	0.000643	0.000135	4.68E-05	6.74E-05	0.000892	0.000251	0	0.000516	0.000767	0.000135	4.68E-05	6.74E-05	0.001016	0.004296	0	0.007334	0.01163	0.000241	0	8.6E-07	0.000242	0.0006	2.576331		
Sacramento	202																												

Source: EMFAC2021 (v1.0.2) Emission Factors Estimation

Region Type: County Units: tons/mile
Region: Sacramento Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.
Calendar Year: 2020 The emission rates are calculated as follows:
Season: Annual EF_PM_D = PM_BW+PM_TW
Vehicle Classification: EMFAC2007 EF_PM = PM_TOTEX/Total VMT
Units: miles/day for CVMT and EVI EF_Gas = Gas_TOTEX/Total VMT
EF_VOC = VOC_TOTLE/Total VMT

GWP
1 25 298
MTs/ton 0.907185

Vehicle Classification: EMFAC2007			EF_PM = PM_TOTEX/Total VMT											Weighted Emission Factors (tons/mile)										
Units: miles/day for CVMT and EVI			EF_Gas = Gas_TOTEX/Total VMT											Diesel Vehicle Fleet	3.456E-07	1.245E-08	5.307E-08	9.615E-10	0.0001015	5.782E-10	1.6E-08	7.158E-09	4.439E-09	2.343E-09
			EF_VOC = VOC_TOTLE/Total VMT											EMFAC Fleet	5.45E-07	2.88E-07	2.30E-06	4.88E-09	5.02E-04	3.15E-08	3.25E-08	2.69E-08	6.49E-09	8.42E-09
Region	Calendar Year	Vehicle Category	PM10_VM T_D	PM10_VMT_Ex	PM2.5_VM T_D	PM2.5_VM T_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D
Sacramento	2020	HHDT	1.52E-07	2.61E-08	5.08E-08	2.45E-08	2.48E-05	1.26E-05	2.78E-04	3.31E-08	3.35E-03	1.11E-06	5.56E-07	1.58556E-05	3.93E-10	2.00E-10	4.42E-09	5.26E-13	5.32E-08	1.76E-11	8.82E-12	2.40E-12	4.13E-13	8.059E-13
Sacramento	2020	HHDT	1.36E-07	6.41E-08	4.39E-08	6.14E-08	6.27E-06	1.38E-07	8.67E-07	1.97E-08	2.08E-03	6.40E-09	3.27E-07	0.026705747	1.67E-07	3.68E-09	2.32E-08	5.25E-10	5.54E-05	1.71E-10	8.74E-09	3.644E-09	1.71E-09	1.172E-09
Sacramento	2020	HHDT	2.41E-07	3.42E-09	8.03E-08	3.15E-09	2.53E-06	1.27E-07	2.32E-05	0.00E+00	1.96E-03	5.00E-06	4.00E-07	0.001170499	2.96E-09	1.48E-10	2.71E-08	0.00E+00	2.30E-06	5.85E-09	4.69E-10	2.817E-10	4.01E-12	9.395E-11
Sacramento	2020	LDA	1.77E-08	2.12E-09	5.30E-09	1.95E-09	1.37E-07	2.33E-07	1.97E-06	3.49E-09	3.53E-04	2.00E-08	1.33E-08	0.478791964	6.54E-08	1.12E-07	9.44E-07	1.67E-09	1.69E-04	9.55E-09	6.35E-09	8.457E-09	1.01E-09	2.538E-09
Sacramento	2020	LDA	1.77E-08	2.37E-08	5.32E-09	2.26E-08	4.10E-07	3.98E-08	4.58E-07	2.54E-09	2.69E-04	1.85E-09	4.23E-08	0.00163213	6.69E-10	6.50E-11	7.48E-10	4.15E-12	4.38E-07	3.02E-12	6.90E-11	2.891E-11	3.86E-11	8.68E-12
Sacramento	2020	LDA	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.009328961	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.271E-10	0.00E+00	3.627E-11	
Sacramento	2020	LDA	1.32E-08	1.38E-09	3.74E-09	1.27E-09	1.78E-08	4.74E-08	4.48E-07	1.81E-09	1.83E-04	5.56E-09	3.15E-09	0.00879848	1.57E-10	4.17E-10	3.95E-09	1.59E-11	1.61E-06	4.89E-11	2.77E-11	1.162E-10	1.22E-11	3.29E-11
Sacramento	2020	LDT1	1.96E-08	3.43E-09	5.99E-09	3.15E-09	3.12E-07	5.25E-07	3.83E-06	4.10E-09	4.15E-04	3.76E-08	2.27E-08	0.047284115	1.48E-08	2.48E-08	1.81E-07	1.94E-10	1.96E-05	1.78E-09	1.07E-09	9.281E-10	1.62E-10	2.832E-10
Sacramento	2020	LDT1	2.12E-08	2.68E-07	6.55E-09	2.57E-07	1.78E-06	3.28E-07	1.77E-06	4.46E-09	4.71E-04	1.52E-08	7.42E-08	8.86692E-06	1.58E-11	2.91E-12	1.57E-11	3.96E-14	4.18E-09	1.35E-13	6.58E-13	1.882E-13	2.38E-12	5.805E-14
Sacramento	2020	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.5705E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.309E-12	0.00E+00	3.737E-13	
Sacramento	2020	LDT1	1.32E-08	1.22E-09	3.74E-09	1.12E-09	1.65E-08	3.71E-08	4.28E-07	1.77E-09	1.79E-04	5.16E-09	2.96E-09	2.90866E-06	4.80E-14	1.08E-13	1.25E-12	5.14E-15	5.20E-10	1.50E-14	8.62E-15	3.839E-14	3.54E-15	1.087E-14
Sacramento	2020	LDT2	1.93E-08	2.13E-09	5.86E-09	1.96E-09	2.06E-07	2.27E-07	2.18E-06	4.38E-09	4.43E-04	2.23E-08	1.65E-08	0.207725191	4.29E-08	4.72E-08	4.52E-07	9.10E-10	9.21E-05	4.63E-09	3.42E-09	4.004E-09	4.43E-10	1.218E-09
Sacramento	2020	LDT2	1.90E-08	8.41E-09	5.75E-09	8.04E-09	8.89E-08	2.08E-08	1.82E-07	3.49E-09	3.68E-04	9.68E-10	5.80E-08	0.000603486	5.37E-11	1.26E-11	1.10E-10	2.11E-12	2.22E-07	5.84E-13	3.50E-11	1.144E-11	5.07E-12	3.472E-12
Sacramento	2020	LDT2	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86427E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.901E-13	0.00E+00	1.113E-13	
Sacramento	2020	LDT2	1.32E-08	1.44E-09	3.74E-09	1.32E-09	1.67E-08	3.86E-08	4.33E-07	1.79E-09	1.81E-04	5.23E-09	3.00E-09	0.000456042	7.63E-12	1.76E-11	1.97E-10	8.15E-13	8.24E-08	2.38E-12	1.37E-12	6.019E-12	6.55E-13	1.704E-12
Sacramento	2020	LHDT1	9.48E-08	2.42E-09	3.23E-08	2.23E-09	6.97E-07	4.96E-07	3.42E-06	1.05E-08	1.06E-03	3.91E-08	4.51E-08	0.022644279	1.58E-08	1.12E-08	7.75E-08	2.37E-10	2.40E-05	8.85E-10	1.02E-09	2.147E-09	5.48E-11	7.314E-10
Sacramento	2020	LHDT1	9.92E-08	6.58E-08	3.34E-08	6.30E-08	3.33E-06	2.85E-07	8.76E-07	6.70E-09	7.07E-04	1.33E-08	1.11E-07	0.014741649	4.91E-08	4.21E-09	1.29E-08	9.88E-11	1.04E-05	1.95E-10	1.64E-09	1.462E-09	9.70E-10	4.924E-10
Sacramento	2020	LHDT2	1.09E-07	2.02E-09	3.73E-08	1.86E-09	5.90E-07	3.90E-07	3.25E-06	1.14E-08	1.15E-03	3.41E-08	4.02E-08	0.003266439	1.93E-09	1.27E-09	1.06E-08	3.72E-11	3.76E-06	1.11E-10	1.31E-10	3.565E-10	6.61E-12	1.219E-10
Sacramento	2020	LHDT2	1.14E-07	5.09E-08	3.84E-08	4.87E-08	2.29E-06	2.31E-07	6.46E-07	8.23E-09	8.68E-04	1.07E-08	1.37E-07	0.005432541	1.24E-08	1.26E-09	3.51E-09	4.47E-11	4.72E-06	5.83E-11	7.43E-10	6.168E-10	2.77E-10	2.087E-10
Sacramento	2020	MCY	1.76E-08	4.03E-09	5.73E-09	3.80E-09	8.84E-07	7.21E-06	2.28E-05	2.42E-09	2.45E-04	3.47E-07	5.57E-08	0.003877053	3.43E-09	2.80E-08	8.83E-08	9.39E-12	9.50E-07	1.34E-09	2.16E-10	6.838E-11	1.56E-11	2.222E-11
Sacramento	2020	MDV	1.96E-08	2.35E-09	5.98E-09	2.17E-09	3.32E-07	3.45E-07	2.90E-06	5.34E-09	5.41E-04	3.37E-08	2.25E-08	0.136579098	4.54E-08	4.71E-08	3.97E-07	7.30E-10	7.38E-05	4.61E-09	3.07E-09	2.68E-09	3.22E-10	8.174E-10
Sacramento	2020	MDV	1.90E-08	8.24E-09	5.76E-09	7.89E-09	9.92E-08	1.79E-08	2.71E-07	4.48E-09	4.73E-04	8.32E-10	7.45E-08	0.00258874	2.57E-10	4.64E-11	7.00E-10	1.16E-11	1.22E-06	2.15E-12	1.93E-10	4.91E-11	2.13E-11	1.49E-11
Sacramento	2020	MDV	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.1677E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.037E-13	0.00E+00	2.007E-13	
Sacramento	2020	MDV	1.32E-08	1.59E-09	3.74E-09	1.46E-09	1.74E-08	4.22E-08	4.44E-07	1.85E-09	1.87E-04	5.43E-09	3.09E-09	0.000517547	8.99E-12	2.18E-11	2.30E-10	9.56E-13	9.67E-08	2.81E-12	1.60E-12	6.831E-12	8.22E-13	1.934E-12
Sacramento	2020	MH	6.29E-08	2.24E-09	2.07E-08	2.06E-09	6.06E-07	1.08E-06	3.10E-06	2.13E-08	2.15E-03	2.46E-08	3.47E-08	0.000845438	5.12E-10	9.17E-10	2.62E-09	1.80E-11	1.82E-06	2.08E-11	2.93E-11	5.316E-11	1.89E-12	1.749E-11
Sacramento	2020	MH	6.71E-08	1.61E-07	2.17E-08	1.54E-07	5.98E-06	1.61E-07	5.57E-07	1.13E-08	1.19E-03	7.47E-09	1.87E-07	0.000270353	1.62E-09	4.35E-11	1.51E-10	3.05E-12	3.21E-07	2.02E-12	5.06E-11	1.813E-11	4.34E-11	5.869E-12
Sacramento	2020	MHDT	6.29E-08	2.03E-09	2.07E-08	1.87E-09	1.20E-06	7.29E-07	7.99E-06	2.11E-08	2.14E-03	6.94E-08	5.82E-08	0.003179715	3.82E-09	2.32E-09	2.54E-08	6.72E-11	6.80E-06	2.21E-10	1.85E-10	2E-10	6.46E-12	6.578E-11
Sacramento	2020	MHDT	6.34E-08	6.22E-08	2.09E-08	5.95E-08	5.42E-06	1.39E-07	5.36E-07	1.30E-08	1.38E-03	6.45E-09	2.17E-07	0.018864284	1.02E-07	2.62E-09	1.01E-08	2.46E-10	2.60E-05	1.22E-10	4.09E-09	1.196E-09	1.17E-09	3.936E-10
Sacramento	2020	MHDT	6.40E-08	1.99E-09	2.11E-08	1.83E-09	3.27E-07	1.96E-08	4.23E-06	0.00E+00	1.29E-03	1.37E-06	2.63E-07	0.000256092	8.36E-11	5.02E-12	1.08E-09	0.00E+00	3.31E-07	3.51E-10	6.74E-11	1.64E-11	5.10E-13	5.401E-12
Sacramento	2020	OBUS	6.27E-08	1.16E-09	2.06E-08	1.07E-09	1.05E-06	4.17E-07	5.14E-06	2.04E-08	2.06E-03	4.84E-08	5.26E-08	0.000850594	8.90E-10</									

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Sacramento

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	Weighted Energy Consumption Rates				
			4.247E-09	9.644E-05			
			6.13E-09	4.65E-04	9.07E-03	4.16E-02	6.62E-03
			PM2.5_E	CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Sacramento	2020	HHDT	3.88E-13	5.101E-08	0	0.35358137	0
Sacramento	2020	HHDT	1.64E-09	5.266E-05	0.18545853	0	0
Sacramento	2020	HHDT	3.68E-12	2.344E-06	0	0	0
Sacramento	2020	LDA	9.33E-10	0.0001551	0	0.0371833	0
Sacramento	2020	LDA	3.70E-11	4.163E-07	0.023985	0	0
Sacramento	2020	LDA	0.00E+00	0	0	0	0.3860825
Sacramento	2020	LDA	1.12E-11	1.469E-06	0	0	0.3020298
Sacramento	2020	LDT1	1.49E-10	1.814E-05	0	0.04377267	0
Sacramento	2020	LDT1	2.28E-12	3.971E-09	0.0420883	0	0
Sacramento	2020	LDT1	0.00E+00	0	0	0	0.3860825
Sacramento	2020	LDT1	3.25E-15	4.742E-10	0	0	0.3020298
Sacramento	2020	LDT2	4.07E-10	8.458E-05	0	0.04675278	0
Sacramento	2020	LDT2	4.85E-12	2.112E-07	0.03290798	0	0
Sacramento	2020	LDT2	0.00E+00	0	0	0	0.3860825
Sacramento	2020	LDT2	6.02E-13	7.52E-08	0	0	0.3020298
Sacramento	2020	LHDT1	5.04E-11	2.202E-05	0	0.11153763	0
Sacramento	2020	LHDT1	9.28E-10	9.908E-06	0.06318895	0	0
Sacramento	2020	LHDT2	6.07E-12	3.45E-06	0	0.12140885	0
Sacramento	2020	LHDT2	2.65E-10	4.482E-06	0.07758196	0	0
Sacramento	2020	MCY	1.47E-11	9.503E-07	0	0.02582965	0
Sacramento	2020	MDV	2.96E-10	6.79E-05	0	0.05699506	0
Sacramento	2020	MDV	2.04E-11	1.163E-06	0.0422389	0	0
Sacramento	2020	MDV	0.00E+00	0	0	0	0.3860825
Sacramento	2020	MDV	7.55E-13	8.822E-08	0	0	0.3020298
Sacramento	2020	MH	1.74E-12	1.659E-06	0	0.2269435	0
Sacramento	2020	MH	4.16E-11	3.054E-07	0.10621691	0	0
Sacramento	2020	MHDT	5.94E-12	6.221E-06	0	0.22540913	0
Sacramento	2020	MHDT	1.12E-09	2.466E-05	0.12291304	0	0
Sacramento	2020	MHDT	4.69E-13	3.26E-07	0	0	0
Sacramento	2020	OBUS	9.08E-13	1.605E-06	0	0.21754875	0
Sacramento	2020	OBUS	1.62E-10	1.712E-06	0.13922628	0	0
Sacramento	2020	OBUS	5.81E-14	8.923E-08	0	0	0
Sacramento	2020	SBUS	2.69E-13	1.387E-07	0	0.10361955	0
Sacramento	2020	SBUS	2.45E-11	9.081E-07	0.12538186	0	0
Sacramento	2020	SBUS	5.74E-14	1.868E-08	0	0	0
Sacramento	2020	UBUS	2.13E-13	6.958E-07	0	0.21285133	0
Sacramento	2020	UBUS	4.26E-14	1.074E-08	0.10476484	0	0
Sacramento	2020	UBUS	0.00E+00	0	0	0	1.7432441
Sacramento	2020	UBUS	2.48E-13	1.461E-06	0	0	0

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

		Mod el		1299160.2 46913926.79 6571998.797																		
Region	Calendar Year	Vehicle Category	Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumption	NOx_RUN EX	NOx_IDLE X	NOx_STR EX	NOx_TOT EX	PM2.5_R UNEX	PM2.5_ID LEX	PM2.5_ST REX	PM2.5_T OTEX	PM2.5_P MTW		
Sacramento	2050	HHDT	Aggre	Aggre	Gasol	0.7885722	96.20923179	96.20923179		0	15.77775201	0	0.000261	0	3.64E-05	0.000297	1.52E-07	0	8.32E-09	1.6E-07	5.3E-07	
Sacramento	2050	HHDT	Aggre	Aggre	Diese	11228.402	1443077.573	1443077.573		0	161919.9506	0	2.038719	0.709407	0.467285	3.215411	0.03883	0.000293	0	0.039123	0.014105	
Sacramento	2050	HHDT	Aggre	Aggre	Electr	5703.031	413789.8294		0	413789.8294	775377.5222		0	0	0	0	0	0	0	0	0.003861	
Sacramento	2050	HHDT	Aggre	Aggre	Natur	719.0772	46400.87617	46400.87617		0	4159.936047	0	0.011706	0.00359	0	0.015296	6.73E-05	1.21E-05	0	7.93E-05	0.00046	
Sacramento	2050	LDA	Aggre	Aggre	Gasol	535287.83	19306735.1	19306735.1		0	2465815.438	0	0.42365	0	0.442772	0.866422	0.010011	0	0.001975	0.011985	0.042564	
Sacramento	2050	LDA	Aggre	Aggre	Diese	355.24975	11248.29156	11248.29156		0	1556.921773	0	0.000125	0	0	0.000125	1.08E-05	0	0	1.08E-05	2.48E-05	
Sacramento	2050	LDA	Aggre	Aggre	Electr	73451.22	2854489.646		0	2854489.646	342300.1648	1102068.597	0	0	0	0	0	0	0	0	0.006293	
Sacramento	2050	LDA	Aggre	Aggre	Plug-i	24997.712	923317.5914	376108.4531	547209.1383		103365.5407	165273.4692	0.002871	0	0.013024	0.015894	0.000195	0	8.66E-05	0.000282	0.002036	
Sacramento	2050	LDT1	Aggre	Aggre	Gasol	34303.679	1161427.811	1161427.811		0	154220.3862	0	0.026848	0	0.029777	0.056625	0.000635	0	0.000134	0.000769	0.002561	
Sacramento	2050	LDT1	Aggre	Aggre	Diese	0.3926669	13.93313908	13.93313908		0	1.803206098	0	4.63E-07	0	0	4.63E-07	6.52E-08	0	0	6.52E-08	3.07E-08	
Sacramento	2050	LDT1	Aggre	Aggre	Electr	1062.637	40650.86878		0	40650.86878	4924.9947	15694.59045	0	0	0	0	0	0	0	0	8.96E-05	
Sacramento	2050	LDT1	Aggre	Aggre	Plug-i	806.36659	29353.12909	11941.25113	17411.87796		3334.325838	5258.906102	9.11E-05	0	0.00042	0.000511	6.13E-06	0	2.69E-06	8.82E-06	6.47E-05	
Sacramento	2050	LDT2	Aggre	Aggre	Gasol	301413.03	10612338.31	10612338.31		0	1377191.788	0	0.262761	0	0.311202	0.573963	0.00563	0	0.001135	0.006766	0.023396	
Sacramento	2050	LDT2	Aggre	Aggre	Diese	1150.4584	40665.30211	40665.30211		0	5266.923981	0	0.001359	0	0	0.001359	0.00019	0	0	0.00019	8.97E-05	
Sacramento	2050	LDT2	Aggre	Aggre	Electr	12145.848	323392.6586		0	323392.6586	56420.9549	124856.2573	0	0	0	0	0	0	0	0	0.000713	
Sacramento	2050	LDT2	Aggre	Aggre	Plug-i	8271.9234	296406.345	120705.0759	175701.2691		34204.40315	53067.02001	0.000921	0	0.00431	0.005231	6.27E-05	0	2.82E-05	9.08E-05	0.000653	
Sacramento	2050	LHDT1	Aggre	Aggre	Gasol	9607.5416	335226.2072	335226.2072		0	143138.0549	0	0.006091	0.000261	0.064871	0.071223	0.000424	0	1.37E-05	0.000438	0.000739	
Sacramento	2050	LHDT1	Aggre	Aggre	Diese	6432.0383	220967.6453	220967.6453		0	80906.95072	0	0.053935	0.006636	0	0.060571	0.004123	0.000187	0	0.00431	0.000731	
Sacramento	2050	LHDT1	Aggre	Aggre	Electr	12672.374	530268.8272		0	530268.8272	177256.9584	345215.2476	0	0	0	0	0	0	0	0	0.001169	
Sacramento	2050	LHDT2	Aggre	Aggre	Gasol	1180.1951	39947.15419	39947.15419		0	17583.14832	0	0.000843	2.76E-05	0.006594	0.007464	5.1E-05	0	1.72E-06	5.28E-05	8.81E-05	
Sacramento	2050	LHDT2	Aggre	Aggre	Diese	3297.8167	106190.5778	106190.5778		0	41482.38486	0	0.038617	0.003855	0	0.042473	0.002581	9.57E-05	0	0.002677	0.000351	
Sacramento	2050	LHDT2	Aggre	Aggre	Electr	3238.1624	130803.7443		0	130803.7443	42841.6861	83719.37422	0	0	0	0	0	0	0	0	0.000288	
Sacramento	2050	MCY	Aggre	Aggre	Gasol	27310.059	141466.7992	141466.7992		0	54620.11703	0	0.073516	0	0.003517	0.077033	0.000332	0	0.000197	0.000529	0.000156	
Sacramento	2050	MDV	Aggre	Aggre	Gasol	169892.7	5800819.561	5800819.561		0	771163.3285	0	0.148059	0	0.18243	0.33049	0.003081	0	0.000639	0.00372	0.012789	
Sacramento	2050	MDV	Aggre	Aggre	Diese	1917.0129	63365.73345	63365.73345		0	8586.261689	0	0.000738	0	0	0.000738	6.45E-05	0	0	6.45E-05	0.00014	
Sacramento	2050	MDV	Aggre	Aggre	Electr	10825.606	285507.2235		0	285507.2235	50111.05987	110229.3525	0	0	0	0	0	0	0	0	0.000629	
Sacramento	2050	MDV	Aggre	Aggre	Plug-i	5103.805	178048.9463	72512.31863	105536.6276		21104.23359	31875.20704	0.000553	0	0.002659	0.003212	3.78E-05	0	1.76E-05	5.54E-05	0.000393	
Sacramento	2050	MH	Aggre	Aggre	Gasol	1331.1425	14371.57793	14371.57793		0	133.167492	0	0.003428	0	5.08E-05	0.003479	2.17E-05	0	5.08E-08	2.18E-05	4.75E-05	
Sacramento	2050	MH	Aggre	Aggre	Diese	844.22311	8051.189829	8051.189829		0	84.42231128	0	0.021814	0	0	0.021814	0.000156	0	0	0.000156	3.55E-05	
Sacramento	2050	MHDT	Aggre	Aggre	Gasol	593.74505	27922.72904	27922.72904		0	11879.65087	0	0.001966	3.69E-05	0.006416	0.008419	4.23E-05	0	6.06E-06	4.84E-05	9.23E-05	
Sacramento	2050	MHDT	Aggre	Aggre	Diese	14488.622	645354.2545	645354.2545		0	162814.1356	0	0.206448	0.108567	0.200134	0.515149	0.002147	4.17E-05	0	0.002189	0.002134	
Sacramento	2050	MHDT	Aggre	Aggre	Electr	16323.819	717254.1057		0	717254.1057	189139.3686	778954.9199	0	0	0	0	0	0	0	0	0.002372	
Sacramento	2050	MHDT	Aggre	Aggre	Natur	351.37809	14122.06184	14122.06184		0	1992.652306	0	0.000972	0.002903	0	0.003875	2.51E-05	1.08E-05	0	3.58E-05	4.67E-05	
Sacramento	2050	OBUS	Aggre	Aggre	Gasol	166.34917	5218.9814	5218.9814		0	3328.314136	0	0.00145	9.27E-06	0.001368	0.002827	6.61E-06	0	8.61E-07	7.47E-06	1.73E-05	
Sacramento	2050	OBUS	Aggre	Aggre	Diese	657.2726	42651.77476	42651.77476		0	7500.140259	0	0.035079	0.003229	0.007228	0.045536	0.000487	2.67E-06	0	0.00049	0.000141	
Sacramento	2050	OBUS	Aggre	Aggre	Electr	106.03493	6670.572167		0	6670.572167	2121.546927	7399.560232	0	0	0	0	0	0	0	0	2.21E-05	
Sacramento	2050	OBUS	Aggre	Aggre	Natur	82.844349	4257.340519	4257.340519		0	737.3147045	0	0.00053	0.000137	0	0.000667	6.72E-06	4.37E-07	0	7.15E-06	1.41E-05	
Sacramento	2050	SBUS	Aggre	Aggre	Gasol	71.154952	3641.439774	3641.439774		0	284.619809	0	0.000309	3.79E-05	0.000111	0.000458	4.73E-06	0	2.52E-07	4.98E-06	8.03E-06	
Sacramento	2050	SBUS	Aggre	Aggre	Diese	467.70822	9772.380638	9772.380638		0	6772.415026	0	0.002926	0.002621	0.003882	0.00943	3.08E-05	1.19E-06	0	3.2E-05	3.23E-05	
Sacramento	2050	SBUS	Aggre	Aggre	Electr	573.14768	15717.00024		0	15717.00024	7534.355165	16557.16176	0	0	0	0	0	0	0	0	4.79E-05	
Sacramento	2050	SBUS	Aggre	Aggre	Natur	22.396013	456.3110951	456.3110951		0	324.2942632	0	5.66E-05	0.000122	0	0.000179	1.7E-06	4.64E-07	0	2.16E-06	1.51E-06	
Sacramento	2050	UBUS	Aggre	Aggre	Electr	697.59381	62072.92999		0	62072.92999	2790.375237	108208.2701	0	0	0	0	0	0	0	0	0.00046	
Sacramento	2050	UBUS	Aggre	Aggre	Natur	7.7844127	376.24185	376.24185		0	31.1376506	0	9.72E-05	0	0	0	9.72E-05	8.57E-06	0	0	8.57E-06	1.24E-06

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Sacramento
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	PM2.5_P	PM2.5_T	PM10_RU	PM10_IDL	PM10_ST	PM10_TO	PM10_P	PM10_P	PM10_TO	CO2_RUN	CO2_IDLE	CO2_STRE	CO2_TOT	CH4_RUN	CH4_IDLE	CH4_STRE	CH4_TOT	N2O_RUN	N2O_IDLE	N2O_STR	N2O_TOT	ROG_RUN	ROG_IDLE	ROG_STR
			MBW	OTAL	NEX	EX	REX	TEX	MTW	MBW	TAL	EX	X	X	EX	EX	X	X	EX	EX	X	EX	EX	EX	X	EX
Sacramento	2050	HHDT	3.59E-06	4.28E-06	1.65E-07	0	9.05E-09	1.74E-07	2.12E-06	1.03E-05	1.26E-05	0.190237	0	0.000737	0.190974	9.71E-06	0	2.24E-08	9.73E-06	1.09E-05	0	1.69E-06	1.26E-05	4.5E-05	0	1.33E-07
Sacramento	2050	HHDT	0.046588	0.099817	0.040586	0.000307	0	0.040892	0.056421	0.13311	0.230423	2059.157	135.1324	0	2194.29	0.00089	0.00331	0	0.004199	0.324421	0.02129	0	0.345711	0.019151	0.071253	0
Sacramento	2050	HHDT	0.007628	0.011488	0	0	0	0	0.015442	0.021794	0.037236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	HHDT	0.00325	0.00379	7.32E-05	1.31E-05	0	8.63E-05	0.001841	0.009287	0.011214	65.94961	6.122671	0	72.07228	0.034635	0.009115	0	0.04375	0.013444	0.001248	0	0.014692	0.0005	0.00013	0
Sacramento	2050	LDA	0.060637	0.115186	0.010888	0	0.002147	0.013035	0.170256	0.173249	0.35654	4884.147	0	145.3472	5029.494	0.022198	0	0.085038	0.107236	0.06859	0	0.068878	0.137468	0.064522	0	0.323322
Sacramento	2050	LDA	3.54E-05	7.1E-05	1.13E-05	0	0	1.13E-05	9.92E-05	0.000101	0.000212	2.233029	0	0	2.233029	2.83E-06	0	0	2.83E-06	0.000352	0	0	0.000352	6.09E-05	0	0
Sacramento	2050	LDA	0.004841	0.011134	0	0	0	0	0.025172	0.013831	0.039003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	LDA	0.001472	0.003789	0.000213	0	9.42E-05	0.000307	0.008142	0.004205	0.012654	123.0675	0	6.314396	129.3819	0.000397	0	0.004533	0.00493	0.000476	0	0.002119	0.002595	0.001314	0	0.019465
Sacramento	2050	LDT1	0.004402	0.007732	0.00069	0	0.000146	0.000836	0.010242	0.012578	0.023656	337.9295	0	10.5471	348.4766	0.001402	0	0.005585	0.006987	0.004234	0	0.004523	0.008757	0.004133	0	0.021513
Sacramento	2050	LDT1	5.26E-08	1.49E-07	6.82E-08	0	0	6.82E-08	1.23E-07	1.5E-07	3.41E-07	0.005169	0	0	0.005169	1.06E-08	0	0	1.06E-08	8.14E-07	0	0	8.14E-07	2.29E-07	0	0
Sacramento	2050	LDT1	6.9E-05	0.000159	0	0	0	0	0.000358	0.000197	0.000556	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	LDT1	4.68E-05	0.00012	6.67E-06	0	2.93E-06	9.6E-06	0.000259	0.000134	0.000402	3.907162	0	0.233491	4.140653	1.26E-05	0	0.000146	0.000159	1.5E-05	0	6.82E-05	8.33E-05	4.17E-05	0	0.000628
Sacramento	2050	LDT2	0.040029	0.070191	0.006123	0	0.001235	0.007358	0.093585	0.11437	0.215313	3209.442	0	99.2827	3308.725	0.016248	0	0.061308	0.077557	0.040098	0	0.046228	0.086326	0.049344	0	0.241681
Sacramento	2050	LDT2	0.000153	0.000433	0.000199	0	0	0.000199	0.000359	0.000438	0.000995	11.17148	0	0	11.17148	3.1E-05	0	0	3.1E-05	0.00176	0	0	0.00176	0.000668	0	0
Sacramento	2050	LDT2	0.000549	0.001262	0	0	0	0	0.002852	0.001568	0.00442	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	LDT2	0.000473	0.001217	6.81E-05	0	3.07E-05	9.88E-05	0.002614	0.001351	0.004064	39.49377	0	2.516602	42.01037	0.000127	0	0.001496	0.001623	0.000151	0	0.000697	0.000849	0.000422	0	0.006441
Sacramento	2050	LHDT1	0.010088	0.011265	0.000461	0	1.49E-05	0.000476	0.002956	0.028823	0.032255	275.3364	1.137543	3.737528	280.2115	0.000432	0.000885	0.003043	0.00436	0.000562	2.58E-05	0.006203	0.006791	0.001428	0.003003	0.013351
Sacramento	2050	LHDT1	0.00665	0.011691	0.00431	0.000196	0	0.004505	0.002923	0.018999	0.026427	145.4386	0.815629	0	146.2542	0.000956	3.61E-05	0	0.000992	0.022914	0.000129	0	0.023042	0.020577	0.000778	0
Sacramento	2050	LHDT1	0.007979	0.009148	0	0	0	0	0.004676	0.022796	0.027473	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	LHDT2	0.001402	0.001543	5.55E-05	0	1.87E-06	5.74E-05	0.000352	0.004007	0.004417	36.90837	0.160528	0.449947	37.51884	4.68E-05	9.47E-05	0.000328	0.000469	8.88E-05	2.8E-06	0.00066	0.000752	0.000151	0.000317	0.001416
Sacramento	2050	LHDT2	0.003728	0.006756	0.002698	0.0001	0	0.002798	0.001405	0.010652	0.014855	81.88996	0.686771	0	82.57673	0.000577	1.85E-05	0	0.000595	0.012902	0.000108	0	0.01301	0.012414	0.000399	0
Sacramento	2050	LHDT2	0.002296	0.002585	0	0	0	0	0.001153	0.00656	0.007714	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	MCY	0.000655	0.00134	0.000356	0	0.000211	0.000567	0.000624	0.001871	0.003062	29.41292	0	2.139855	31.55277	0.021537	0	0.007511	0.029048	0.005552	0	0.00024	0.005793	0.12809	0	0.052121
Sacramento	2050	MDV	0.022177	0.038685	0.003351	0	0.000695	0.004046	0.051154	0.063363	0.118563	2122.057	0	67.67795	2189.734	0.00909	0	0.035012	0.044103	0.022249	0	0.02655	0.048799	0.027777	0	0.139277
Sacramento	2050	MDV	0.000243	0.000447	6.74E-05	0	0	6.74E-05	0.000559	0.000694	0.00132	22.66937	0	0	22.66937	1.71E-05	0	0	1.71E-05	0.003572	0	0	0.003572	0.000369	0	0
Sacramento	2050	MDV	0.000485	0.001115	0	0	0	0	0.002518	0.001386	0.003904	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	MDV	0.000284	0.000732	4.11E-05	0	1.91E-05	6.02E-05	0.00157	0.000812	0.002443	23.72605	0	1.88923	25.61528	7.6E-05	0	0.000919	0.000995	9.05E-05	0	0.000427	0.000517	0.000253	0	0.003974
Sacramento	2050	MH	0.00025	0.000319	2.36E-05	0	5.52E-08	2.37E-05	0.00019	0.000714	0.000927	30.85107	0	0.00429	30.85536	4.49E-05	0	4.79E-06	4.97E-05	0.000282	0	5.81E-06	0.000288	0.000126	0	1.63E-05
Sacramento	2050	MH	0.000139	0.00033	0.000163	0	0	0.000163	0.000142	0.000398	0.000703	9.675767	0	0	9.675767	3.4E-05	0	0	3.4E-05	0.001524	0	0	0.001524	0.000732	0	0
Sacramento	2050	MHDT	0.000485	0.000626	4.6E-05	0	6.59E-06	5.26E-05	0.000369	0.001387	0.001808	47.17984	0.301281	0.476808	47.95793	8.57E-05	0.000178	0.000481	0.000745	0.000205	3.54E-06	0.000479	0.000687	0.000322	0.000673	0.002378
Sacramento	2050	MHDT	0.011261	0.015583	0.002244	4.36E-05	0	0.002288	0.008537	0.032173	0.042997	708.0021	31.18074	0	739.1828	0.000201	0.000139	0	0.00034	0.111546	0.004913	0	0.116459	0.004335	0.00299	0
Sacramento	2050	MHDT	0.006294	0.008666	0	0	0	0	0.009488	0.017983	0.027471	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	MHDT	0.000251	0.000334	2.72E-05	1.17E-05	0	3.9E-05	0.000187	0.000717	0.000943	15.07921	2.494659	0	17.57387	0.013444	0.006755	0	0.020199	0.003074	0.000509	0	0.003583	0.000192	9.65E-05	0
Sacramento	2050	OBUS	9.04E-05	0.000115	7.19E-06	0	9.36E-07	8.12E-06	6.9E-05	0.000258	0.000335	8.828772	0.063882	0.097739	8.990393	9.86E-06	3.52E-05	0.000101	0.000147	8.43E-05	8.35E-07	9.25E-05	0.000178	3.63E-05	0.000138	0.000524
Sacramento	2050	OBUS	0.000962	0.001593	0.000509	2.79E-06	0	0.000512	0.000564	0.00275	0.003825	55.51394	1.382354	0	56.89629	2.92E-05	2.54E-05	0	5.45E-05	0.008746	0.000218	0	0.008964	0.000628	0.000546	0
Sacramento	2050	OBUS	5.78E-05	7.98E-05	0	0	0	0	8.82E-05	0.000165	0.000253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	OBUS	7.58E-05	9.7E-05	7.3E-06	4.75E-07	0	7.78E-06	5.63E-05	0.000217	0.000281	4.304817	0.104527	0	4.409344	0.003906	0.000345	0	0.004251	0.000878	2.13E-05	0	0.000899	5.58E-05	4.93E-06	0
Sacramento	2050	SBUS	6.31E-05	7.61E-05	5.14E-06	0	2.75E-07	5.42E-06	3.21E-05	0.00018	0.000218	2.795252	0.176834	0.015088	2.987175	7.34E-06	0.000197	2.18E-05	0.000226	3.05E-05	5.02E-06	1.3E-05	4.85E-05	3.12E-05	0.000835	0.000119
Sacramento	2050	SBUS	0.000169	0.000234	3.22E-05	1.24E-06	0	3.34E-05	0.000129	0.000484	0.000647	10.98709	0.931491	0	11.91858	2.98E-06	3.99E-06	0	6.97E-06	0.001731	0.000147	0	0.001878	6.42E-05	8.59E-05	0
Sacramento	2050	SBUS	0.000136	0.000184	0	0	0	0	0.000191	0.000389	0.000581	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	SBUS	7.91E-06	1.16E-05	1.85E-06	5.05E-07	0	2.35E-06	6.04E-06	2.26E-05	3.1E-05	0.52905	0.10791	0	0.636959	0.001098	0.000282	0	0.00138	0.000108	2.2E-05	0	0.00013	1.57E-05	4.02E-06	0
Sacramento	2050	UBUS	0.001317	0.001777	0	0	0	0	0.00184	0.003763	0.005603	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2050	UBUS	1.32E-05	2.3E-05	8.95E-06	0	0	8.95E-06	4.98E-06	3.77E-05	5.17E-05	0.331042	0	0	0.331042	2.03E-06	0	0	2.03E-06	6.75E-05	0	0	6.75E-05			

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Sacramento
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category																Fuel									
			ROG_TOT EX	ROG_DIU RN	ROG_HOT SOAK	ROG_RUN LOSS	ROG_TOT AL	TOG_RUN EX	TOG_IDLE X	TOG_STR EX	TOG_TOT EX	TOG_DIU RN	TOG_HOT SOAK	TOG_RUN LOSS	TOG_TOT AL	CO_RUNE X	CO_IDLEX	CO_STREX X	CO_TOTE EX	SOx_RUN X	SOx_IDLE X	SOx_STRE X	SOx_TOTE X	NH3_RUN EX	Consumption		
Sacramento	2050	HHDT	4.51E-05	1.46E-06	1.82E-07	2.88E-06	4.96E-05	6.57E-05	0	1.45E-07	6.58E-05	1.46E-06	1.82E-07	2.88E-06	7.03E-05	0.003049	0	8.83E-05	0.003137	1.88E-06	0	7.29E-09	1.89E-06	4.77E-06	0.020138		
Sacramento	2050	HHDT	0.090405	0	0	0	0.090405	0.021802	0.081117	0	0.102919	0	0	0	0.102919	0.079047	1.051303	0	1.13035	0.019499	0.00128	0	0.020779	0.349013	196.015		
Sacramento	2050	HHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	HHDT	0.00063	0	0	0	0.00063	0.035353	0.009303	0	0.044656	0	0	0	0.044656	0.463658	0.044679	0	0.508337	0	0	0	0.035539	8.330456			
Sacramento	2050	LDA	0.387845	0.605214	0.107969	0.445517	1.546545	0.094151	0	0.353997	0.448148	0.605214	0.107969	0.445517	1.606849	11.26888	0	4.408098	15.67698	0.048285	0	0.001437	0.049722	0.892549	530.3539		
Sacramento	2050	LDA	6.09E-05	0	0	0	6.09E-05	6.93E-05	0	0	6.93E-05	0	0	0	6.93E-05	0.001958	0	0	0.001958	2.12E-05	0	0	2.12E-05	3.84E-05	0.199476		
Sacramento	2050	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	LDA	0.02078	0.02619	0.004661	0.010059	0.061689	0.001918	0	0.021312	0.02323	0.02619	0.004661	0.010059	0.064139	0.20485	0	0.149773	0.354622	0.001217	0	6.24E-05	0.001279	0.017403	13.64316		
Sacramento	2050	LDT1	0.025645	0.054063	0.008703	0.039447	0.127858	0.006031	0	0.023554	0.029584	0.054063	0.008703	0.039447	0.131797	0.711469	0	0.286437	0.997907	0.003341	0	0.000104	0.003445	0.053469	36.74642		
Sacramento	2050	LDT1	2.29E-07	0	0	0	2.29E-07	2.61E-07	0	0	2.61E-07	0	0	0	2.61E-07	2.45E-06	0	0	2.45E-06	4.9E-08	0	0	4.9E-08	4.76E-08	0.000462		
Sacramento	2050	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	LDT1	0.00067	0.000863	0.000149	0.000321	0.002003	6.09E-05	0	0.000687	0.000748	0.000863	0.000149	0.000321	0.002082	0.006503	0	0.004831	0.011334	3.86E-05	0	2.31E-06	4.09E-05	0.000553	0.436627		
Sacramento	2050	LDT2	0.291026	0.389916	0.064337	0.289949	1.035227	0.072003	0	0.264611	0.336614	0.389916	0.064337	0.289949	1.080815	7.26971	0	3.16069	10.4304	0.031729	0	0.000982	0.03271	0.490212	348.9009		
Sacramento	2050	LDT2	0.000668	0	0	0	0.000668	0.00076	0	0	0.00076	0	0	0	0.00076	0.007129	0	0	0.007129	0.000106	0	0	0.000106	0.000139	0.997944		
Sacramento	2050	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	LDT2	0.006863	0.009037	0.001547	0.003415	0.020863	0.000615	0	0.007052	0.007668	0.009037	0.001547	0.003415	0.021668	0.06573	0	0.049561	0.115291	0.00039	0	2.49E-05	0.000415	0.005588	4.429941		
Sacramento	2050	LHDT1	0.017782	0.025555	0.003461	0.034379	0.081177	0.002084	0.004382	0.014617	0.021084	0.025555	0.003461	0.034379	0.084479	0.220217	0.040047	0.521613	0.781877	0.002722	1.12E-05	3.69E-05	0.00277	0.016629	29.54795		
Sacramento	2050	LHDT1	0.021355	0	0	0	0.021355	0.023425	0.000886	0	0.024311	0	0	0	0.024311	0.051256	0.00645	0	0.057707	0.001378	7.73E-06	0	0.001386	0.05328	13.06483		
Sacramento	2050	LHDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	LHDT2	0.001884	0.003312	0.000432	0.004452	0.01008	0.000221	0.000462	0.00155	0.002233	0.003312	0.000432	0.004452	0.010429	0.026654	0.004919	0.065055	0.096628	0.000365	1.59E-06	4.45E-06	0.000371	0.001982	3.956315		
Sacramento	2050	LHDT2	0.012813	0	0	0	0.012813	0.014132	0.000454	0	0.014586	0	0	0	0.014586	0.031525	0.003307	0	0.034832	0.000776	6.51E-06	0	0.000782	0.025162	7.376546		
Sacramento	2050	LHDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	MCY	0.180212	0.120979	0.215606	0.237066	0.753862	0.160519	0	0.056774	0.217293	0.120979	0.215606	0.237066	0.790944	1.611167	0	0.46654	2.077707	0.000291	0	2.12E-05	0.000312	0.001433	3.3272		
Sacramento	2050	MDV	0.167054	0.23968	0.03912	0.176146	0.622	0.040532	0	0.152491	0.193022	0.23968	0.03912	0.176146	0.647968	4.081214	0	1.801103	5.882317	0.020979	0	0.000669	0.021648	0.267512	230.9048		
Sacramento	2050	MDV	0.000369	0	0	0	0.000369	0.00042	0	0	0.00042	0	0	0	0.00042	0.011942	0	0	0.011942	0.000215	0	0	0.000215	0.000217	2.025046		
Sacramento	2050	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	MDV	0.004228	0.00585	0.000984	0.002228	0.01329	0.00037	0	0.004351	0.004721	0.00585	0.000984	0.002228	0.013783	0.039489	0	0.030579	0.070069	0.000235	0	1.87E-05	0.000253	0.003357	2.7011		
Sacramento	2050	MH	0.000143	0.002871	0.000404	1.63E-05	0.003434	0.000185	0	1.79E-05	0.000202	0.002871	0.000404	1.63E-05	0.003494	0.002286	0	0.000304	0.00259	0.000305	0	4.24E-08	0.000305	0.000713	3.253659		
Sacramento	2050	MH	0.000732	0	0	0	0.000732	0.000834	0	0	0.000834	0	0	0	0.000834	0.002089	0	0	0.002089	9.17E-05	0	0	9.17E-05	0.001929	0.864332		
Sacramento	2050	MHDT	0.003373	0.001484	0.00019	0.002864	0.007911	0.00047	0.000982	0.002604	0.004056	0.001484	0.00019	0.002864	0.008594	0.004878	0.010014	0.039924	0.054817	0.000466	2.98E-06	4.71E-06	0.000474	0.001385	5.057103		
Sacramento	2050	MHDT	0.007325	0	0	0	0.007325	0.004936	0.003403	0	0.008339	0	0	0.008339	0.031063	0.126268	0	0.157331	0.006704	0.000295	0	0.007	0.156364	66.03091			
Sacramento	2050	MHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	MHDT	0.000289	0	0	0	0.000289	0.013721	0.006894	0	0.020615	0	0	0	0.020615	0.047196	0.021482	0	0.068678	0	0	0	0	0.016501	2.031271		
Sacramento	2050	OBUS	0.000698	0.000739	0.000114	0.000827	0.002378	5.3E-05	0.000201	0.000574	0.000828	0.000739	0.000114	0.000827	0.002508	0.00094	0.001064	0.008376	0.01038	8.73E-05	6.32E-07	9.66E-07	8.89E-05	0.000259	0.948026		
Sacramento	2050	OBUS	0.001174	0	0	0	0.001174	0.000715	0.000622	0	0.001337	0	0	0	0.001337	0.00341	0.008863	0	0.012272	0.000526	1.31E-05	0	0.000539	0.010305	5.082523		
Sacramento	2050	OBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	OBUS	6.07E-05	0	0	0	6.07E-05	0.003987	0.000352	0	0.004339	0	0	0	0.004339	0.015811	0.000854	0	0.016665	0	0	0	0	0.004974	0.509653		
Sacramento	2050	SBUS	0.000985	0.000273	2.95E-05	0.000201	0.001488	4.55E-05	0.001218	0.00013	0.001394	0.000273	2.95E-05	0.000201	0.001897	0.000713	0.006451	0.002401	0.009566	2.76E-05	1.75E-06	1.49E-07	2.95E-05	0.000181	0.314994		
Sacramento	2050	SBUS	0.00015	0	0	0	0.00015	7.3E-05	9.78E-05	0	0.000171	0	0	0	0.000171	0.000541	0.003639	0	0.00418	0.000104	8.82E-06	0	0.000113	0.00237	1.064682		
Sacramento	2050	SBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	SBUS	1.97E-05	0	0	0	1.97E-05	0.00112	0.000287	0	0.001408	0	0	0	0.001408	0.002891	0.000926	0	0.003817	0	0	0	0	0.000533	0.073623		
Sacramento	2050	UBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2050	UBUS	4.37E-05	0	0	0	4.37E-05	4.98E-05	0	0	4.98E-05	0	0	0	4.98E-05	0.000115	0	0	0.000115	0	0	0	0	0.000402	0.038263		

Source: EMFAC2021 (v1.0.2) Emission

Region Type: County Units: tons/mile

Region: Sacramento Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2050 The emission rates are calculated as follows:

Season: Annual EF_PM = (PM_TOTAL - PMTW - PMBW)/Total VMT

Vehicle Classification: EMFAC2007 EF_Gas = Gas_TOTEX/Total VMT

Units: miles/day for CVMT and EVI EF_VOC = VOC_TOTLE/Total VMT

GWP

1

25

298

MTs/ton

0.907185

Vehicle Classification: EMFAC2007 Units: miles/day for CVMT and EVI			EF_Gas = Gas_TOTEX/Total VMT EF_VOC = VOC_TOTLE/Total VMT											Weighted Emission Factors (tons/mile)																						
														Diesel Vehicle Fleet												8.34E-08	2.879E-09	3.026E-08	6.615E-10	6.985E-05	1.337E-10	1.1E-08	5.775E-09	1.097E-09	1.87E-09	1.05E-09
														EMFAC Fleet												1.27E-07	9.43E-08	8.23E-07	3.09E-09	3.17E-04	7.56E-09	1.78E-08	2.53E-08	1.67E-09	7.84E-09	1.58E-09
Region	Calendar Year	Vehicle Category	PM10_VM T_D	PM10_VM T_Ex	PM2.5_VM T_D	PM2.5_VM T_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E											
Sacramento	2050	HHDT	1.29E-07	1.81E-09	4.29E-08	1.66E-09	3.09E-06	5.16E-07	3.26E-05	1.96E-08	1.98E-03	1.01E-07	1.31E-07	2.051E-06	6.34E-12	1.06E-12	6.69E-11	4.02E-14	4.07E-09	2.07E-13	2.68E-13	2.64E-13	3.71E-15	8.788E-14	3.41E-15											
Sacramento	2050	HHDT	1.31E-07	2.83E-08	4.21E-08	2.71E-08	2.23E-06	6.26E-08	7.83E-07	1.44E-08	1.52E-03	2.91E-09	2.40E-07	0.0307601	6.85E-08	1.93E-09	2.41E-08	4.43E-10	4.68E-05	8.95E-11	7.37E-09	4.04E-09	8.72E-10	1.294E-09	8.34E-10											
Sacramento	2050	HHDT	9.00E-08	0.00E+00	2.78E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0088202	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.937E-10	0.00E+00	2.449E-10	0.00E+00											
Sacramento	2050	HHDT	2.40E-07	1.86E-09	8.00E-08	1.71E-09	3.30E-07	1.36E-08	1.10E-05	0.00E+00	1.55E-03	9.43E-07	3.17E-07	0.0009891	3.26E-10	1.34E-11	1.08E-08	0.00E+00	1.54E-06	9.93E-10	3.13E-10	2.372E-10	1.84E-12	7.91E-11	1.69E-12											
Sacramento	2050	LDA	1.78E-08	6.75E-10	5.35E-09	6.21E-10	4.49E-08	8.01E-08	8.12E-07	2.58E-09	2.61E-04	5.55E-09	7.12E-09	0.4115353	1.85E-08	3.30E-08	3.34E-07	1.06E-09	1.07E-04	2.29E-09	2.93E-09	7.322E-09	2.78E-10	2.2E-09	2.55E-10											
Sacramento	2050	LDA	1.78E-08	1.00E-09	5.35E-09	9.59E-10	1.11E-08	5.41E-09	1.74E-07	1.88E-09	1.99E-04	2.51E-10	3.13E-08	0.0002398	2.67E-12	1.30E-12	4.17E-11	4.51E-13	4.76E-08	6.03E-14	7.50E-12	4.269E-12	2.40E-13	1.283E-12	2.30E-13											
Sacramento	2050	LDA	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0608453	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.314E-10	0.00E+00	2.373E-10	0.00E+00											
Sacramento	2050	LDA	1.34E-08	3.32E-10	3.80E-09	3.05E-10	1.72E-08	6.68E-08	3.84E-07	1.39E-09	1.40E-04	5.34E-09	2.81E-09	0.0196811	3.39E-10	1.31E-09	7.56E-09	2.73E-11	2.76E-06	1.05E-10	5.53E-11	2.632E-10	6.54E-12	7.476E-11	6.01E-12											
Sacramento	2050	LDT1	1.96E-08	7.20E-10	6.00E-09	6.62E-10	4.88E-08	1.10E-07	8.59E-07	2.97E-09	3.00E-04	6.02E-09	7.54E-09	0.0247566	1.21E-09	2.73E-09	2.13E-08	7.34E-11	7.43E-06	1.49E-10	1.87E-10	4.864E-10	1.78E-11	1.484E-10	1.64E-11											
Sacramento	2050	LDT1	1.96E-08	4.89E-09	5.98E-09	4.68E-09	3.32E-08	1.64E-08	1.76E-07	3.52E-09	3.71E-04	7.63E-10	5.85E-08	2.97E-07	9.86E-15	4.88E-15	5.22E-14	1.04E-15	1.10E-10	2.27E-16	1.74E-14	5.822E-15	1.45E-15	1.776E-15	1.39E-15											
Sacramento	2050	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0008665	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.184E-11	0.00E+00	3.381E-12	0.00E+00											
Sacramento	2050	LDT1	1.34E-08	3.27E-10	3.80E-09	3.01E-10	1.74E-08	6.82E-08	3.86E-07	1.39E-09	1.41E-04	5.41E-09	2.84E-09	0.0006257	1.09E-11	4.27E-11	2.42E-10	8.73E-13	8.83E-08	3.38E-12	1.77E-12	8.37E-12	2.05E-13	2.378E-12	1.88E-13											
Sacramento	2050	LDT2	1.96E-08	6.93E-10	5.98E-09	6.38E-10	5.41E-08	9.75E-08	9.83E-07	3.08E-09	3.12E-04	7.31E-09	8.13E-09	0.2262087	1.22E-08	2.21E-08	2.22E-07	6.97E-10	7.05E-05	1.65E-09	1.84E-09	4.433E-09	1.57E-10	1.352E-09	1.44E-10											
Sacramento	2050	LDT2	1.96E-08	4.88E-09	5.98E-09	4.67E-09	3.34E-08	1.64E-08	1.75E-07	2.60E-09	2.75E-04	7.63E-10	4.33E-08	0.0008668	2.90E-11	1.42E-11	1.52E-10	2.26E-12	2.38E-07	6.61E-13	3.75E-11	1.698E-11	4.23E-12	5.179E-12	4.05E-12											
Sacramento	2050	LDT2	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0068933	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.422E-11	0.00E+00	2.69E-11	0.00E+00											
Sacramento	2050	LDT2	1.34E-08	3.33E-10	3.80E-09	3.06E-10	1.76E-08	7.04E-08	3.89E-07	1.40E-09	1.42E-04	5.47E-09	2.86E-09	0.0063181	1.11E-10	4.45E-10	2.46E-09	8.85E-12	8.95E-07	3.46E-11	1.81E-11	8.452E-11	2.11E-12	2.401E-11	1.94E-12											
Sacramento	2050	LHDT1	9.48E-08	1.42E-09	3.23E-08	1.31E-09	2.12E-07	2.42E-07	2.33E-06	8.26E-09	8.36E-04	1.30E-08	2.03E-08	0.0071456	1.52E-09	1.73E-09	1.67E-08	5.90E-11	5.97E-06	9.29E-11	1.45E-10	6.774E-10	1.01E-11	2.308E-10	9.33E-12											
Sacramento	2050	LHDT1	9.92E-08	2.04E-08	3.34E-08	1.95E-08	2.74E-07	9.66E-08	2.61E-07	6.27E-09	6.62E-04	4.49E-09	1.04E-07	0.0047101	1.29E-09	4.55E-10	1.23E-09	2.95E-11	3.12E-06	2.11E-11	4.91E-10	4.673E-10	9.60E-11	1.573E-10	9.19E-11											
Sacramento	2050	LHDT1	5.18E-08	0.00E+00	1.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.011303	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.856E-10	0.00E+00	1.95E-10	0.00E+00											
Sacramento	2050	LHDT2	1.09E-07	1.44E-09	3.73E-08	1.32E-09	1.87E-07	2.52E-07	2.42E-06	9.29E-09	9.39E-04	1.17E-08	1.88E-08	0.0008515	1.59E-10	2.15E-10	2.06E-09	7.91E-12	8.00E-07	1.00E-11	1.60E-11	9.292E-11	1.22E-12	3.177E-11	1.12E-12											
Sacramento	2050	LHDT2	1.14E-07	2.63E-08	3.84E-08	2.52E-08	4.00E-07	1.21E-07	3.28E-07	7.37E-09	7.78E-04	5.60E-09	1.23E-07	0.0022635	9.05E-10	2.73E-10	7.42E-10	1.67E-11	1.76E-06	1.27E-11	2.77E-10	2.57E-10	5.96E-11	8.695E-11	5.71E-11											
Sacramento	2050	LHDT2	5.90E-08	0.00E+00	1.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0027882	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.644E-10	0.00E+00	5.509E-11	0.00E+00											
Sacramento	2050	MCY	1.76E-08	4.01E-09	5.73E-09	3.74E-09	5.45E-07	5.33E-06	1.47E-05	2.20E-09	2.23E-04	2.05E-07	4.09E-08	0.0030155	1.64E-09	1.61E-08	4.43E-08	6.65E-12	6.73E-07	6.19E-10	1.23E-10	5.318E-11	1.21E-11	1.728E-11	1.13E-11											
Sacramento	2050	MDV	1.97E-08	6.97E-10	6.03E-09	6.41E-10	5.70E-08	1.07E-07	1.01E-06	3.73E-09	3.77E-04	7.60E-09	8.41E-09	0.1236481	7.04E-09	1.33E-08	1.25E-07	4.61E-10	4.67E-05	9.40E-10	1.04E-09	2.441E-09	8.62E-11	7.453E-10	7.93E-11											
Sacramento	2050	MDV	1.98E-08	1.06E-09	6.04E-09	1.02E-09	1.17E-08	5.82E-09	1.88E-07	3.39E-09	3.58E-04	2.70E-10	5.64E-08	0.0013507	1.57E-11	7.85E-12	2.55E-10	4.58E-12	4.83E-07	3.65E-13	7.61E-11	2.671E-11	1.44E-12	8.157E-12	1.37E-12											
Sacramento	2050	MDV	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0060858	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.321E-11	0.00E+00	2.376E-11	0.00E+00											
Sacramento	2050	MDV	1.34E-08	3.38E-10	3.80E-09	3.11E-10	1.80E-08	7.46E-08	3.94E-07	1.42E-09	1.44E-04	5.59E-09	2.90E-09	0.0037952	6.85E-11	2.83E-10	1.49E-09	5.40E-12	5.46E-07	2.12E-11	1.10E-11	5.079E-11	1.28E-12	1.443E-11	1.18E-12											
Sacramento	2050	MH	6.29E-08	1.65E-09	2.07E-08	1.51E-09	2.42E-07	2.39E-07	1.80E-07	2.12E-08	2.15E-03	3.46E-09	2.00E-08	0.0003063	7.42E-11	7.32E-11	5.52E-11	6.50E-12	6.58E-07	1.06E-12	6.14E-12	1.926E-11	5.05E-13	6.337E-12	4.64E-13											
Sacramento	2050	MH	6.71E-08	2.02E-08	2.17E-08	1.93E-08	2.71E-06	9.10E-08	2.59E-07	1.14E-08	1.20E-03	4.23E-09	1.89E-07	0.0001716	4.65E-10	1.56E-11	4.45E-11	1.95E-12																		

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Sacramento

Calendar Year: 2050

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	6.634E-05	Weighted Energy Consumption Rates		
			2.93E-04	6.24E-03	2.54E-02	8.31E-02
			CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Sacramento	2050	HHDT	3.77E-09	0	0.20931465	0
Sacramento	2050	HHDT	4.443E-05	0.13583124	0	0
Sacramento	2050	HHDT	0	0	0	1.8738438
Sacramento	2050	HHDT	1.499E-06	0	0	0
Sacramento	2050	LDA	9.81E-05	0	0.02746989	0
Sacramento	2050	LDA	4.521E-08	0.01773386	0	0
Sacramento	2050	LDA	0	0	0	0.3860825
Sacramento	2050	LDA	2.519E-06	0	0	0.3020298
Sacramento	2050	LDT1	6.792E-06	0	0.03163901	0
Sacramento	2050	LDT1	1.047E-10	0.03314319	0	0
Sacramento	2050	LDT1	0	0	0	0.3860825
Sacramento	2050	LDT1	8.063E-08	0	0	0.3020298
Sacramento	2050	LDT2	6.452E-05	0	0.03287691	0
Sacramento	2050	LDT2	2.262E-07	0.02454044	0	0
Sacramento	2050	LDT2	0	0	0	0.3860825
Sacramento	2050	LDT2	8.18E-07	0	0	0.3020298
Sacramento	2050	LHDT1	5.46E-06	0	0.08814333	0
Sacramento	2050	LHDT1	2.961E-06	0.05912553	0	0
Sacramento	2050	LHDT1	0	0	0	0.6510193
Sacramento	2050	LHDT2	7.301E-07	0	0.09903872	0
Sacramento	2050	LHDT2	1.672E-06	0.06946517	0	0
Sacramento	2050	LHDT2	0	0	0	0.6400381
Sacramento	2050	MCY	6.576E-07	0	0.0235193	0
Sacramento	2050	MDV	4.265E-05	0	0.03980554	0
Sacramento	2050	MDV	4.59E-07	0.03195806	0	0
Sacramento	2050	MDV	0	0	0	0.3860825
Sacramento	2050	MDV	4.988E-07	0	0	0.3020298
Sacramento	2050	MH	5.983E-07	0	0.22639541	0
Sacramento	2050	MH	1.959E-07	0.10735462	0	0
Sacramento	2050	MHDT	9.317E-07	0	0.18111064	0
Sacramento	2050	MHDT	1.496E-05	0.1023173	0	0
Sacramento	2050	MHDT	0	0	0	1.0860236
Sacramento	2050	MHDT	3.702E-07	0	0	0
Sacramento	2050	OBUS	1.749E-07	0	0.18164957	0
Sacramento	2050	OBUS	1.152E-06	0.11916323	0	0
Sacramento	2050	OBUS	0	0	0	1.1092842
Sacramento	2050	OBUS	9.25E-08	0	0	0
Sacramento	2050	SBUS	5.815E-08	0	0.08650255	0
Sacramento	2050	SBUS	2.413E-07	0.10894812	0	0
Sacramento	2050	SBUS	0	0	0	1.0534556
Sacramento	2050	SBUS	1.373E-08	0	0	0
Sacramento	2050	UBUS	0	0	0	1.7432441
Sacramento	2050	UBUS	6.791E-09	0	0	0

Region: Sutter

Regional VMT

Sutter	Daily VMT
2020	2,469,306
2050	2,885,689

Emission from VMT on County Roads

Year	Emission (tons/day)											GHG (MT/day)
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
2020	2.06	0.75	5.70	0.01	1528.39	0.06	0.14	0.87	0.03	0.22	0.03	1425.16
2050	0.93	0.25	2.34	0.01	1214.93	0.02	0.11	1.01	0.01	0.26	0.01	1131.74

PM_D is the sum of breakwear, tirewear, and fugitive dust.

Change in Diesel PM2.5 and PM10 Emissions

Year	VMT on County Road	% diesel	Diesel PM (grams/mile)		Diesel PM (grams/day)	
			PM10	PM2.5	PM10	PM2.5
2020	2,469,306	17.3%	9.58E-03	9.16E-03	4,081	3,905
2050	2,885,689	14.3%	3.65E-03	3.49E-03	1,510	1,445
Percent Change		-17.0%			-63.0%	-63.0%

Fugitive Dust Emission Factors

3 Travel on Paved Roads
E(lbs/VMT)=(k)(sL)^.91 (W)^1.02

Where:	PM10	<u>Unit</u>	<u>Source</u>
k= Particle Size Multiplier:	0.0022	lb/VMT	AP-42 Chapter 13.2.1, Table 13.2.1-1, PM10 emissions
sL= road surface silt loading	0.1	g/m^2	CalEEMod default
W= average weight of the vehicles traveling the road	2.4	tons	Statewide average vehicle weight in CA
PM10 Emission factor	0.00066	lbs/VMT	Public roads

Correction for Natural Precipitation⁵

3a	E(ext)=E[(1-P/4N)]			
	Where:		<u>Unit</u>	<u>Source</u>
	Ext = annual or other long-term average emission factor		dimensionless	
	P=#days/yr with >=0.01 inch precipitation during	58	days	Note: Sacramento data is used for all counties in the plan region
	N=# days in averaging period	365	days	Sacramento data: https://wrcc.dri.edu/Climate/comp_table_show.php?type=ppt_mean
	Corrected EF PM10	0.00063	lbs/VMT	Public roads
	Corrected EF PM2.5	0.00016	lbs/VMT	Public roads

Sources

EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 1

Fugitive			
Dust			
Source	PM2.5/PM10		Reference
Paved road	0.25		EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final Report, Oct 2005.

Region: Sutter

2020 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	6.30E-07	2.697E-08	1.452E-07	2.418E-09	0.0002553	1.253E-09	4.022E-08	1.853E-08	1.056E-08	5.996E-09	1.01E-08	0.0002425
EFs (tons/mile)	8.32E-07	3.05E-07	2.31E-06	6.01E-09	6.19E-04	2.52E-08	5.57E-08	3.59E-08	1.25E-08	1.13E-08	1.19E-08	5.77E-04

2050 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	2.84E-07	8.838E-09	1.056E-07	1.886E-09	0.0001992	4.105E-10	3.138E-08	1.739E-08	4.026E-09	5.578E-09	3.852E-09	0.0001892
EFs (tons/mile)	3.23E-07	8.63E-08	8.10E-07	4.07E-09	4.21E-04	7.13E-09	3.73E-08	3.53E-08	4.54E-09	1.10E-08	4.33E-09	3.92E-04

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sutter
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

		97112.457		3013602.829		535706.6095																		
Region	Calendar Year	Vehicle Category	Mod el	Spee d	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumption	NOx_RUN		NOx_IDLE		NOx_STR		NOx_TOT		PM2.5_R	PM2.5_ID	PM2.5_ST	PM2.5_T	PM2.5_P
												EX	X	EX	EX	UNEX	LEX	REX	OTEX	MTW				
Sutter	2020	HHDT	Aggre	Aggre	Gasol	4.3437132	78.35588305	78.35588305		0	86.9090134	0	0.001013		0	1.75E-05	0.001031	3.65E-07		0	1.59E-07	5.24E-07	4.32E-07	
Sutter	2020	HHDT	Aggre	Aggre	Diese	1698.9085	303007.3444	303007.3444		0	31693.81301	0	1.000218	0.194288	0.072263	1.266769	0.018911	0.000292		0	0.019203	0.002986		
Sutter	2020	HHDT	Aggre	Aggre	Natur	14.224803	1433.625457	1433.625457		0	206.686392	0	0.000675	0.000353		0	0.001027	2.41E-06	6.98E-07		0	3.11E-06	1.42E-05	
Sutter	2020	LDA	Aggre	Aggre	Gasol	40916.794	1195453.625	1195453.625		0	189279.8305	0	0.102971		0	0.069467	0.172437	0.001906		0	0.000465	0.002372	0.002636	
Sutter	2020	LDA	Aggre	Aggre	Diese	169.66328	4451.678393	4451.678393		0	749.7213733	0	0.001668		0	0	0.001668	0.000104		0	0	0.000104	9.81E-06	
Sutter	2020	LDA	Aggre	Aggre	Electr	504.3696	17115.78665		0	17115.78665	2558.445953	6608.106291		0		0		0		0	0		0	3.77E-05
Sutter	2020	LDA	Aggre	Aggre	Plug-i	602.90663	21823.61027	11718.11115	10105.49913	2493.018902	3052.161928	8.93E-05		0	0.000314	0.000403	2.12E-05		0	6.92E-06	2.82E-05	4.81E-05		
Sutter	2020	LDT1	Aggre	Aggre	Gasol	4943.5642	123364.0045	123364.0045		0	21176.66439	0	0.039342		0	0.014733	0.054075	0.000396		0	0.000101	0.000497	0.000272	
Sutter	2020	LDT1	Aggre	Aggre	Diese	3.3557788	35.52623445	35.52623445		0	10.3601811	0	5.84E-05		0	0	5.84E-05	8.93E-06		0	0	8.93E-06	7.83E-08	
Sutter	2020	LDT1	Aggre	Aggre	Electr	1.3476958	34.43475195		0	34.43475195	6.235253458	13.29465631		0		0		0		0	0		0	7.59E-08
Sutter	2020	LDT1	Aggre	Aggre	Plug-i	0.1886066	8.034127519	4.184059504	3.850068015	0.779888356	1.162835291	3.19E-08		0	9.81E-08	1.3E-07	6.63E-09		0	1.94E-09	8.57E-09	1.77E-08		
Sutter	2020	LDT2	Aggre	Aggre	Gasol	17129.104	522375.3243	522375.3243		0	79185.73425	0	0.083533		0	0.046725	0.130258	0.000891		0	0.000201	0.001092	0.001152	
Sutter	2020	LDT2	Aggre	Aggre	Diese	46.172658	1608.483304	1608.483304		0	222.1402702	0	0.000122		0	0	0.000122	1.57E-05		0	0	1.57E-05	3.55E-06	
Sutter	2020	LDT2	Aggre	Aggre	Electr	2.1148433	62.19671322		0	62.19671322	10.8654977	24.01306468		0	0	0		0		0	0		0	1.37E-07
Sutter	2020	LDT2	Aggre	Aggre	Plug-i	28.796063	1197.896187	630.5489026	567.347284	119.0717186	171.3557894	4.81E-06		0	1.5E-05	1.98E-05	1.19E-06		0	3.53E-07	1.55E-06	2.64E-06		
Sutter	2020	LHDT1	Aggre	Aggre	Gasol	2223.371	62848.41567	62848.41567		0	33124.9153	0	0.022286	0.0001	0.026712	0.049097	0.000133		0	1.58E-05	0.000149	0.000139		
Sutter	2020	LHDT1	Aggre	Aggre	Diese	3441.7516	103964.5203	103964.5203		0	43292.90532	0	0.315391	0.009139		0	0.32453	0.005783	0.000102		0	0.005885	0.000344	
Sutter	2020	LHDT2	Aggre	Aggre	Gasol	322.20446	9948.345606	9948.345606		0	4800.366422	0	0.001936	1.43E-05	0.003805	0.005755	1.41E-05		0	1.31E-06	1.54E-05	2.19E-05		
Sutter	2020	LHDT2	Aggre	Aggre	Diese	907.31516	29401.57214	29401.57214		0	11412.8833	0	0.060423	0.002346		0	0.062769	0.001299	2.6E-05		0	0.001325	9.72E-05	
Sutter	2020	MCY	Aggre	Aggre	Gasol	2445.7579	11385.72681	11385.72681		0	4891.515787	0	0.008898		0	0.001006	0.009904	2.37E-05		0	2.06E-05	4.43E-05	1.26E-05	
Sutter	2020	MDV	Aggre	Aggre	Gasol	19061.725	515902.2877	515902.2877		0	86971.19902	0	0.111474		0	0.064497	0.175972	0.000897		0	0.000247	0.001144	0.001137	
Sutter	2020	MDV	Aggre	Aggre	Diese	455.86449	14694.82589	14694.82589		0	2195.028176	0	0.00153		0	0	0.00153	0.000123		0	0	0.000123	3.24E-05	
Sutter	2020	MDV	Aggre	Aggre	Electr	4.7297359	141.798984		0	141.798984	24.46263671	54.74611114		0	0	0		0		0	0		0	3.13E-07
Sutter	2020	MDV	Aggre	Aggre	Plug-i	53.768182	1996.594622	1074.397386	922.1972356	222.3314305	278.531051	8.19E-06		0	2.8E-05	3.61E-05	2.25E-06		0	7.28E-07	2.98E-06	4.4E-06		
Sutter	2020	MH	Aggre	Aggre	Gasol	363.03633	2535.94549	2535.94549		0	36.31815483	0	0.001975		0	1.59E-05	0.001991	5.74E-06		0	2.01E-08	5.76E-06	8.39E-06	
Sutter	2020	MH	Aggre	Aggre	Diese	132.0641	955.2436287	955.2436287		0	13.20641027	0	0.006052		0	0	0.006052	0.000176		0	0	0.000176	4.21E-06	
Sutter	2020	MHDT	Aggre	Aggre	Gasol	161.81055	4325.217308	4325.217308		0	3237.505515	0	0.005524	1.54E-05	0.001675	0.007215	9.33E-06		0	3.72E-06	1.31E-05	1.43E-05		
Sutter	2020	MHDT	Aggre	Aggre	Diese	1309.8731	58758.98677	58758.98677		0	15298.91533	0	0.160599	0.02914	0.02113	0.210868	0.003304	0.000128		0	0.003432	0.000194		
Sutter	2020	OBUS	Aggre	Aggre	Gasol	34.011569	989.2089365	989.2089365		0	680.503476	0	0.001039	2.44E-06	0.00033	0.001372	8.34E-07		0	1.8E-07	1.01E-06	3.27E-06		
Sutter	2020	OBUS	Aggre	Aggre	Diese	11.234556	838.1369763	838.1369763		0	135.0772585	0	0.002712	0.000246	0.000209	0.003166	7.58E-05	9.04E-07		0	7.67E-05	2.77E-06		
Sutter	2020	SBUS	Aggre	Aggre	Gasol	13.423746	459.0947618	459.0947618		0	53.69498289	0	0.000691	1.37E-05	3.86E-05	0.000743	5.9E-07		0	4.29E-08	6.33E-07	1.01E-06		
Sutter	2020	SBUS	Aggre	Aggre	Diese	104.6619	2406.981189	2406.981189		0	1515.504368	0	0.015471	0.003624	0.00052	0.019615	8.42E-05	3.61E-06		0	8.78E-05	7.96E-06		

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Sutter

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

5.69E-07

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX
Sutter	2020	HHDT	3.53E-06	4.49E-06	3.97E-07	0	1.73E-07	5.69E-07	1.73E-06	1.01E-05	1.24E-05	0.225958	0	0.005863	0.23182	2.32E-05	0	5.86E-10	2.32E-05	2.64E-05	0	3.72E-07	2.67E-05	0.000139
Sutter	2020	HHDT	0.009059	0.031247	0.019766	0.000305	0	0.020071	0.011943	0.025883	0.057897	539.7939	37.45691	0	577.2508	0.001085	0.000718	0	0.001803	0.085045	0.005901	0	0.090946	0.023364
Sutter	2020	HHDT	4.33E-05	6.07E-05	2.62E-06	7.59E-07	0	3.38E-06	5.69E-05	0.000124	0.000184	1.94435	0.241684	0	2.186034	0.001596	0.001043	0	0.00264	0.000396	4.93E-05	0	0.000446	2.28E-05
Sutter	2020	LDA	0.003702	0.008709	0.002073	0	0.000506	0.002579	0.010542	0.010576	0.023697	407.9891	0	16.03133	424.0205	0.005647	0	0.019125	0.024772	0.008923	0	0.007517	0.016441	0.024148
Sutter	2020	LDA	1.38E-05	0.000128	0.000109	0	0	0.000109	3.93E-05	3.95E-05	0.000188	1.19333	0	0	1.19333	8.42E-06	0	0	8.42E-06	0.000188	0	0	0.000188	0.000181
Sutter	2020	LDA	2.88E-05	6.65E-05	0	0	0	0	0.000151	8.23E-05	0.000233	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2020	LDA	3.35E-05	0.00011	2.31E-05	0	7.52E-06	3.06E-05	0.000192	9.57E-05	0.000319	3.822251	0	0.188062	4.010313	1.26E-05	0	0.000113	0.000126	1.56E-05	0	5.48E-05	7.04E-05	4.04E-05
Sutter	2020	LDT1	0.000476	0.001245	0.000431	0	0.00011	0.000541	0.001088	0.001359	0.002988	50.08474	0	2.357775	52.44251	0.001985	0	0.004079	0.006063	0.002478	0	0.001131	0.003608	0.009435
Sutter	2020	LDT1	1.55E-07	9.16E-06	9.33E-06	0	0	9.33E-06	3.13E-07	4.41E-07	1.01E-05	0.015948	0	0	0.015948	5.91E-07	0	0	5.91E-07	2.51E-06	0	0	2.51E-06	1.27E-05
Sutter	2020	LDT1	5.85E-08	1.34E-07	0	0	0	0	3.04E-07	1.67E-07	4.71E-07	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2020	LDT1	1.23E-08	3.86E-08	7.21E-09	0	2.11E-09	9.32E-09	7.08E-08	3.52E-08	1.15E-07	0.001367	0	6.54E-05	0.001432	4.56E-09	0	3.59E-08	4.05E-08	5.75E-09	0	1.77E-08	2.34E-08	1.44E-08
Sutter	2020	LDT2	0.001919	0.004162	0.000969	0	0.000218	0.001187	0.004607	0.005482	0.011276	225.2301	0	8.653522	233.8836	0.003077	0	0.009914	0.01299	0.005685	0	0.004022	0.009707	0.013367
Sutter	2020	LDT2	5.61E-06	2.48E-05	1.64E-05	0	0	1.64E-05	1.42E-05	1.6E-05	4.66E-05	0.584346	0	0	0.584346	1.66E-06	0	0	1.66E-06	9.21E-05	0	0	9.21E-05	3.57E-05
Sutter	2020	LDT2	1.04E-07	2.42E-07	0	0	0	0	5.48E-07	2.98E-07	8.47E-07	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2020	LDT2	1.84E-06	6.02E-06	1.3E-06	0	3.84E-07	1.68E-06	1.06E-05	5.25E-06	1.75E-05	0.205938	0	0.010785	0.216723	6.85E-07	0	5.48E-06	6.16E-06	8.64E-07	0	2.69E-06	3.56E-06	2.18E-06
Sutter	2020	LHDT1	0.001891	0.002178	0.000144	0	1.72E-05	0.000161	0.000554	0.005404	0.006119	66.41037	0.302878	0.930544	67.64379	0.000987	0.000294	0.001418	0.0027	0.001197	7.13E-06	0.001885	0.003089	0.005033
Sutter	2020	LHDT1	0.003129	0.009358	0.006045	0.000107	0	0.006151	0.001375	0.008939	0.016466	73.9014	0.525544	0	74.42695	0.001252	1.93E-05	0	0.001272	0.011643	8.28E-05	0	0.011726	0.026963
Sutter	2020	LHDT2	0.000349	0.000387	1.54E-05	0	1.42E-06	1.68E-05	8.77E-05	0.000998	0.001102	11.37548	0.050276	0.137873	11.56363	7.27E-05	4.39E-05	0.000183	0.0003	0.000118	1.1E-06	0.000284	0.000403	0.000339
Sutter	2020	LHDT2	0.001032	0.002454	0.001357	2.72E-05	0	0.001385	0.000389	0.002949	0.004723	25.55349	0.220822	0	25.77431	0.000292	5.1E-06	0	0.000297	0.004026	3.48E-05	0	0.004061	0.006287
Sutter	2020	MCY	5.27E-05	0.00011	2.53E-05	0	2.18E-05	4.7E-05	5.02E-05	0.000151	0.000248	2.466408	0	0.312291	2.778699	0.002677	0	0.001185	0.003862	0.000569	0	5.7E-05	0.000626	0.018871
Sutter	2020	MDV	0.001948	0.00423	0.000976	0	0.000268	0.001244	0.004549	0.005566	0.011359	267.8838	0	11.47966	279.3635	0.004158	0	0.013826	0.017984	0.00699	0	0.004855	0.011845	0.019882
Sutter	2020	MDV	5.2E-05	0.000207	0.000128	0	0	0.000128	0.00013	0.000149	0.000406	6.929493	0	0	6.929493	1.25E-05	0	0	1.25E-05	0.001092	0	0	0.001092	0.00027
Sutter	2020	MDV	2.38E-07	5.5E-07	0	0	0	0	1.25E-06	6.79E-07	1.93E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2020	MDV	3.06E-06	1.04E-05	2.45E-06	0	7.92E-07	3.24E-06	1.76E-05	8.75E-06	2.96E-05	0.350638	0	0.025138	0.375776	1.16E-06	0	1.01E-05	1.13E-05	1.44E-06	0	4.92E-06	6.36E-06	3.71E-06
Sutter	2020	MH	4.41E-05	5.82E-05	6.24E-06	0	2.18E-08	6.26E-06	3.35E-05	0.000126	0.000166	5.459382	0	0.001315	5.460698	7.46E-05	0	1.63E-06	7.62E-05	0.000106	0	1.52E-06	0.000107	0.00035
Sutter	2020	MH	1.65E-05	0.000196	0.000184	0	0	0.000184	1.68E-05	4.72E-05	0.000248	1.134949	0	0	1.134949	7.78E-06	0	0	7.78E-06	0.000179	0	0	0.000179	0.000167
Sutter	2020	MHDT	7.52E-05	0.000103	1.01E-05	0	4.05E-06	1.42E-05	5.72E-05	0.000215	0.000286	8.999312	0.098983	0.178013	9.276308	0.000221	3.87E-05	0.000175	0.000434	0.000224	9.49E-07	9.65E-05	0.000322	0.001224
Sutter	2020	MHDT	0.00102	0.004646	0.003453	0.000134	0	0.003587	0.000777	0.002913	0.007277	73.85498	3.419706	0	77.27468	0.000326	2.69E-05	0	0.000353	0.011636	0.000539	0	0.012175	0.007027
Sutter	2020	OBUS	1.71E-05	2.14E-05	9.06E-07	0	1.96E-07	1.1E-06	1.31E-05	4.89E-05	6.31E-05	2.031053	0.014668	0.025498	2.07122	2.87E-05	6.75E-06	3.05E-05	6.6E-05	4.51E-05	1.66E-07	2.12E-05	6.64E-05	0.000145
Sutter	2020	OBUS	1.9E-05	9.85E-05	7.92E-05	9.45E-07	0	8.01E-05	1.11E-05	5.44E-05	0.000146	1.294027	0.036379	0	1.330406	8.14E-06	6.92E-07	0	8.84E-06	0.000204	5.73E-06	0	0.00021	0.000175
Sutter	2020	SBUS	7.96E-06	9.6E-06	6.42E-07	0	4.66E-08	6.88E-07	4.05E-06	2.27E-05	2.75E-05	0.42495	0.039358	0.004146	0.468454	1.75E-05	3.36E-05	5.92E-06	5.7E-05	3.04E-05	1.05E-06	2.88E-06	3.43E-05	8.88E-05
Sutter	2020	SBUS	4.17E-05	0.000137	8.8E-05	3.78E-06	0	9.18E-05	3.18E-05	0.000119	0.000243	3.10614	0.27068	0	3.37682	9.28E-06	8.51E-07	0	1.01E-05	0.000489	4.26E-05	0	0.000532	0.0002

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Sutter
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category																			Fuel									
			ROG_IDLE	ROG_STR	ROG_TOT	ROG_DIU	ROG_HOT	ROG_RUN	ROG_TOT	TOG_RUN	TOG_IDLE	TOG_STR	TOG_TOT	TOG_DIU	TOG_HOT	TOG_RUN	TOG_TOT	CO_RUNE	CO_IDLE	CO_TOTE		SOx_RUN	SOx_IDLE	SOx_STRE	SOx_TOTE	NH3_RUN	Consumption			
			X	EX	EX	RN	SOAK	LOSS	AL	EX	X	EX	EX	RN	SOAK	LOSS	AL	X		EX	X	X	X	X	X	EX				
Sutter	2020	HHDT	0	3.19E-09	0.000139	5.19E-05	1.4E-05	0.000121	0.000326	0.0002	0	3.49E-09	0.0002	5.19E-05	1.4E-05	0.000121	0.000387	0.005942	0	0.000689	0.006631	2.23E-06	0	5.8E-08	2.29E-06	3.65E-06	0.024445			
Sutter	2020	HHDT	0.015463	0	0.038827	0	0	0	0.038827	0.026598	0.017603	0	0.044202	0	0	0	0.044202	0.094564	0.200452	0	0.295016	0.005112	0.000355	0	0.005466	0.065541	51.56559			
Sutter	2020	HHDT	1.49E-05	0	3.77E-05	0	0	0	3.77E-05	0.001629	0.001065	0	0.002694	0	0	0	0.002694	0.010767	0.001251	0	0.012019	0	0	0	0	0.001675	0.252672			
Sutter	2020	LDA	0	0.095788	0.119936	0.084364	0.024003	0.0606	0.288903	0.035212	0	0.104875	0.140087	0.084364	0.024003	0.0606	0.309054	1.553543	0	0.895866	2.449409	0.004033	0	0.000158	0.004192	0.04077	44.71243			
Sutter	2020	LDA	0	0	0.000181	0	0	0	0.000181	0.000206	0	0	0.000206	0	0	0	0.000206	0.001994	0	0	0.001994	1.13E-05	0	0	1.13E-05	1.52E-05	0.1066			
Sutter	2020	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2020	LDA	0	0.000468	0.000508	0.000364	0.000112	9.89E-05	0.001083	5.9E-05	0	0.000512	0.000571	0.000364	0.000112	9.89E-05	0.001146	0.006417	0	0.003598	0.010015	3.78E-05	0	1.86E-06	3.96E-05	0.000462	0.422882			
Sutter	2020	LDT1	0	0.023485	0.03292	0.026834	0.007033	0.021425	0.088212	0.013753	0	0.025713	0.039465	0.026834	0.007033	0.021425	0.094758	0.415512	0	0.226671	0.642184	0.000495	0	2.33E-05	0.000518	0.005182	5.529998			
Sutter	2020	LDT1	0	0	1.27E-05	0	0	0	1.27E-05	1.45E-05	0	0	1.45E-05	0	0	0	1.45E-05	7.4E-05	0	0	7.4E-05	1.51E-07	0	0	1.51E-07	1.21E-07	0.001425			
Sutter	2020	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2020	LDT1	0	1.46E-07	1.61E-07	7.94E-08	2.37E-08	2.35E-08	2.87E-07	2.11E-08	0	1.6E-07	1.81E-07	7.94E-08	2.37E-08	2.35E-08	3.08E-07	2.3E-06	0	1.13E-06	3.43E-06	1.35E-08	0	6.46E-10	1.42E-08	1.94E-07	0.000151			
Sutter	2020	LDT2	0	0.05073	0.064097	0.036763	0.010094	0.026601	0.137555	0.019495	0	0.055542	0.075038	0.036763	0.010094	0.026601	0.148496	0.827623	0	0.460095	1.287718	0.002227	0	8.55E-05	0.002312	0.019019	24.66273			
Sutter	2020	LDT2	0	0	3.57E-05	0	0	0	3.57E-05	4.06E-05	0	0	4.06E-05	0	0	0	4.06E-05	0.000288	0	0	0.000288	5.54E-06	0	0	5.54E-06	5.5E-06	0.052199			
Sutter	2020	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2020	LDT2	0	2.23E-05	2.45E-05	1.33E-05	3.86E-06	3.82E-06	4.55E-05	3.17E-06	0	2.45E-05	2.76E-05	1.33E-05	3.86E-06	3.82E-06	4.87E-05	0.000347	0	0.000172	0.000519	2.04E-06	0	1.07E-07	2.14E-06	2.9E-05	0.022853			
Sutter	2020	LHDT1	0.001145	0.007422	0.0136	0.008543	0.002277	0.011681	0.036101	0.007309	0.00167	0.008125	0.017105	0.008543	0.002277	0.011681	0.039606	0.110565	0.009166	0.107189	0.22692	0.000657	2.99E-06	9.2E-06	0.000669	0.003106	7.132953			
Sutter	2020	LHDT1	0.0000416	0	0.027379	0	0	0	0.027379	0.030695	0.000474	0	0.031169	0	0	0	0.031169	0.080619	0.003451	0	0.08407	0.0007	4.98E-06	0	0.000705	0.015538	6.64853			
Sutter	2020	LHDT2	0.000164	0.000916	0.001419	0.000758	0.000204	0.000951	0.003333	0.000495	0.00024	0.001002	0.001737	0.000758	0.000204	0.000951	0.003651	0.009658	0.001338	0.015494	0.02649	0.000112	4.97E-07	1.36E-06	0.000114	0.000493	1.21937			
Sutter	2020	LHDT2	0.00011	0	0.006396	0	0	0	0.006396	0.007157	0.000125	0	0.007282	0	0	0	0.007282	0.016794	0.00091	0	0.017704	0.000242	2.09E-06	0	0.000244	0.00529	2.302409			
Sutter	2020	MCY	0	0.009149	0.02802	0.014048	0.019436	0.020632	0.082135	0.022128	0	0.009939	0.032067	0.014048	0.019436	0.020632	0.086182	0.20756	0	0.04586	0.253421	2.44E-05	0	3.09E-06	2.75E-05	0.000105	0.29301			
Sutter	2020	MDV	0	0.076599	0.096481	0.045739	0.012866	0.033778	0.188865	0.028307	0	0.083856	0.112163	0.045739	0.012866	0.033778	0.204547	0.96879	0	0.558131	1.526921	0.002648	0	0.000113	0.002762	0.01825	29.45853			
Sutter	2020	MDV	0	0	0.00027	0	0	0	0.00027	0.000307	0	0	0.000307	0	0	0	0.000307	0.003943	0	0	0.003943	6.57E-05	0	0	6.57E-05	5.02E-05	0.619009			
Sutter	2020	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2020	MDV	0	4.17E-05	4.54E-05	2.81E-05	7.76E-06	7.98E-06	8.93E-05	5.41E-06	0	4.57E-05	5.11E-05	2.81E-05	7.76E-06	7.98E-06	9.5E-05	0.000589	0	0.000321	0.00091	3.47E-06	0	2.49E-07	3.71E-06	4.97E-05	0.039625			
Sutter	2020	MH	0	7.51E-06	0.000358	0.002435	0.00065	1.45E-05	0.003457	0.000508	0	8.23E-06	0.000517	0.002435	0.00065	1.45E-05	0.003616	0.009309	0	0.000166	0.009474	5.4E-05	0	1.3E-08	5.4E-05	0.000125	0.575824			
Sutter	2020	MH	0	0	0.000167	0	0	0	0.000167	0.000191	0	0	0.000191	0	0	0	0.000191	0.000589	0	0	0.000589	1.08E-05	0	0	1.08E-05	0.000104	0.101385			
Sutter	2020	MHDT	0.000174	0.001087	0.002486	0.001038	0.000303	0.002231	0.006057	0.001786	0.000255	0.00119	0.003231	0.001038	0.000303	0.002231	0.006803	0.026607	0.002625	0.024795	0.054027	8.9E-05	9.79E-07	1.76E-06	9.17E-05	0.000211	0.978175			
Sutter	2020	MHDT	0.000578	0	0.007605	0	0	0	0.007605	0.008	0.000658	0	0.008658	0	0	0	0.008658	0.02149	0.010677	0	0.032167	0.000699	3.24E-05	0	0.000732	0.011328	6.902917			
Sutter	2020	OBUS	2.79E-05	0.000175	0.000348	0.000116	2.93E-05	0.000119	0.000613	0.000211	4.08E-05	0.000192	0.000444	0.000116	2.93E-05	0.000119	0.000709	0.003331	0.000216	0.003665	0.007212	2.01E-05	1.45E-07	2.52E-07	2.05E-05	4.9E-05	0.218408			
Sutter	2020	OBUS	1.49E-05	0	0.00019	0	0	0	0.00019	0.0002	1.7E-05	0	0.000217	0	0	0	0.000217	0.000507	0.000176	0	0.000682	1.23E-05	3.44E-07	0	1.26E-05	0.000179	0.118845			
Sutter	2020	SBUS	0.000157	3.69E-05	0.000283	3.87E-05	9.64E-06	2.5E-05	0.000356	0.00013	0.000229	4.04E-05	0.000399	3.87E-05	9.64E-06	2.5E-05	0.000472	0.002352	0.001214	0.000989	0.004555	4.2E-06	3.89E-07	4.1E-08	4.63E-06	2.28E-05	0.049398			
Sutter	2020	SBUS	1.83E-05	0	0.000218	0	0	0	0.000218	0.000228	2.08E-05	0	0.000248	0	0	0	0.000248	0.000606	0.00038	0	0.000986	2.94E-05	2.56E-06	0	3.2E-05	0.000264	0.30165			

Source: EMFAC2021 (v1.0.2) Emission Factors Estimation

Region Type: County Units: tons/mile

Region: Sutter Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2020 The emission rates are calculated as follows:

Season: Annual EF_PM_D = PM_BW+PM_TW

Vehicle Classification: EMFAC2007 EF_PM = PM_TOTEX/Total VMT

Units: miles/day for CVMT and EVI EF_Gas = Gas_TOTEX/Total VMT

GWP

1 25 298

MTs/ton 0.907185

Vehicle Classification: EMFAC2007			EF_PM = PM_TOTEX/Total VMT											Weighted Emission Factors (tons/mile)										
Units: miles/day for CVMT and EVI			EF_Gas = Gas_TOTEX/Total VMT											Diesel Vehicle Fleet	6.295E-07	2.697E-08	1.452E-07	2.418E-09	0.0002553	1.253E-09	4.022E-08	1.853E-08	1.056E-08	5.996E-09
			EF_VOC = VOC_TOTLE/Total VMT											EMFAC Fleet	8.32E-07	3.048E-07	2.308E-06	6.006E-09	0.000619	2.518E-08	5.575E-08	3.588E-08	1.249E-08	1.134E-08
Region	Calendar Year	Vehicle Category	PM10_VMT_D	PM10_VMT_Ex	PM2.5_VMT_D	PM2.5_VMT_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D
Sutter	2020	HHDT	1.51E-07	7.27E-09	5.06E-08	6.69E-09	1.32E-05	4.16E-06	8.46E-05	2.92E-08	2.96E-03	2.96E-07	3.41E-07	2.60007E-05	3.42E-10	1.08E-10	2.20E-09	7.60E-13	7.69E-08	7.71E-12	8.87E-12	3.92E-12	1.89E-13	1.31E-12
Sutter	2020	HHDT	1.25E-07	6.62E-08	3.98E-08	6.34E-08	4.18E-06	1.28E-07	9.74E-07	1.80E-08	1.91E-03	5.95E-09	3.00E-07	0.100546542	4.20E-07	1.29E-08	9.79E-08	1.81E-09	1.92E-04	5.98E-10	3.02E-08	1.255E-08	6.66E-09	3.997E-09
Sutter	2020	HHDT	1.26E-07	2.36E-09	4.02E-08	2.17E-09	7.17E-07	2.63E-08	8.38E-06	0.00E+00	1.52E-03	1.84E-06	3.11E-07	0.000475718	3.41E-10	1.25E-11	3.99E-09	0.00E+00	7.25E-07	8.76E-10	1.48E-10	5.998E-11	1.12E-12	1.91E-11
Sutter	2020	LDA	1.77E-08	2.16E-09	5.30E-09	1.98E-09	1.44E-07	2.42E-07	2.05E-06	3.51E-09	3.55E-04	2.07E-08	1.38E-08	0.396685858	5.72E-08	9.59E-08	8.13E-07	1.39E-09	1.41E-04	8.22E-09	5.46E-09	7.008E-09	8.56E-10	2.103E-09
Sutter	2020	LDA	1.77E-08	2.44E-08	5.31E-09	2.34E-08	3.75E-07	4.07E-08	4.48E-07	2.54E-09	2.68E-04	1.89E-09	4.22E-08	0.001477195	5.53E-10	6.02E-11	6.62E-10	3.75E-12	3.96E-07	2.79E-12	6.24E-11	2.615E-11	3.61E-11	7.849E-12
Sutter	2020	LDA	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00567951	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.738E-11	0.00E+00	2.207E-11
Sutter	2020	LDA	1.32E-08	1.40E-09	3.74E-09	1.29E-09	1.85E-08	4.96E-08	4.59E-07	1.82E-09	1.84E-04	5.75E-09	3.23E-09	0.007241701	1.34E-10	3.59E-10	3.32E-09	1.32E-11	1.33E-06	4.17E-11	2.34E-11	9.561E-11	1.02E-11	2.708E-11
Sutter	2020	LDT1	1.98E-08	4.39E-09	6.06E-09	4.03E-09	4.38E-07	7.15E-07	5.21E-06	4.20E-09	4.25E-04	4.91E-08	2.93E-08	0.040935721	1.79E-08	2.93E-08	2.13E-07	1.72E-10	1.74E-05	2.01E-09	1.20E-09	8.121E-10	1.80E-10	2.481E-10
Sutter	2020	LDT1	2.12E-08	2.63E-07	6.55E-09	2.51E-07	1.64E-06	3.58E-07	2.08E-06	4.25E-09	4.49E-04	1.66E-08	7.07E-08	1.17886E-05	1.94E-11	4.22E-12	2.46E-11	5.01E-14	5.29E-09	1.96E-13	8.34E-13	2.504E-13	3.10E-12	7.726E-14
Sutter	2020	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14264E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.562E-13	0.00E+00	4.46E-14
Sutter	2020	LDT1	1.32E-08	1.16E-09	3.74E-09	1.07E-09	1.62E-08	3.58E-08	4.27E-07	1.76E-09	1.78E-04	5.04E-09	2.92E-09	2.66595E-06	4.31E-14	9.53E-14	1.14E-12	4.70E-15	4.75E-10	1.34E-14	7.77E-15	3.519E-14	3.09E-15	9.964E-15
Sutter	2020	LDT2	1.93E-08	2.27E-09	5.88E-09	2.09E-09	2.49E-07	2.63E-07	2.47E-06	4.43E-09	4.48E-04	2.49E-08	1.86E-08	0.173339141	4.32E-08	4.56E-08	4.27E-07	7.67E-10	7.76E-05	4.31E-09	3.22E-09	3.348E-09	3.94E-10	1.019E-09
Sutter	2020	LDT2	1.88E-08	1.02E-08	5.69E-09	9.74E-09	7.61E-08	2.22E-08	1.79E-07	3.44E-09	3.63E-04	1.03E-09	5.72E-08	0.000533741	4.06E-11	1.18E-11	9.56E-11	1.84E-12	1.94E-07	5.50E-13	3.05E-11	1.002E-11	5.43E-12	3.037E-12
Sutter	2020	LDT2	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06387E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.81E-13	0.00E+00	8.015E-14
Sutter	2020	LDT2	1.32E-08	1.40E-09	3.74E-09	1.29E-09	1.65E-08	3.80E-08	4.33E-07	1.79E-09	1.81E-04	5.14E-09	2.97E-09	0.000397496	6.56E-12	1.51E-11	1.72E-10	7.11E-13	7.19E-08	2.04E-12	1.18E-12	5.246E-12	5.58E-13	1.486E-12
Sutter	2020	LHDT1	9.48E-08	2.57E-09	3.23E-08	2.36E-09	7.81E-07	5.74E-07	3.61E-06	1.06E-08	1.08E-03	4.30E-08	4.92E-08	0.02085491	1.63E-08	1.20E-08	7.53E-08	2.22E-10	2.24E-05	8.96E-10	1.03E-09	1.977E-09	5.36E-11	6.736E-10
Sutter	2020	LHDT1	9.92E-08	5.92E-08	3.34E-08	5.66E-08	3.12E-06	2.63E-07	8.09E-07	6.78E-09	7.16E-04	1.22E-08	1.13E-07	0.034498415	1.08E-07	9.09E-09	2.79E-08	2.34E-10	2.47E-05	4.22E-10	3.89E-09	3.423E-09	2.04E-09	1.152E-09
Sutter	2020	LHDT2	1.09E-07	1.69E-09	3.73E-08	1.55E-09	5.79E-07	3.35E-07	2.66E-06	1.15E-08	1.16E-03	3.01E-08	4.05E-08	0.003301147	1.91E-09	1.11E-09	8.79E-09	3.79E-11	3.84E-06	9.95E-11	1.34E-10	3.603E-10	5.57E-12	1.232E-10
Sutter	2020	LHDT2	1.14E-07	4.71E-08	3.84E-08	4.51E-08	2.13E-06	2.18E-07	6.02E-07	8.31E-09	8.77E-04	1.01E-08	1.38E-07	0.009756286	2.08E-08	2.12E-09	5.87E-09	8.10E-11	8.55E-06	9.86E-11	1.35E-09	1.108E-09	4.59E-10	3.748E-10
Sutter	2020	MCY	1.76E-08	4.13E-09	5.73E-09	3.89E-09	8.70E-07	7.21E-06	2.23E-05	2.41E-09	2.44E-04	3.39E-07	5.50E-08	0.003778111	3.29E-09	2.73E-08	8.41E-08	9.12E-12	9.22E-07	1.28E-09	2.08E-10	6.663E-11	1.56E-11	2.166E-11
Sutter	2020	MDV	1.96E-08	2.41E-09	5.98E-09	2.22E-09	3.41E-07	3.66E-07	2.96E-06	5.35E-09	5.42E-04	3.49E-08	2.30E-08	0.171191201	5.84E-08	6.27E-08	5.07E-07	9.16E-10	9.27E-05	5.97E-09	3.93E-09	3.357E-09	4.13E-10	1.024E-09
Sutter	2020	MDV	1.89E-08	8.71E-09	5.74E-09	8.34E-09	1.04E-07	1.84E-08	2.68E-07	4.47E-09	4.72E-04	8.53E-10	7.43E-08	0.004876165	5.08E-10	8.95E-11	1.31E-09	2.18E-11	2.30E-06	4.16E-12	3.62E-10	9.23E-11	4.25E-11	2.8E-11
Sutter	2020	MDV	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.7053E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.404E-13	0.00E+00	1.826E-13
Sutter	2020	MDV	1.32E-08	1.62E-09	3.74E-09	1.49E-09	1.81E-08	4.47E-08	4.56E-07	1.86E-09	1.88E-04	5.64E-09	3.19E-09	0.000662527	1.20E-11	2.96E-11	3.02E-10	1.23E-12	1.25E-07	3.74E-12	2.11E-12	8.744E-12	1.08E-12	2.476E-12
Sutter	2020	MH	6.29E-08	2.47E-09	2.07E-08	2.27E-09	7.85E-07	1.36E-06	3.74E-06	2.13E-08	2.15E-03	3.01E-08	4.22E-08	0.0008415	6.61E-10	1.15E-09	3.14E-09	1.79E-11	1.81E-06	2.53E-11	3.55E-11	5.292E-11	2.08E-12	1.741E-11
Sutter	2020	MH	6.71E-08	1.92E-07	2.17E-08	1.84E-07	6.34E-06	1.75E-07	6.17E-07	1.13E-08	1.19E-03	8.14E-09	1.87E-07	0.000316977	2.01E-09	5.55E-11	1.96E-10	3.57E-12	3.77E-07	2.58E-12	5.93E-11	2.126E-11	6.09E-11	6.881E-12
Sutter	2020	MHDT	6.29E-08	3.28E-09	2.07E-08	3.02E-09	1.67E-06	1.40E-06	1.25E-05	2.12E-08	2.14E-03	1.00E-07	7.44E-08	0.001435231	2.39E-09	2.01E-09	1.79E-08	3.04E-11	3.08E-06	1.44E-10	1.07E-10	9.025E-11	4.71E-12	2.969E-11
Sutter	2020	MHDT	6.28E-08	6.10E-08	2.07E-08	5.84E-08	3.59E-06	1.29E-07	5.47E-07	1.25E-08	1.32E-03	6.01E-09	2.07E-07	0.01949792	7.00E-08	2.52E-09	1.07E-08	2.43E-10	2.56E-05	1.17E-10	4.04E-09	1.225E-09	1.19E-09	4.028E-10
Sutter	2020	OBUS	6.27E-08	1.11E-09	2.06E-08	1.02E-09	1.39E-06	6.20E-07	7.29E-06	2.07E-08	2.09E-03	6.67E-08	6.72E-08	0.000328248	4.55E-10	2.03E-10	2.39E-09	6.79E-12	6.87E-07	2.19E-11	2.20E-11	2.058E-11	3.66E-13	6.77E-12
Sutter	2020	OBUS	7.82E-08	9.56E-08	2.60E-08	9.15E-08	3.78E-06	2.27E-07	8.14E-07	1.50E-08	1.59E-03	1.05E-08	2.50E-07	0.000278118	1.05E-09	6.31E-11	2.26E-10	4.18E-12	4.41E-07	2.93E-12	6.96E-11	2.174E-11	2.66E-11	7.24E-12
Sutter	2020	SBUS	5.83E-08	1.50E-09	1.95E-08	1.38E-09	1.62E-06	7.75E-07	9.92E-06	1.01E-08	1.02E-03	1.24E-07	7.47E-08	0.000152341	2.47E-10	1.18E-10	1.51E-09	1.54E-12	1.55E-07	1.89E-11	1.14E-11	8.886E-12	2.28E-13	2.976E-12
Sutter	2020	SBUS	6.27E-08	3.81E-08	2.06E-08	3.65E-08	8.15E-06	9.06E-08	4.10E-07	1.33E-08	1.40E-03	4.21E-09	2.21E-07	0.000798706	6.51E-09	7.24E-11	3.27E-10	1.06E-11	1.12E-06	3.36E-12	1.77E-10	5.011E-11	3.05E-11	1.648E-11

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Sutter

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	1.01E-08	0.0002425	Weighted Energy Consumption Rates		
			1.188E-08	0.0005771	2.28E-02	3.81E-02	4.73E-03
			PM2.5_E	CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Sutter	2020	HHDT	1.74E-13	7.236E-08	0	0.31197625	0
Sutter	2020	HHDT	6.37E-09	0.0001819	0.17017933	0	0
Sutter	2020	HHDT	1.03E-12	7.179E-07	0	0	0
Sutter	2020	LDA	7.87E-10	0.0001293	0	0.03740206	0
Sutter	2020	LDA	3.45E-11	3.762E-07	0.02394596	0	0
Sutter	2020	LDA	0.00E+00	0	0	0	0.3860825
Sutter	2020	LDA	9.34E-12	1.214E-06	0	0	0.3020298
Sutter	2020	LDT1	1.65E-10	1.616E-05	0	0.04482667	0
Sutter	2020	LDT1	2.96E-12	5.031E-09	0.04009963	0	0
Sutter	2020	LDT1	0.00E+00	0	0	0	0.3860825
Sutter	2020	LDT1	2.84E-15	4.336E-10	0	0	0.3020298
Sutter	2020	LDT2	3.62E-10	7.137E-05	0	0.04721267	0
Sutter	2020	LDT2	5.20E-12	1.842E-07	0.03245257	0	0
Sutter	2020	LDT2	0.00E+00	0	0	0	0.3860825
Sutter	2020	LDT2	5.13E-13	6.561E-08	0	0	0.3020298
Sutter	2020	LHDT1	4.93E-11	2.066E-05	0	0.11349456	0
Sutter	2020	LHDT1	1.95E-09	2.347E-05	0.06394999	0	0
Sutter	2020	LHDT2	5.12E-12	3.519E-06	0	0.12257018	0
Sutter	2020	LHDT2	4.40E-10	8.125E-06	0.07830904	0	0
Sutter	2020	MCY	1.47E-11	9.217E-07	0	0.02573488	0
Sutter	2020	MDV	3.80E-10	8.529E-05	0	0.05710098	0
Sutter	2020	MDV	4.07E-11	2.184E-06	0.04212428	0	0
Sutter	2020	MDV	0.00E+00	0	0	0	0.3860825
Sutter	2020	MDV	9.89E-13	1.138E-07	0	0	0.3020298
Sutter	2020	MH	1.91E-12	1.654E-06	0	0.22706471	0
Sutter	2020	MH	5.83E-11	3.578E-07	0.10613475	0	0
Sutter	2020	MHDT	4.33E-12	2.825E-06	0	0.2261563	0
Sutter	2020	MHDT	1.14E-09	2.436E-05	0.11747849	0	0
Sutter	2020	OBUS	3.36E-13	6.3E-07	0	0.22079009	0
Sutter	2020	OBUS	2.54E-11	4.194E-07	0.14179624	0	0
Sutter	2020	SBUS	2.10E-13	1.445E-07	0	0.10759852	0
Sutter	2020	SBUS	2.91E-11	1.064E-06	0.12532294	0	0

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

					128290.63	5143425.792	699657.2099														
		Mod																			
	Calendar	Vehicle	el	Spee						Energy	NOx_RUN	NOx_IDLE	NOx_STR	NOx_TOT	PM2.5_R	PM2.5_ID	PM2.5_ST	PM2.5_T	PM2.5_P		
Region	Year	Category	Year	d	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Consumption	EX	X	EX	EX	UNEX	LEX	REX	OTEX	MTW	
Sutter	2050	HHDT	Aggre	Aggre	Gasol	0.0804994	7.984559777	7.984559777	0	1.61063101	0	2.19E-05	0	3.69E-06	2.55E-05	1.26E-08	0	8.46E-10	1.34E-08	4.4E-08	
Sutter	2050	HHDT	Aggre	Aggre	Diese	3495.3215	622741.7973	622741.7973	0	67410.6932	0	0.879845	0.335386	0.17645	1.391681	0.018561	0.000134	0	0.018695	0.006162	
Sutter	2050	HHDT	Aggre	Aggre	Electr	701.58628	80599.95333	0	80599.95333	10766.35799	147820.4116	0	0	0	0	0	0	0	0	0.000782	
Sutter	2050	HHDT	Aggre	Aggre	Natur	59.962399	3967.225166	3967.225166	0	871.253665	0	0.000721	0.001392	0	0.002113	8.68E-06	5.22E-06	0	1.39E-05	3.94E-05	
Sutter	2050	LDA	Aggre	Aggre	Gasol	52534.744	1911354.396	1911354.396	0	243623.8838	0	0.042402	0	0.043251	0.085653	0.000988	0	0.000193	0.001181	0.004214	
Sutter	2050	LDA	Aggre	Aggre	Diese	32.695354	1110.125486	1110.125486	0	147.1676439	0	1.31E-05	0	0	1.31E-05	1.06E-06	0	0	1.06E-06	2.45E-06	
Sutter	2050	LDA	Aggre	Aggre	Electr	7320.4277	286421.3609	0	286421.3609	34154.19018	110582.2849	0	0	0	0	0	0	0	0	0.000631	
Sutter	2050	LDA	Aggre	Aggre	Plug-i	2484.0913	91603.20388	37302.42711	54300.77677	10271.71766	16400.45301	0.000287	0	0.001292	0.001579	1.93E-05	0	8.48E-06	2.78E-05	0.000202	
Sutter	2050	LDT1	Aggre	Aggre	Gasol	3249.0969	117627.2272	117627.2272	0	14722.56753	0	0.002722	0	0.002794	0.005516	6.38E-05	0	1.24E-05	7.62E-05	0.000259	
Sutter	2050	LDT1	Aggre	Aggre	Diese	0.037916	1.416250932	1.416250932	0	0.174511573	0	4.72E-08	0	0	4.72E-08	6.6E-09	0	0	6.6E-09	3.12E-09	
Sutter	2050	LDT1	Aggre	Aggre	Electr	102.39059	3968.288892	0	3968.288892	476.1550794	1532.087033	0	0	0	0	0	0	0	0	8.75E-06	
Sutter	2050	LDT1	Aggre	Aggre	Plug-i	78.033721	2978.282281	1211.628884	1766.653398	322.6694365	533.5819808	9.32E-06	0	4.06E-05	4.99E-05	6.22E-07	0	2.6E-07	8.82E-07	6.57E-06	
Sutter	2050	LDT2	Aggre	Aggre	Gasol	28335.671	1058610.228	1058610.228	0	130208.4278	0	0.026218	0	0.029037	0.055255	0.000559	0	0.000106	0.000665	0.002334	
Sutter	2050	LDT2	Aggre	Aggre	Diese	108.61309	4063.072927	4063.072927	0	499.5927229	0	0.000136	0	0	0.000136	1.88E-05	0	0	1.88E-05	8.96E-06	
Sutter	2050	LDT2	Aggre	Aggre	Electr	1154.2855	31112.06938	0	31112.06938	5376.671382	12011.8266	0	0	0	0	0	0	0	0	6.86E-05	
Sutter	2050	LDT2	Aggre	Aggre	Plug-i	784.56496	29579.4903	12044.84709	17534.6432	3244.176118	5295.984864	9.27E-05	0	0.000408	0.000501	6.24E-06	0	2.66E-06	8.9E-06	6.52E-05	
Sutter	2050	LHDT1	Aggre	Aggre	Gasol	933.33571	33261.29094	33261.29094	0	13905.31141	0	0.000609	2.51E-05	0.006221	0.006855	4.21E-05	0	1.33E-06	4.35E-05	7.33E-05	
Sutter	2050	LHDT1	Aggre	Aggre	Diese	755.95324	24340.59356	24340.59356	0	9508.940726	0	0.007295	0.000926	0	0.008221	0.000486	2.2E-05	0	0.000508	8.05E-05	
Sutter	2050	LHDT1	Aggre	Aggre	Electr	1275.209	53740.27205	0	53740.27205	17833.57701	34983.79779	0	0	0	0	0	0	0	0	0.000118	
Sutter	2050	LHDT2	Aggre	Aggre	Gasol	117.00089	4011.83299	4011.83299	0	1743.138914	0	8.6E-05	2.72E-06	0.000651	0.00074	5.12E-06	0	1.7E-07	5.29E-06	8.84E-06	
Sutter	2050	LHDT2	Aggre	Aggre	Diese	383.60372	11676.90303	11676.90303	0	4825.252169	0	0.005275	0.000521	0	0.005797	0.000311	1.11E-05	0	0.000322	3.86E-05	
Sutter	2050	LHDT2	Aggre	Aggre	Electr	326.9169	13296.37712	0	13296.37712	4325.263166	8510.229413	0	0	0	0	0	0	0	0	2.93E-05	
Sutter	2050	MCY	Aggre	Aggre	Gasol	2587.4051	13847.23812	13847.23812	0	5174.810271	0	0.007196	0	0.000323	0.007519	3.26E-05	0	1.89E-05	5.14E-05	1.53E-05	
Sutter	2050	MDV	Aggre	Aggre	Gasol	16404.331	550797.8644	550797.8644	0	74388.03017	0	0.014107	0	0.017463	0.031569	0.000294	0	6.23E-05	0.000356	0.001214	
Sutter	2050	MDV	Aggre	Aggre	Diese	198.6399	6152.257439	6152.257439	0	872.367086	0	7.55E-05	0	0	7.55E-05	7.09E-06	0	0	7.09E-06	1.36E-05	
Sutter	2050	MDV	Aggre	Aggre	Electr	1034.3257	27605.2214	0	27605.2214	4800.355936	10657.89384	0	0	0	0	0	0	0	0	6.09E-05	
Sutter	2050	MDV	Aggre	Aggre	Plug-i	488.56886	16900.64352	6883.984265	10016.65925	2020.232248	3025.329639	5.3E-05	0	0.000254	0.000307	3.59E-06	0	1.69E-06	5.28E-06	3.73E-05	
Sutter	2050	MH	Aggre	Aggre	Gasol	132.56682	1451.364847	1451.364847	0	13.26198507	0	0.000349	0	5.03E-06	0.000354	2.19E-06	0	5.06E-09	2.2E-06	4.8E-06	
Sutter	2050	MH	Aggre	Aggre	Diese	84.689669	814.4162038	814.4162038	0	8.468966931	0	0.002225	0	0	0.002225	1.65E-05	0	0	1.65E-05	3.59E-06	
Sutter	2050	MHDT	Aggre	Aggre	Gasol	57.168442	2291.767446	2291.767446	0	1143.82618	0	0.000162	3.44E-06	0.000618	0.000784	3.49E-06	0	5.97E-07	4.08E-06	7.58E-06	
Sutter	2050	MHDT	Aggre	Aggre	Diese	1445.4428	65085.88307	65085.88307	0	17196.00463	0	0.0207	0.010092	0.021703	0.052495	0.000229	3.89E-06	0	0.000233	0.000215	
Sutter	2050	MHDT	Aggre	Aggre	Electr	1585.3966	70417.05236	0	70417.05236	19163.06722	75312.48787	0	0	0	0	0	0	0	0	0.000233	
Sutter	2050	OBUS	Aggre	Aggre	Gasol	11.799445	379.759605	379.759605	0	236.0832939	0	0.000111	5.77E-07	8.18E-05	0.000194	5.07E-07	0	7.27E-08	5.8E-07	1.26E-06	
Sutter	2050	OBUS	Aggre	Aggre	Diese	15.949281	1074.202885	1074.202885	0	187.3829538	0	0.000833	8.32E-05	0.00018	0.001096	1.21E-05	6.74E-08	0	1.21E-05	3.55E-06	
Sutter	2050	OBUS	Aggre	Aggre	Electr	10.722027	534.7292917	0	534.7292917	214.526308	593.1667483	0	0	0	0	0	0	0	0	1.77E-06	
Sutter	2050	SBUS	Aggre	Aggre	Gasol	8.1162184	327.5712862	327.5712862	0	32.46487353	0	3.49E-05	4.82E-06	1.81E-05	5.79E-05	4.25E-07	0	2.88E-08	4.54E-07	7.22E-07	
Sutter	2050	SBUS	Aggre	Aggre	Diese	53.63586	1114.035428	1114.035428	0	776.6432877	0	0.000337	0.000299	0.000445	0.001082	3.53E-06	1.36E-07	0	3.67E-06	3.68E-06	
Sutter	2050	SBUS	Aggre	Aggre	Electr	61.764267	1590.301799	0	1590.301799	817.3729573	1675.31232	0	0	0	0	0	0	0	0	4.93E-06	

Units: miles/day for CVMT and EVMT

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX	ROG_IDLE X	ROG_STR EX	
Sutter	2050	HHDT	2.98E-07	3.56E-07	1.37E-08		9.2E-10	1.46E-08	1.76E-07	8.52E-07	1.04E-06	0.015796		0	7.53E-05	0.015872	8.06E-07	0	2.27E-09	8.09E-07	9.06E-07	0	1.66E-07	1.07E-06	3.74E-06	0	1.35E-08
Sutter	2050	HHDT	0.01981	0.044668	0.0194	0.00014		0.01954	0.024649	0.056601	0.100791	857.617	61.9094		0	919.5264	0.000355	0.001531	0	0.001886	0.135118	0.009754	0	0.144872	0.007638	0.032968	0
Sutter	2050	HHDT	0.001287	0.002069		0	0	0	0.003128	0.003678	0.006807		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	HHDT	0.000132	0.000185	9.44E-06	5.68E-06		1.51E-05	0.000157	0.000377	0.00055	4.689067	1.049811		0	5.738878	0.004465	0.00322	0	0.007685	0.000956	0.000214	0	0.00117	6.38E-05	4.6E-05	0
Sutter	2050	LDA	0.006006	0.011401	0.001075		0.00021	0.001284	0.016855	0.01716	0.0353	484.7964		0	14.28955	499.086	0.002208	0	0.008287	0.010494	0.006848	0	0.006789	0.013638	0.006417	0	0.031177
Sutter	2050	LDA	3.49E-06	7E-06	1.11E-06		0	1.11E-06	9.79E-06	9.98E-06	2.09E-05	0.220141		0	0	0.220141	2.79E-07	0	0	2.79E-07	3.47E-05	0	0	3.47E-05	6E-06	0	0
Sutter	2050	LDA	0.000486	0.001117		0	0	0	0.002526	0.001388	0.003914		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	LDA	0.000146	0.000376	2.1E-05		9.23E-06	3.02E-05	0.000808	0.000417	0.001255	12.2439		0	0.62636	12.87026	3.94E-05	0	0.000449	0.000489	4.75E-05	0	0.00021	0.000258	0.000131	0	0.001927
Sutter	2050	LDT1	0.000445	0.00078	6.93E-05		1.35E-05	8.29E-05	0.001037	0.001271	0.002391	34.28497		0	1.002394	35.28737	0.000142	0	0.000527	0.000669	0.000434	0	0.000431	0.000865	0.000416	0	0.002001
Sutter	2050	LDT1	5.34E-09	1.51E-08	6.9E-09		0	6.9E-09	1.25E-08	1.52E-08	3.46E-08	0.000526		0	0	0.000526	1.08E-09	0	0	1.08E-09	8.28E-08	0	0	8.28E-08	2.32E-08	0	0
Sutter	2050	LDT1	6.73E-06	1.55E-05		0	0	0	3.5E-05	1.92E-05	5.42E-05		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	LDT1	4.75E-06	1.22E-05	6.77E-07		2.83E-07	9.6E-07	2.63E-05	1.36E-05	0.037697		0	0.02259	0.420288	1.29E-06	0	1.42E-05	1.55E-05	1.55E-06	0	6.67E-06	8.22E-06	4.24E-06	0	6.05E-05	
Sutter	2050	LDT2	0.00398	0.006979	0.000608		0.000115	0.000724	0.009335	0.011372	0.021431	320.761		0	9.361614	330.1226	0.001623	0	0.005761	0.007384	0.004041	0	0.004366	0.008407	0.004896	0	0.022496
Sutter	2050	LDT2	1.53E-05	4.31E-05	1.97E-05		0	1.97E-05	3.58E-05	4.36E-05	9.92E-05	1.116027		0	0	1.116027	3.09E-06	0	0	3.09E-06	0.000176	0	0	0.000176	6.65E-05	0	0
Sutter	2050	LDT2	5.28E-05	0.000121		0	0	0	0.000274	0.000151	0.000425		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	LDT2	4.72E-05	0.000121	6.79E-06		2.89E-06	9.68E-06	0.000261	0.000135	0.000405	3.953486		0	0.238556	4.192042	1.28E-05	0	0.000142	0.000155	1.54E-05	0	6.69E-05	8.23E-05	4.22E-05	0	0.000609
Sutter	2050	LHDT1	0.001001	0.001118	4.58E-05		1.45E-06	4.73E-05	0.000293	0.00286	0.0032	27.27372	0.110239	0.360872	27.74483	4.29E-05	8.54E-05	0.000292	0.00042	5.64E-05	2.51E-06	0.000601	0.00066	0.000141	0.000288	0.001274	
Sutter	2050	LHDT1	0.000732	0.001321	0.000508	2.3E-05		0.000531	0.000322	0.002093	0.002946	16.20312	0.097967		0	16.30108	0.000109	4.25E-06	0	0.000114	0.002553	1.54E-05	0	0.002568	0.002354	9.15E-05	0
Sutter	2050	LHDT1	0.000809	0.000927		0	0	0	0.000474	0.00231	0.002784		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	LHDT2	0.000141	0.000155	5.57E-06		1.85E-07	5.75E-06	3.54E-05	0.000402	0.000444	3.705314	0.015901	0.044577	3.765793	4.71E-06	9.35E-06	3.23E-05	4.63E-05	9.06E-06	2.77E-07	6.54E-05	7.47E-05	1.52E-05	3.12E-05	0.000139	
Sutter	2050	LHDT2	0.00041	0.000771	0.000325	1.16E-05		0.000337	0.000154	0.001171	0.001662	9.120016	0.081674		0	9.20169	6.75E-05	2.16E-06	0	6.96E-05	0.001437	1.29E-05		0.00145	0.001452	4.64E-05	0
Sutter	2050	LHDT2	0.000233	0.000263		0	0	0	0.000117	0.000667	0.000784		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	MCY	6.41E-05	0.000131	3.49E-05		2.02E-05	5.52E-05	6.11E-05	0.000183	0.000299	2.876313		0	0.200348	3.07666	0.002094	0	0.000703	0.002797	0.000544	0	2.23E-05	0.000566	0.012417	0	0.004851
Sutter	2050	MDV	0.002101	0.003672	0.00032		6.77E-05	0.000388	0.004857	0.006003	0.011248	202.0079		0	6.54421	208.5521	0.000861	0	0.003373	0.004233	0.002116	0	0.002535	0.004651	0.002633	0	0.013466
Sutter	2050	MDV	2.36E-05	4.43E-05	7.41E-06		0	7.41E-06	5.43E-05	6.75E-05	0.000129	2.216552		0	2.216552	1.74E-06	0	0	1.74E-06	0.000349	0	0	0.000349	3.75E-05	0	0	0
Sutter	2050	MDV	4.69E-05	0.000108		0	0	0	0.000243	0.000134	0.000377		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	MDV	2.7E-05	6.95E-05	3.91E-06		1.84E-06	5.74E-06	0.000149	7.71E-05	0.000232	2.259563		0	0.180897	2.44046	7.23E-06	0	8.76E-05	9.48E-05	8.64E-06	0	4.07E-05	4.93E-05	2.41E-05	0	0.000379
Sutter	2050	MH	2.52E-05	3.22E-05	2.39E-06		5.5E-09	2.39E-06	1.92E-05	7.21E-05	9.37E-05	3.115604		0	0.000427	3.11603	4.51E-06	0	4.76E-07	4.98E-06	2.87E-05	0	5.75E-07	2.92E-05	1.27E-05	0	1.62E-06
Sutter	2050	MH	1.41E-05	3.42E-05	1.73E-05		0	1.73E-05	1.44E-05	4.03E-05	7.19E-05	0.978679		0	0.978679	3.44E-06	0	0	3.44E-06	0.000154	0	0	0.000154	7.41E-05	0	0	0
Sutter	2050	MHDT	3.98E-05	5.15E-05	3.79E-06		6.5E-07	4.44E-06	3.03E-05	0.000114	0.000149	3.86357	0.028719	0.04544	3.937729	6.9E-06	1.69E-05	4.54E-05	6.92E-05	1.65E-05	3.31E-07	4.44E-05	6.12E-05	2.64E-05	6.48E-05	0.000228	
Sutter	2050	MHDT	0.001126	0.001574	0.000239	4.07E-06		0.000243	0.000861	0.003217	0.004321	70.51919	2.937529		0	73.45672	1.92E-05	1.31E-05	0	3.23E-05	0.01111	0.000463	0	0.011573	0.000414	0.000281	0
Sutter	2050	MHDT	0.000612	0.000845		0	0	0	0.000931	0.001748	0.00268		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	OBUS	6.58E-06	8.41E-06	5.52E-07		7.91E-08	6.31E-07	5.02E-06	1.88E-05	2.44E-05	0.630168	0.004335	0.006632	0.641135	6.85E-07	2.55E-06	7.08E-06	1.03E-05	6.35E-06	5.97E-08	5.86E-06	1.23E-05	2.53E-06	9.76E-06	3.6E-05	
Sutter	2050	OBUS	2.47E-05	4.04E-05	1.26E-05	7.05E-08		1.27E-05	1.42E-05	7.06E-05	9.75E-05	1.411175	0.036687		0	1.447863	5.52E-07	6.92E-07	0	1.24E-06	0.000222	5.78E-06	0	0.000228	1.19E-05	1.49E-05	0
Sutter	2050	OBUS	4.63E-06	6.4E-06		0	0	0	7.07E-06	1.32E-05	2.03E-05		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sutter	2050	SBUS	5.68E-06	6.85E-06	4.62E-07		3.13E-08	4.93E-07	2.89E-06	1.62E-05	1.96E-05	0.255245	0.02046	0.001748	0.277453	6.3E-07	2.18E-05	2.43E-06	2.48E-05	3.2E-06	5.66E-07	1.81E-06	5.57E-06	2.76E-06	9.52E-05	1.37E-05	
Sutter	2050	SBUS	1.93E-05	2.67E-05	3.69E-06	1.42E-07		3.84E-06	1.47E-05	5.52E-05	7.37E-05	1.254826	0.107022		0	1.361848	3.43E-07	4.58E-07	0	8.01E-07	0.000198	1.69E-05	0	0.000215	7.39E-06	9.85E-06	0
Sutter	2050	SBUS	1.38E-05	1.87E-05		0	0	0	1.97E-05	3.94E-05	5.91E-05		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Units: miles/day for CVMT and EVMT

																											Fuel
Region	Calendar Year	Vehicle Category	ROG_TOT EX	ROG_DIU RN	ROG_HOT SOAK	ROG_RUN LOSS	ROG_TOT AL	TOG_RUN EX	TOG_IDLE X	TOG_STR EX	TOG_TOT EX	TOG_DIU RN	TOG_HOT SOAK	TOG_RUN LOSS	TOG_TOT AL	CO_RUNE X	CO_IDLEX	CO_STREX X	CO_TOTE X	SOX_RUN X	SOX_IDLE X	SOx_STRE X	SOx_TOTE X	NH3_RUN EX	Consumption		
Sutter	2050	HHDT	3.75E-06	1.52E-07	1.9E-08	2.98E-07	4.22E-06	5.46E-06	0	1.47E-08	5.47E-06	1.52E-07	1.9E-08	2.98E-07	5.94E-06	0.000253	0	8.98E-06	0.000262	1.56E-07	0	7.45E-10	1.57E-07	3.96E-07	0.001674		
Sutter	2050	HHDT	0.040606	0	0	0	0.040606	0.008696	0.037531	0	0.046227	0	0	0	0.046227	0.027531	0.487103	0	0.514634	0.008121	0.000586	0	0.008707	0.151007	82.14093		
Sutter	2050	HHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	HHDT	0.00011	0	0	0	0.00011	0.004557	0.003286	0	0.007843	0	0	0	0.007843	0.016181	0.010408	0	0.026589	0	0	0	0	0.004636	0.663327		
Sutter	2050	LDA	0.037594	0.054443	0.009676	0.040839	0.142552	0.009364	0	0.034135	0.043499	0.054443	0.009676	0.040839	0.148457	1.132565	0	0.42927	1.561835	0.004793	0	0.000141	0.004934	0.088389	52.62799		
Sutter	2050	LDA	6E-06	0	0	0	6E-06	6.83E-06	0	0	6.83E-06	0	0	0	6.83E-06	0.000193	0	0	0.000193	2.09E-06	0	0	2.09E-06	3.79E-06	0.019665		
Sutter	2050	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	LDA	0.002058	0.002534	0.000451	0.000953	0.005996	0.000191	0	0.00211	0.0023	0.002534	0.000451	0.000953	0.006239	0.020565	0	0.014823	0.035388	0.000121	0	6.19E-06	0.000127	0.001726	1.357153		
Sutter	2050	LDT1	0.002417	0.004745	0.000765	0.003487	0.011414	0.000607	0	0.002191	0.002798	0.004745	0.000765	0.003487	0.011794	0.072488	0	0.026915	0.099403	0.000339	0	9.91E-06	0.000349	0.005419	3.721009		
Sutter	2050	LDT1	2.32E-08	0	0	0	2.32E-08	2.64E-08	0	0	2.64E-08	0	0	0	2.64E-08	2.48E-07	0	0	2.48E-07	4.98E-09	0	0	4.98E-09	4.84E-09	4.69E-05		
Sutter	2050	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	LDT1	6.48E-05	8.22E-05	1.42E-05	3.04E-05	0.000192	6.19E-06	0	6.63E-05	7.25E-05	8.22E-05	1.42E-05	3.04E-05	0.000199	0.000668	0	0.000466	0.001134	3.93E-06	0	2.23E-07	4.15E-06	5.61E-05	0.044319		
Sutter	2050	LDT2	0.027392	0.03431	0.005733	0.025557	0.092991	0.007144	0	0.02463	0.031774	0.03431	0.005733	0.025557	0.097373	0.72935	0	0.295948	1.025299	0.003171	0	9.25E-05	0.003264	0.048912	34.81101		
Sutter	2050	LDT2	6.65E-05	0	0	0	6.65E-05	7.57E-05	0	0	7.57E-05	0	0	0	7.57E-05	0.000706	0	0	0.000706	1.06E-05	0	0	1.06E-05	1.39E-05	0.099694		
Sutter	2050	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	LDT2	0.000651	0.000826	0.000143	0.000309	0.001929	6.15E-05	0	0.000666	0.000728	0.000826	0.000143	0.000309	0.002006	0.00664	0	0.004682	0.011322	3.91E-05	0	2.36E-06	4.14E-05	0.000558	0.442046		
Sutter	2050	LHDT1	0.001703	0.002364	0.00032	0.003183	0.007569	0.000206	0.00042	0.001395	0.002021	0.002364	0.00032	0.003183	0.007887	0.021802	0.00389	0.050662	0.076354	0.00027	1.09E-06	3.57E-06	0.000274	0.00165	2.925658		
Sutter	2050	LHDT1	0.002446	0	0	0	0.002446	0.00268	0.000104	0	0.002784	0	0	0	0.002784	0.005996	0.000758	0	0.006754	0.000154	9.28E-07	0	0.000154	0.005838	1.456169		
Sutter	2050	LHDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	LHDT2	0.000186	0.000321	4.2E-05	0.000431	0.000979	2.22E-05	4.55E-05	0.000152	0.00022	0.000321	4.2E-05	0.000431	0.001014	0.002672	0.000488	0.006443	0.009603	3.66E-05	1.57E-07	4.41E-07	3.72E-05	0.000199	0.397098		
Sutter	2050	LHDT2	0.001499	0	0	0	0.001499	0.001654	5.28E-05	0	0.001706	0	0	0	0.001706	0.003751	0.000385	0	0.004136	8.64E-05	7.74E-07	0	8.72E-05	0.002733	0.821983		
Sutter	2050	LHDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	MCY	0.017268	0.011178	0.020399	0.0224	0.071246	0.015567	0	0.005285	0.020852	0.011178	0.020399	0.0224	0.07483	0.156163	0	0.043804	0.199967	2.84E-05	0	1.98E-06	3.04E-05	0.00014	0.32443		
Sutter	2050	MDV	0.016099	0.023658	0.00389	0.017134	0.06078	0.003842	0	0.014743	0.018585	0.023658	0.00389	0.017134	0.063267	0.390564	0	0.173425	0.563989	0.001997	0	6.47E-05	0.002062	0.025391	21.99156		
Sutter	2050	MDV	3.75E-05	0	0	0	3.75E-05	4.27E-05	0	0	4.27E-05	0	0	0	4.27E-05	0.001182	0	0	0.001182	2.1E-05	0	0	2.1E-05	2.1E-05	0.198004		
Sutter	2050	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	MDV	0.000403	0.000551	9.33E-05	0.000209	0.001256	3.52E-05	0	0.000415	0.00045	0.000551	9.33E-05	0.000209	0.001303	0.003795	0	0.002915	0.006711	2.23E-05	0	1.79E-06	2.41E-05	0.000319	0.257343		
Sutter	2050	MH	1.43E-05	0.000277	3.92E-05	1.57E-06	0.000332	1.85E-05	0	1.77E-06	2.03E-05	0.000277	3.92E-05	1.57E-06	0.000338	0.00023	0	3E-05	0.00026	3.08E-05	0	4.22E-09	3.08E-05	7.2E-05	0.328582		
Sutter	2050	MH	7.41E-05	0	0	0	7.41E-05	8.44E-05	0	0	8.44E-05	0	0	0	8.44E-05	0.000212	0	0	0.000212	9.27E-06	0	0	9.27E-06	0.000195	0.087425		
Sutter	2050	MHDT	0.000319	0.000131	1.61E-05	0.000253	0.000719	3.85E-05	9.46E-05	0.000249	0.000382	0.000131	1.61E-05	0.000253	0.000783	0.0004	0.000964	0.003813	0.005178	3.82E-05	2.84E-07	4.49E-07	3.89E-05	0.000114	0.415229		
Sutter	2050	MHDT	0.000695	0	0	0	0.000695	0.000471	0.00032	0	0.000791	0	0	0	0.000791	0.003067	0.011889	0	0.014956	0.000668	2.78E-05	0	0.000696	0.015782	6.561859		
Sutter	2050	MHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	OBUS	4.83E-05	4.07E-05	5.88E-06	4.61E-05	0.000141	3.69E-06	1.42E-05	3.95E-05	5.74E-05	4.07E-05	5.88E-06	4.61E-05	0.00015	6.56E-05	7.54E-05	0.000573	0.000714	6.23E-06	4.29E-08	6.56E-08	6.34E-06	1.88E-05	0.067607		
Sutter	2050	OBUS	2.68E-05	0	0	0	2.68E-05	1.35E-05	1.7E-05	0	3.05E-05	0	0	0	3.05E-05	7.36E-05	0.000239	0	0.000313	1.34E-05	3.47E-07	0	1.37E-05	0.000261	0.129337		
Sutter	2050	OBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sutter	2050	SBUS	0.000112	3.4E-05	3.83E-06	2.47E-05	0.000174	4.03E-06	0.000139	1.5E-05	0.000158	3.4E-05	3.83E-06	2.47E-05	0.000221	6.61E-05	0.000736	0.000278	0.00108	2.52E-06	2.02E-07	1.73E-08	2.74E-06	1.62E-05	0.029257		
Sutter	2050	SBUS	1.72E-05	0	0	0	1.72E-05	8.41E-06	1.12E-05	0	1.96E-05	0	0	0	1.96E-05	6.23E-05	0.000417	0	0.00048	1.19E-05	1.01E-06	0	1.29E-05	0.00027	0.121653		
Sutter	2050	SBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Source: EMFAC2021 (v1.0.2) Emission Factors Estimation

Region Type: County Units: tons/mile

Region: Sutter Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2050 The emission rates are calculated as follows:

Season: Annual EF_PM = (PM_TOTAL - PMTW - PMBW)/Total VMT

Vehicle Classification: EMFAC2007 EF_Gas = Gas_TOTEX/Total VMT

Units: miles/day for CVMT and EVT EF_VOC = VOC_TOTLE/Total VMT

GWP

1

25

298

MTs/ton

0.907185

Vehicle Classification: EMFAC2007					EF_Gas = Gas_TOTEX/Total VMT										Weighted Emission Factors (tons/mile)											
Units: miles/day for CVMT and EVI					EF_VOC = VOC_TOTLE/Total VMT										Diesel Vehicle Fleet											
					EMFAC Fleet										2.842E-07	8.838E-09	1.056E-07	1.886E-09	0.0001992	4.105E-10	3.138E-08	1.739E-08	4.026E-09	5.578E-09	3.852E-09	
															3.23E-07	8.626E-08	8.102E-07	4.068E-09	0.000421	7.131E-09	3.732E-08	3.532E-08	4.543E-09	1.105E-08	4.327E-09	
Region	Calendar Year	Vehicle Category	PM10_VM T_D	PM10_VM T_Ex	PM2.5_VM T_D	PM2.5_VM T_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	
Sutter	2050	HHDT	1.29E-07	1.83E-09	4.28E-08	1.68E-09	3.20E-06	5.29E-07	3.29E-05	1.97E-08	1.99E-03	1.01E-07	1.34E-07	1.552E-06	4.97E-12	8.21E-13	5.10E-11	3.05E-14	3.09E-09	1.57E-13	2.08E-13	2.00E-13	2.84E-15	6.651E-14	2.61E-15	
Sutter	2050	HHDT	1.30E-07	3.14E-08	4.17E-08	3.00E-08	2.23E-06	6.52E-08	8.26E-07	1.40E-08	1.48E-03	3.03E-09	2.33E-07	0.1210753	2.71E-07	7.89E-09	1.00E-07	1.69E-09	1.79E-04	3.67E-10	2.82E-08	1.58E-08	3.80E-09	5.05E-09	3.63E-09	
Sutter	2050	HHDT	8.45E-08	0.00E+00	2.57E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0156705	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.323E-09	0.00E+00	4.024E-10	0.00E+00	
Sutter	2050	HHDT	1.35E-07	3.81E-09	4.32E-08	3.50E-09	5.33E-07	2.77E-08	6.70E-06	0.00E+00	1.45E-03	1.94E-06	2.95E-07	0.0007713	4.11E-10	2.13E-11	5.17E-09	0.00E+00	1.12E-06	1.49E-09	2.27E-10	1.04E-10	2.94E-12	3.333E-11	2.70E-12	
Sutter	2050	LDA	1.78E-08	6.72E-10	5.35E-09	6.18E-10	4.48E-08	7.46E-08	8.17E-07	2.58E-09	2.61E-04	5.49E-09	7.14E-09	0.3716112	1.67E-08	2.77E-08	3.04E-07	9.59E-10	9.70E-05	2.04E-09	2.65E-09	6.613E-09	2.50E-10	1.987E-09	2.30E-10	
Sutter	2050	LDA	1.78E-08	9.99E-10	5.35E-09	9.55E-10	1.18E-08	5.41E-09	1.74E-07	1.88E-09	1.98E-04	2.51E-10	3.12E-08	0.0002158	2.54E-12	1.17E-12	3.76E-11	4.06E-13	4.28E-08	5.42E-14	6.74E-12	3.844E-12	2.16E-13	1.155E-12	2.06E-13	
Sutter	2050	LDA	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0556869	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.609E-10	0.00E+00	2.172E-10	0.00E+00	
Sutter	2050	LDA	1.34E-08	3.30E-10	3.80E-09	3.03E-10	1.72E-08	6.55E-08	3.86E-07	1.39E-09	1.41E-04	5.34E-09	2.82E-09	0.0178098	3.07E-10	1.17E-09	6.88E-09	2.47E-11	2.50E-06	9.50E-11	5.02E-11	2.382E-10	5.88E-12	6.766E-11	5.40E-12	
Sutter	2050	LDT1	1.96E-08	7.05E-10	5.99E-09	6.48E-10	4.69E-08	9.70E-08	8.45E-07	2.97E-09	3.00E-04	5.69E-09	7.35E-09	0.0228694	1.07E-09	2.22E-09	1.93E-08	6.78E-11	6.86E-06	1.30E-10	1.68E-10	4.487E-10	1.61E-11	1.369E-10	1.48E-11	
Sutter	2050	LDT1	1.96E-08	4.87E-09	5.97E-09	4.66E-09	3.33E-08	1.64E-08	1.75E-07	3.52E-09	3.71E-04	7.62E-10	5.85E-08	2.754E-07	9.18E-15	4.52E-15	4.81E-14	9.68E-16	1.02E-10	2.10E-16	1.61E-14	5.392E-15	1.34E-15	1.644E-15	1.28E-15	
Sutter	2050	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0007715	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.054E-11	0.00E+00	3.01E-12	0.00E+00	
Sutter	2050	LDT1	1.34E-08	3.22E-10	3.80E-09	2.96E-10	1.68E-08	6.43E-08	3.81E-07	1.40E-09	1.41E-04	5.19E-09	2.76E-09	0.000579	9.70E-12	3.72E-11	2.20E-10	8.08E-13	8.17E-08	3.01E-12	1.60E-12	7.746E-12	1.87E-13	2.2E-12	1.72E-13	
Sutter	2050	LDT2	1.96E-08	6.83E-10	5.96E-09	6.28E-10	5.22E-08	8.78E-08	9.69E-07	3.08E-09	3.12E-04	6.98E-09	7.94E-09	0.2058181	1.07E-08	1.81E-08	1.99E-07	6.35E-10	6.42E-05	1.44E-09	1.63E-09	4.026E-09	1.41E-10	1.228E-09	1.29E-10	
Sutter	2050	LDT2	1.96E-08	4.85E-09	5.96E-09	4.64E-09	3.34E-08	1.64E-08	1.74E-07	2.60E-09	2.75E-04	7.60E-10	4.33E-08	0.00079	2.64E-11	1.29E-11	1.37E-10	2.06E-12	2.17E-07	6.01E-13	3.42E-11	1.545E-11	3.83E-12	4.711E-12	3.66E-12	
Sutter	2050	LDT2	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0060489	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.267E-11	0.00E+00	2.36E-11	0.00E+00	
Sutter	2050	LDT2	1.34E-08	3.27E-10	3.80E-09	3.01E-10	1.69E-08	6.52E-08	3.83E-07	1.40E-09	1.42E-04	5.24E-09	2.78E-09	0.0057509	9.73E-11	3.75E-10	2.20E-09	8.06E-12	8.15E-07	3.02E-11	1.60E-11	7.692E-11	1.88E-12	2.185E-11	1.73E-12	
Sutter	2050	LHDT1	9.48E-08	1.42E-09	3.23E-08	1.31E-09	2.06E-07	2.28E-07	2.30E-06	8.25E-09	8.34E-04	1.26E-08	1.98E-08	0.0064668	1.33E-09	1.47E-09	1.48E-08	5.33E-11	5.39E-06	8.17E-11	1.28E-10	6.13E-10	9.19E-12	2.089E-10	8.45E-12	
Sutter	2050	LHDT1	9.92E-08	2.18E-08	3.34E-08	2.09E-08	3.38E-07	1.00E-07	2.77E-07	6.35E-09	6.70E-04	4.67E-09	1.06E-07	0.0047324	1.60E-09	4.76E-10	1.31E-09	3.00E-11	3.17E-06	2.21E-11	4.99E-10	4.695E-10	1.03E-10	1.581E-10	9.88E-11	
Sutter	2050	LHDT1	5.18E-08	0.00E+00	1.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0104483	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.413E-10	0.00E+00	1.802E-10	0.00E+00	
Sutter	2050	LHDT2	1.09E-07	1.43E-09	3.73E-08	1.32E-09	1.84E-07	2.44E-07	2.39E-06	9.28E-09	9.39E-04	1.15E-08	1.86E-08	0.00078	1.44E-10	1.90E-10	1.87E-09	7.24E-12	7.32E-07	9.01E-12	1.45E-11	8.512E-11	1.12E-12	2.91E-11	1.03E-12	
Sutter	2050	LHDT2	1.14E-07	2.88E-08	3.84E-08	2.76E-08	4.96E-07	1.28E-07	3.54E-07	7.47E-09	7.88E-04	5.96E-09	1.24E-07	0.0022703	1.13E-09	2.91E-10	8.04E-10	1.70E-11	1.79E-06	1.35E-11	2.82E-10	2.578E-10	6.54E-11	8.721E-11	6.26E-11	
Sutter	2050	LHDT2	5.90E-08	0.00E+00	1.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0025851	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.525E-10	0.00E+00	5.108E-11	0.00E+00	
Sutter	2050	MCY	1.76E-08	3.98E-09	5.73E-09	3.71E-09	5.43E-07	5.15E-06	1.44E-05	2.20E-09	2.22E-04	2.02E-07	4.09E-08	0.0026922	1.46E-09	1.39E-08	3.89E-08	5.91E-12	5.98E-07	5.44E-10	1.10E-10	4.748E-11	1.07E-11	1.543E-11	1.00E-11	
Sutter	2050	MDV	1.97E-08	7.04E-10	6.02E-09	6.47E-10	5.73E-08	1.10E-07	1.02E-06	3.74E-09	3.79E-04	7.69E-09	8.44E-09	0.1070877	6.14E-09	1.18E-08	1.10E-07	4.01E-10	4.05E-05	8.23E-10	9.04E-10	2.111E-09	7.53E-11	6.446E-10	6.93E-11	
Sutter	2050	MDV	1.98E-08	1.20E-09	6.05E-09	1.15E-09	1.23E-08	6.09E-09	1.92E-07	3.41E-09	3.60E-04	2.83E-10	5.68E-08	0.0011961	1.47E-11	7.28E-12	2.30E-10	4.08E-12	4.31E-07	3.38E-13	6.79E-11	2.367E-11	1.44E-12	7.231E-12	1.38E-12	
Sutter	2050	MDV	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0053671	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.338E-11	0.00E+00	2.095E-11	0.00E+00	
Sutter	2050	MDV	1.34E-08	3.40E-10	3.80E-09	3.12E-10	1.82E-08	7.43E-08	3.97E-07	1.43E-09	1.44E-04	5.61E-09	2.92E-09	0.0032859	5.97E-11	2.44E-10	1.30E-09	4.69E-12	4.74E-07	1.84E-11	9.59E-12	4.397E-11	1.12E-12	1.249E-11	1.03E-12	
Sutter	2050	MH	6.29E-08	1.65E-09	2.07E-08	1.51E-09	2.44E-07	2.29E-07	1.79E-07	2.12E-08	2.15E-03	3.43E-09	2.01E-08	0.0002822	6.89E-11	6.45E-11	5.06E-11	5.99E-12	6.06E-07	9.68E-13	5.68E-12	1.774E-11	4.65E-13	5.837E-12	4.27E-13	
Sutter	2050	MH	6.71E-08	2.12E-08	2.17E-08	2.03E-08	2.73E-06	9.10E-08	2.60E-07	1.14E-08	1.20E-03	4.23E-09	1.89E-07	0.0001583	4.33E-10	1.44E-11	4.12E-11	1.80E-12	1.90E-07	6.69E-13	3.00E-11	1.062E-11	3.36E-12	3.438E-12	3.21E-12	
Sutter	2050	MHDT	6.29E-08	1.94E-09	2.07E-08	1.78E-09	3.42E-07	3.14E-07	2.26E-06	1.70E-08	1.72E-03	3.02E-08	2.67E-08	0.0004456	1.52E-10											

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Sutter

Calendar Year: 2050

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	0.0001892	Weighted Energy Consumption Rates		
			0.0003922	1.78E-02	2.29E-02	8.68E-02
			CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Sutter	2050	HHDT	2.859E-09	0	0.20961064	0
Sutter	2050	HHDT	0.0001698	0.13190206	0	0
Sutter	2050	HHDT	0	0	0	1.8340012
Sutter	2050	HHDT	1.108E-06	0	0	0
Sutter	2050	LDA	8.879E-05	0	0.0275344	0
Sutter	2050	LDA	4.065E-08	0.01771434	0	0
Sutter	2050	LDA	0	0	0	0.3860825
Sutter	2050	LDA	2.286E-06	0	0	0.3020298
Sutter	2050	LDT1	6.272E-06	0	0.03163391	0
Sutter	2050	LDT1	9.704E-11	0.03314626	0	0
Sutter	2050	LDT1	0	0	0	0.3860825
Sutter	2050	LDT1	7.463E-08	0	0	0.3020298
Sutter	2050	LDT2	5.87E-05	0	0.03288369	0
Sutter	2050	LDT2	2.061E-07	0.02453666	0	0
Sutter	2050	LDT2	0	0	0	0.3860825
Sutter	2050	LDT2	7.444E-07	0	0	0.3020298
Sutter	2050	LHDT1	4.93E-06	0	0.08795985	0
Sutter	2050	LHDT1	3.011E-06	0.05982472	0	0
Sutter	2050	LHDT1	0	0	0	0.6509792
Sutter	2050	LHDT2	6.683E-07	0	0.09898172	0
Sutter	2050	LHDT2	1.699E-06	0.07039395	0	0
Sutter	2050	LHDT2	0	0	0	0.6400412
Sutter	2050	MCY	5.847E-07	0	0.02342922	0
Sutter	2050	MDV	3.705E-05	0	0.03992673	0
Sutter	2050	MDV	4.093E-07	0.03218391	0	0
Sutter	2050	MDV	0	0	0	0.3860825
Sutter	2050	MDV	4.335E-07	0	0	0.3020298
Sutter	2050	MH	5.512E-07	0	0.22639484	0
Sutter	2050	MH	1.807E-07	0.1073468	0	0
Sutter	2050	MHDT	6.981E-07	0	0.1811827	0
Sutter	2050	MHDT	1.356E-05	0.10081847	0	0
Sutter	2050	MHDT	0	0	0	1.0695206
Sutter	2050	OBUS	1.138E-07	0	0.17802542	0
Sutter	2050	OBUS	2.674E-07	0.12040278	0	0
Sutter	2050	OBUS	0	0	0	1.1092842
Sutter	2050	SBUS	4.934E-08	0	0.08931515	0
Sutter	2050	SBUS	2.515E-07	0.10920059	0	0
Sutter	2050	SBUS	0	0	0	1.0534556

Region: Yolo

Regional VMT

Yolo	Daily VMT
2020	6,415,883
2050	7,614,015

Emission from VMT on County Roads

Year	Emission (tons/day)											GHG (MT/day)
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
2020	3.45	1.63	13.64	0.03	3386.27	0.19	0.24	2.22	0.05	0.57	0.05	3141.78
2050	1.11	0.59	5.90	0.02	2510.68	0.05	0.15	2.61	0.01	0.66	0.01	2318.44

PM_D is the sum of breakwear, tirewear, and fugitive dust.

Change in Diesel PM2.5 and PM10 Emissions

Year	VMT on County Road	% diesel	Diesel PM (grams/mile)		Diesel PM (grams/day)	
			PM10	PM2.5	PM10	PM2.5
2020	6,415,883	10.5%	5.20E-03	4.98E-03	3,515	3,362
2050	7,614,015	6.4%	1.26E-03	1.20E-03	615	588
Percent Change		-38.9%			-82.5%	-82.5%

Fugitive Dust Emission Factors

3 Travel on Paved Roads
E(lbs/VMT)=(k)(sL)^.91 (W)^1.02

Where:	PM10	<u>Unit</u>	<u>Source</u>
k= Particle Size Multiplier:	0.0022	lb/VMT	AP-42 Chapter 13.2.1, Table 13.2.1-1, PM10 emissions
sL= road surface silt loading	0.1	g/m^2	CalEEMod default
W= average weight of the vehicles traveling the road	2.4	tons	Statewide average vehicle weight in CA
PM10 Emission factor	0.00066	lbs/VMT	Public roads

Correction for Natural Precipitation⁵

3a	E(ext)=E[(1-P/4N)]			
	Where:		<u>Unit</u>	<u>Source</u>
	Ext = annual or other long-term average emission factor		dimensionless	
	P=#days/yr with >=0.01 inch precipitation during	58	days	Note: Sacramento data is used for all counties in the plan region
	N=# days in averaging period	365	days	Sacramento data: https://wrcc.dri.edu/Climate/comp_table_show.php?type=ppt_mean
	Corrected EF PM10	0.00063	lbs/VMT	Public roads
	Corrected EF PM2.5	0.00016	lbs/VMT	Public roads

Sources

EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 1

Fugitive			
Dust			
Source	PM2.5/PM10		Reference
Paved road	0.25		EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final Report, Oct 2005.

Region: Yolo

2020 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	3.63E-07	1.634E-08	7.687E-08	1.361E-09	0.0001437	7.59E-10	2.264E-08	1.037E-08	5.737E-09	3.383E-09	5.489E-09	0.0001365
EFs (tons/mile)	5.38E-07	2.54E-07	2.13E-06	5.11E-09	5.28E-04	3.00E-08	3.77E-08	2.96E-08	7.65E-09	9.31E-09	7.25E-09	4.90E-04

2050 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	1.07E-07	3.596E-09	3.923E-08	7.902E-10	8.344E-05	1.67E-10	1.315E-08	6.91E-09	1.384E-09	2.233E-09	1.324E-09	7.925E-05
EFs (tons/mile)	1.45E-07	7.81E-08	7.75E-07	3.21E-09	3.30E-04	6.43E-09	1.93E-08	2.63E-08	1.94E-09	8.14E-09	1.84E-09	3.04E-04

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Yolo
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

		171772.2		5918149.437		919876.155																		
		Mod																						
	Calendar	Vehicle	el	Spee						Energy	NOx_RUN	NOx_IDLE	NOx_STR	NOx_TOT	PM2.5_R	PM2.5_ID	PM2.5_ST	PM2.5_T	PM2.5_P					
Region	Year	Category	Year	d	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Consumption	EX	X	EX	EX	UNEX	LEX	REX	OTEX	MTW				
Yolo	2020	HHDT	Aggre	Aggre	Gasol	4.9813962	103.8476256	103.8476256		0	99.667775	0	0.001951		0	0.000212	0.002163	1.56E-06		0	7.43E-07	2.3E-06	5.72E-07	
Yolo	2020	HHDT	Aggre	Aggre	Diese	2060.2465	256831.0261	256831.0261		0	28046.94706	0	0.903627	0.154538	0.070857	1.129021	0.01446	0.000237		0	0.014698	0.002468		
Yolo	2020	HHDT	Aggre	Aggre	Natur	98.889664	7113.113145	7113.113145		0	704.9232238	0	0.009678	0.001191		0	0.010869	1.22E-05	2.01E-06		0	1.42E-05	7.06E-05	
Yolo	2020	LDA	Aggre	Aggre	Gasol	73596.948	2692845.346	2692845.346		0	340942.9929	0	0.196564		0	0.122583	0.319146	0.004143		0	0.000816	0.004959	0.005937	
Yolo	2020	LDA	Aggre	Aggre	Diese	422.53941	13600.65177	13600.65177		0	1866.612656	0	0.005479		0	0	0.005479	0.000284		0	0	0.000284	3E-05	
Yolo	2020	LDA	Aggre	Aggre	Electr	1629.7961	56953.30873		0	56953.30873	8209.473067	21988.67778		0	0	0	0	0		0	0	0	0.000126	
Yolo	2020	LDA	Aggre	Aggre	Plug-i	1099.8065	51512.10046	27673.81347	23838.28699	4547.699811	7199.873164	0.00021		0	0.000573	0.000783	5.03E-05		0	1.26E-05	6.28E-05	0.000114		
Yolo	2020	LDT1	Aggre	Aggre	Gasol	10024.17	279172.1074	279172.1074		0	44118.72703	0	0.060407		0	0.025563	0.085971	0.000711		0	0.000177	0.000888	0.000615	
Yolo	2020	LDT1	Aggre	Aggre	Diese	8.9305642	83.52922831	83.52922831		0	27.2768868	0	0.000148		0	0	0.000148	2.27E-05		0	0	2.27E-05	1.84E-07	
Yolo	2020	LDT1	Aggre	Aggre	Electr	12.123816	346.4755356		0	346.4755356	57.34455172	133.7681529		0	0	0	0	0		0	0	0	7.64E-07	
Yolo	2020	LDT1	Aggre	Aggre	Plug-i	0.3662738	16.50297696	8.63892622	7.864050737	1.514542197	2.375177709	6.54E-08		0	1.91E-07	2.56E-07	1.43E-08		0	3.95E-09	1.83E-08	3.64E-08		
Yolo	2020	LDT2	Aggre	Aggre	Gasol	32439.819	1058490.937	1058490.937		0	151013.1413	0	0.134015		0	0.079894	0.213909	0.001735		0	0.000368	0.002103	0.002334	
Yolo	2020	LDT2	Aggre	Aggre	Diese	120.25111	4430.253787	4430.253787		0	579.3700437	0	0.000362		0	0	0.000362	4.09E-05		0	0	4.09E-05	9.77E-06	
Yolo	2020	LDT2	Aggre	Aggre	Electr	10.98654	327.3006		0	327.3006	55.68646646	126.3650452		0	0	0	0	0		0	0	0	7.22E-07	
Yolo	2020	LDT2	Aggre	Aggre	Plug-i	53.370395	2371.178354	1249.313084	1121.865271	220.6865827	338.8367487	9.46E-06		0	2.78E-05	3.73E-05	2.39E-06		0	6.62E-07	3.05E-06		5.23E-06	
Yolo	2020	LHDT1	Aggre	Aggre	Gasol	4608.3859	148671.6695	148671.6695		0	68658.08352	0	0.038191	0.000206	0.053092	0.091489	0.000266		0	2.69E-05	0.000293	0.000328		
Yolo	2020	LHDT1	Aggre	Aggre	Diese	4507.7054	143492.6407	143492.6407		0	56701.26363	0	0.429656	0.011933		0	0.441589	0.008162	0.000135		0	0.008297	0.000475	
Yolo	2020	LHDT2	Aggre	Aggre	Gasol	504.92459	16724.16319	16724.16319		0	7522.624064	0	0.003185	2.23E-05	0.005696	0.008904	2.31E-05		0	1.96E-06	2.51E-05	3.69E-05		
Yolo	2020	LHDT2	Aggre	Aggre	Diese	1204.1581	41068.52016	41068.52016		0	15146.79404	0	0.08308	0.003099		0	0.086179	0.001826	3.54E-05		0	0.001861	0.000136	
Yolo	2020	MCY	Aggre	Aggre	Gasol	5242.6829	24878.68113	24878.68113		0	10485.36588	0	0.019718		0	0.002142	0.02186	5.05E-05		0	4.25E-05	9.3E-05	2.74E-05	
Yolo	2020	MDV	Aggre	Aggre	Gasol	29263.343	931740.3673	931740.3673		0	134604.9088	0	0.164595		0	0.091649	0.256244	0.001578		0	0.000365	0.001943	0.002054	
Yolo	2020	MDV	Aggre	Aggre	Diese	606.60315	23130.20106	23130.20106		0	2928.477508	0	0.001775		0	0	0.001775	0.000162		0	0	0.000162	5.1E-05	
Yolo	2020	MDV	Aggre	Aggre	Electr	10.594795	303.9385576		0	303.9385576	53.00667496	117.3453686		0	0	0	0	0		0	0	0	6.7E-07	
Yolo	2020	MDV	Aggre	Aggre	Plug-i	86.185879	3844.985206	2068.974064	1776.011142	356.3786078	536.4082986	1.57E-05		0	4.49E-05	6.06E-05	4.32E-06		0	1.16E-06	5.49E-06	8.48E-06		
Yolo	2020	MH	Aggre	Aggre	Gasol	542.30622	4364.562625	4364.562625		0	54.25231383	0	0.002238		0	2.37E-05	0.002262	8.28E-06		0	2.8E-08	8.31E-06	1.44E-05	
Yolo	2020	MH	Aggre	Aggre	Diese	194.72683	1632.224167	1632.224167		0	19.47268324	0	0.009087		0	0	0.009087	0.000226		0	0	0.000226	7.2E-06	
Yolo	2020	MHDT	Aggre	Aggre	Gasol	258.39725	8704.117867	8704.117867		0	5170.012206	0	0.012875	2.44E-05	0.002648	0.015548	2.08E-05		0	5.98E-06	2.68E-05	2.88E-05		
Yolo	2020	MHDT	Aggre	Aggre	Diese	2818.312	131714.9613	131714.9613		0	33138.58988	0	0.319255	0.060072	0.046706	0.426033	0.006064	0.000225		0	0.00629	0.000436		
Yolo	2020	MHDT	Aggre	Aggre	Natur	2.7859736	105.4704525	105.4704525		0	35.09582219	0	2.63E-05	1.7E-05		0	4.33E-05	7.49E-08	3.44E-08		0	1.09E-07	3.49E-07	
Yolo	2020	OBUS	Aggre	Aggre	Gasol	72.195115	3318.915162	3318.915162		0	1444.479856	0	0.0018	5.17E-06	0.000692	0.002498	2.75E-06		0	3.45E-07	3.1E-06	1.1E-05		
Yolo	2020	OBUS	Aggre	Aggre	Diese	59.419482	3640.657747	3640.657747		0	579.2059292	0	0.015788	0.000721	0.000596	0.017104	0.000472	3.32E-06		0	0.000475	1.2E-05		
Yolo	2020	OBUS	Aggre	Aggre	Natur	35.012639	1905.844827	1905.844827		0	311.6124847	0	0.000606	6.09E-05		0	0.000667	1.26E-06	1.13E-07		0	1.37E-06	6.3E-06	
Yolo	2020	SBUS	Aggre	Aggre	Gasol	16.495276	747.0702606	747.0702606		0	65.98110285	0	0.000869	1.64E-05	4.94E-05	0.000935	1.74E-06		0	6.49E-08	1.8E-06	1.65E-06		
Yolo	2020	SBUS	Aggre	Aggre	Diese	142.12844	3274.22251	3274.22251		0	2058.019772	0	0.01939	0.004114	0.000838	0.024342	0.000105	5.16E-06		0	0.00011	1.08E-05		
Yolo	2020	UBUS	Aggre	Aggre	Gasol	12.61659	688.5437711	688.5437711		0	50.46635923	0	0.000126		0	4.58E-05	0.000172	6.23E-07		0	2.95E-08	6.52E-07	2.04E-06	
Yolo	2020	UBUS	Aggre	Aggre	Diese	28.437517	2538.906529	2538.906529		0	113.7500686	0	0.004364		0	0	0.004364	1.63E-05		0	0	1.63E-05	1.74E-05	
Yolo	2020	UBUS	Aggre	Aggre	Electr	0.0023594	0.17588517		0	0.17588517	0.009437672	0.306610789		0	0	0	0	0		0	0	0	5.82E-10	
Yolo	2020	UBUS	Aggre	Aggre	Natur	93.801978	9429.373184	9429.373184		0	375.2079106	0	0.00365		0	0	0.00365	2.21E-06		0	0	2.21E-06	9.2E-05	

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Yolo

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

2.44E-06

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX
Yolo	2020	HHDT	4.7E-06	7.58E-06	1.66E-06	0	7.86E-07	2.44E-06	2.29E-06	1.34E-05	1.82E-05	0.337284	0	0.010393	0.347677	0.000131	0	9.8E-10	0.000131	4.52E-05	0	3.7E-06	4.89E-05	0.001062
Yolo	2020	HHDT	0.0079	0.025065	0.015114	0.000248	0	0.015362	0.00987	0.02257	0.047803	477.2256	28.684	0	505.9096	0.000945	0.000547	0	0.001492	0.075187	0.004519	0	0.079706	0.020355
Yolo	2020	HHDT	0.0004	0.000485	1.33E-05	2.18E-06	0	1.54E-05	0.000282	0.001142	0.00144	11.5933	0.946696	0	12.54	0.022585	0.002838	0	0.025423	0.002363	0.000193	0	0.002556	0.000428
Yolo	2020	LDA	0.008323	0.019219	0.004506	0	0.000887	0.005393	0.023747	0.02378	0.05292	910.1889	0	28.77935	938.9683	0.011046	0	0.034321	0.045367	0.018397	0	0.013857	0.032255	0.04538
Yolo	2020	LDA	4.23E-05	0.000356	0.000297	0	0	0.000297	0.00012	0.000121	0.000538	3.637342	0	0	3.637342	2.32E-05	0	0	2.32E-05	0.000573	0	0	0.000573	0.0005
Yolo	2020	LDA	9.59E-05	0.000221	0	0	0	0	0.000502	0.000274	0.000776	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2020	LDA	7.9E-05	0.000255	5.47E-05	0	1.37E-05	6.83E-05	0.000454	0.000226	0.000748	8.990414	0	0.343352	9.333766	3.05E-05	0	0.000213	0.000244	3.89E-05	0	0.000106	0.000145	9.52E-05
Yolo	2020	LDT1	0.001054	0.002558	0.000773	0	0.000192	0.000965	0.002462	0.003013	0.00644	110.7763	0	4.682924	115.4592	0.003122	0	0.007127	0.010249	0.004068	0	0.002156	0.006225	0.014566
Yolo	2020	LDT1	3.63E-07	2.32E-05	2.37E-05	0	0	2.37E-05	7.37E-07	1.04E-06	2.55E-05	0.038958	0	0	0.038958	1.24E-06	0	0	1.24E-06	6.14E-06	0	0	6.14E-06	2.66E-05
Yolo	2020	LDT1	5.88E-07	1.35E-06	0	0	0	0	3.06E-06	1.68E-06	4.74E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2020	LDT1	2.53E-08	7.99E-08	1.56E-08	0	4.29E-09	1.99E-08	1.46E-07	7.23E-08	2.38E-07	0.00281	0	0.000128	0.002938	9.45E-09	0	7.06E-08	8E-08	1.2E-08	0	3.49E-08	4.68E-08	2.97E-08
Yolo	2020	LDT2	0.003862	0.008298	0.001887	0	0.0004	0.002287	0.009334	0.011034	0.022655	449.949	0	16.2396	466.1886	0.005154	0	0.017669	0.022823	0.009722	0	0.007321	0.017042	0.021739
Yolo	2020	LDT2	1.55E-05	6.62E-05	4.27E-05	0	0	4.27E-05	3.91E-05	4.44E-05	0.000126	1.615965	0	0	1.615965	4.66E-06	0	0	4.66E-06	0.000255	0	0	0.000255	0.0001
Yolo	2020	LDT2	5.5E-07	1.27E-06	0	0	0	0	2.89E-06	1.57E-06	4.46E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2020	LDT2	3.63E-06	1.19E-05	2.6E-06	0	7.2E-07	3.32E-06	2.09E-05	1.04E-05	3.46E-05	0.406323	0	0.020007	0.426331	1.36E-06	0	1.03E-05	1.16E-05	1.73E-06	0	5.07E-06	6.8E-06	4.3E-06
Yolo	2020	LHDT1	0.004474	0.005094	0.000289	0	2.92E-05	0.000318	0.001311	0.012783	0.014412	152.2355	0.623803	1.982853	154.8422	0.001765	0.000623	0.002795	0.005183	0.002118	1.58E-05	0.004018	0.006153	0.008912
Yolo	2020	LHDT1	0.004318	0.01309	0.008531	0.000141	0	0.008672	0.001898	0.012338	0.022908	101.6822	0.687743	0	102.3699	0.001752	2.53E-05	0	0.001777	0.01602	0.000108	0	0.016128	0.037722
Yolo	2020	LHDT2	0.000587	0.000649	2.51E-05	0	2.14E-06	2.73E-05	0.000147	0.001678	0.001852	18.85852	0.078623	0.217084	19.15423	0.000141	6.89E-05	0.000287	0.000498	0.000192	1.76E-06	0.000443	0.000636	0.000693
Yolo	2020	LHDT2	0.001442	0.003439	0.001908	3.7E-05	0	0.001945	0.000543	0.00412	0.006608	35.60691	0.291724	0	35.89863	0.000404	6.77E-06	0	0.000411	0.00561	4.6E-05	0	0.005656	0.008702
Yolo	2020	MCY	0.000115	0.000236	5.38E-05	0	4.49E-05	9.87E-05	0.00011	0.000329	0.000537	5.404039	0	0.668986	6.073025	0.005977	0	0.002556	0.008533	0.001259	0	0.000122	0.001381	0.042103
Yolo	2020	MDV	0.003478	0.007476	0.001715	0	0.000397	0.002112	0.008217	0.009938	0.020267	476.7032	0	17.53038	494.2336	0.006417	0	0.020243	0.02666	0.010873	0	0.007309	0.018182	0.029901
Yolo	2020	MDV	8.21E-05	0.000295	0.00017	0	0	0.00017	0.000204	0.000235	0.000608	10.91915	0	0	10.91915	1.77E-05	0	0	1.77E-05	0.00172	0	0	0.00172	0.00038
Yolo	2020	MDV	5.12E-07	1.18E-06	0	0	0	0	2.68E-06	1.46E-06	4.14E-06	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2020	MDV	5.89E-06	1.99E-05	4.7E-06	0	1.27E-06	5.97E-06	3.39E-05	1.68E-05	5.67E-05	0.672476	0	0.04032	0.712796	2.27E-06	0	1.66E-05	1.89E-05	2.88E-06	0	8.24E-06	1.11E-05	7.12E-06
Yolo	2020	MH	7.59E-05	9.86E-05	8.99E-06	0	3.03E-08	9.02E-06	5.77E-05	0.000217	0.000283	9.387972	0	0.001927	9.389899	9.13E-05	0	2.34E-06	9.36E-05	0.000133	0	2.46E-06	0.000135	0.000434
Yolo	2020	MH	2.82E-05	0.000261	0.000236	0	0	0.000236	2.88E-05	8.07E-05	0.000345	1.946485	0	0	1.946485	1.2E-05	0	0	1.2E-05	0.000307	0	0	0.000307	0.000258
Yolo	2020	MHDT	0.000151	0.000207	2.27E-05	0	6.5E-06	2.92E-05	0.000115	0.000432	0.000577	18.27194	0.15873	0.290174	18.72084	0.000521	6.21E-05	0.000293	0.000876	0.000522	1.53E-06	0.000153	0.000677	0.002869
Yolo	2020	MHDT	0.002308	0.009034	0.006338	0.000236	0	0.006574	0.001742	0.006596	0.014912	167.7232	7.423895	0	175.1471	0.000606	5.18E-05	0	0.000658	0.026425	0.00117	0	0.027594	0.013046
Yolo	2020	MHDT	1.86E-06	2.32E-06	8.15E-08	3.74E-08	0	1.19E-07	1.4E-06	5.32E-06	6.83E-06	0.117744	0.013411	0	0.131154	7.33E-05	5E-05	0	0.000123	2.4E-05	2.73E-06	0	2.67E-05	1.05E-06
Yolo	2020	OBUS	5.75E-05	7.15E-05	2.99E-06	0	3.75E-07	3.37E-06	4.39E-05	0.000164	0.000211	6.724125	0.030841	0.050588	6.805554	4.62E-05	1.57E-05	5.7E-05	0.000119	8.82E-05	4.24E-07	5.19E-05	0.000141	0.000219
Yolo	2020	OBUS	7.07E-05	0.000558	0.000493	3.47E-06	0	0.000497	4.82E-05	0.000202	0.000747	5.091555	0.084527	0	5.176083	6.7E-05	1.33E-06	0	6.83E-05	0.000802	1.33E-05	0	0.000815	0.001443
Yolo	2020	OBUS	3.39E-05	4.16E-05	1.37E-06	1.23E-07	0	1.49E-06	2.52E-05	9.69E-05	0.000124	2.27655	0.04703	0	2.32358	0.001548	0.000183	0	0.001731	0.000464	9.59E-06	0	0.000474	2.21E-05
Yolo	2020	SBUS	1.29E-05	1.64E-05	1.89E-06	0	7.06E-08	1.96E-06	6.59E-06	3.7E-05	4.55E-05	0.696723	0.048706	0.004819	0.750248	2.37E-05	4.19E-05	6.23E-06	7.18E-05	3.98E-05	1.4E-06	4.01E-06	4.52E-05	0.000117
Yolo	2020	SBUS	5.67E-05	0.000178	0.00011	5.39E-06	0	0.000115	4.33E-05	0.000162	0.000321	4.241535	0.353803	0	4.595337	1.19E-05	1.31E-06	0	1.32E-05	0.000668	5.57E-05	0	0.000724	0.000256
Yolo	2020	UBUS	2.77E-05	3.04E-05	6.77E-07	0	3.21E-08	7.1E-07	8.17E-06	7.9E-05	8.79E-05	1.17994	0	0.0053	1.18524	2.6E-06	0	5.39E-06	7.99E-06	1.16E-05	0	3.97E-06	1.56E-05	8.39E-06
Yolo	2020	UBUS	0.000107	0.000141	1.71E-05	0	0	1.71E-05	6.98E-05	0.000306	0.000393	3.365773	0	0	3.365773	1.34E-05	0	0	1.34E-05	0.00053	0	0	0.00053	0.00029
Yolo	2020	UBUS	3.73E-09	4.31E-09	0	0	0	0	2.33E-09	1.07E-08	1.3E-08	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2020	UBUS	0.0004	0.000494	2.31E-06	0	0	2.31E-06	0.000368	0.001143	0.001514	15.36178	0	0	15.36178	0.024795	0	0	0.024795	0.003132	0	0	0.003132	0.000355

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Yolo

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category																		Fuel									
			ROG_IDLE	ROG_STR	ROG_TOT	ROG_DIU	ROG_HOT	ROG_RUN	ROG_TOT	TOG_RUN	TOG_IDLE	TOG_STR	TOG_TOT	TOG_DIU	TOG_HOT	TOG_RUN	TOG_TOT	CO_RUNE	CO_IDLEX	CO_STREX	X	CO_TOTE	SOx_RUN	SOx_IDLE	SOx_STRE	SOx_TOTE	NH3_RUN	Consumption	
			EX	EX	RN	SOAK	LOSS	AL	EX	X	EX	EX	RN	SOAK	LOSS	AL	X												
Yolo	2020	HHDT	0	5.33E-09	0.001062	6.78E-05	3.54E-05	0.000151	0.001316	0.001341	0	5.84E-09	0.001341	6.78E-05	3.54E-05	0.000151	0.001596	0.029511	0	8.35E-05	0.029595	3.33E-06	0	1.03E-07	3.44E-06	3.15E-06	0.036662		
Yolo	2020	HHDT	0.011768	0	0.032124	0	0	0	0.032124	0.023173	0.013397	0	0.03657	0	0	0	0.03657	0.080932	0.150327	0	0.231259	0.004519	0.000272	0	0.004791	0.054348	45.1927		
Yolo	2020	HHDT	4.34E-05	0	0.000471	0	0	0	0.000471	0.02317	0.002899	0	0.026069	0	0	0	0.026069	0.114712	0.008192	0	0.122904	0	0	0	0	0.006418	1.449432		
Yolo	2020	LDA	0	0.167646	0.213026	0.14227	0.041586	0.102886	0.499768	0.066181	0	0.18355	0.249731	0.14227	0.041586	0.102886	0.536473	3.134677	0	1.574748	4.709425	0.008998	0	0.000285	0.009283	0.090917	99.01303		
Yolo	2020	LDA	0	0	0.0005	0	0	0	0.0005	0.00057	0	0	0	0.00057	0	0	0	0.00057	0.005972	0	0	0.005972	3.45E-05	0	0	3.45E-05	4.65E-05	0.324922	
Yolo	2020	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2020	LDA	0	0.000857	0.000952	0.000649	0.000205	0.00018	0.001987	0.000139	0	0.000938	0.001077	0.000649	0.000205	0.00018	0.002112	0.01492	0	0.006589	0.02151	8.89E-05	0	3.39E-06	9.23E-05	0.001089	0.984234		
Yolo	2020	LDT1	0	0.039842	0.054408	0.04282	0.011482	0.034195	0.142905	0.021234	0	0.043622	0.064855	0.04282	0.011482	0.034195	0.153352	0.680848	0	0.383188	1.064036	0.001095	0	4.63E-05	0.001141	0.010881	12.17503		
Yolo	2020	LDT1	0	0	2.66E-05	0	0	0	2.66E-05	3.03E-05	0	0	3.03E-05	0	0	0	3.03E-05	0.000145	0	0	0.000145	3.69E-07	0	0	3.69E-07	2.85E-07	0.00348		
Yolo	2020	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2020	LDT1	0	2.85E-07	3.15E-07	1.58E-07	4.71E-08	4.7E-08	5.68E-07	4.34E-08	0	3.12E-07	3.56E-07	1.58E-07	4.71E-08	4.7E-08	6.08E-07	4.68E-06	0	2.19E-06	6.87E-06	2.78E-08	0	1.26E-09	2.9E-08	4E-07	0.00031		
Yolo	2020	LDT2	0	0.088288	0.110027	0.060762	0.017345	0.044176	0.232309	0.031709	0	0.096664	0.128373	0.060762	0.017345	0.044176	0.250655	1.451632	0	0.81501	2.266642	0.004448	0	0.000161	0.004609	0.037802	49.15901		
Yolo	2020	LDT2	0	0	0.0001	0	0	0	0.0001	0.000114	0	0	0.000114	0	0	0	0.000114	0.000779	0	0	0.000779	1.53E-05	0	0	1.53E-05	1.51E-05	0.144353		
Yolo	2020	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2020	LDT2	0	4.16E-05	4.59E-05	2.44E-05	7.17E-06	7.1E-06	8.45E-05	6.27E-06	0	4.55E-05	5.18E-05	2.44E-05	7.17E-06	7.1E-06	9.04E-05	0.000676	0	0.00032	0.000996	4.02E-06	0	1.98E-07	4.21E-06	5.73E-05	0.044956		
Yolo	2020	LHDT1	0.002355	0.014223	0.02549	0.013821	0.003825	0.019038	0.062174	0.012914	0.003436	0.015571	0.031921	0.013821	0.003825	0.019038	0.068605	0.214534	0.019053	0.230434	0.464021	0.001505	6.17E-06	1.96E-05	0.001531	0.007355	16.32792		
Yolo	2020	LHDT1	0.000545	0	0.038268	0	0	0	0.038268	0.042944	0.000621	0	0.043565	0	0	0	0.043565	0.11166	0.00452	0	0.11618	0.000963	6.52E-06	0	0.00097	0.021205	9.144667		
Yolo	2020	LHDT2	0.000255	0.00143	0.002379	0.001092	0.000313	0.001422	0.005206	0.001011	0.000373	0.001566	0.00295	0.001092	0.000313	0.001422	0.005777	0.018802	0.002096	0.025854	0.046752	0.000186	7.77E-07	2.15E-06	0.000189	0.000829	2.019789		
Yolo	2020	LHDT2	0.000146	0	0.008848	0	0	0	0.008848	0.009907	0.000166	0	0.010073	0	0	0	0.010073	0.023315	0.001208	0	0.024523	0.000337	2.76E-06	0	0.00034	0.007381	3.206811		
Yolo	2020	MCY	0	0.019677	0.06178	0.029712	0.041655	0.044195	0.177341	0.049414	0	0.021379	0.070793	0.029712	0.041655	0.044195	0.186354	0.46492	0	0.099695	0.564615	5.34E-05	0	6.61E-06	6E-05	0.000229	0.640393		
Yolo	2020	MDV	0	0.109276	0.139178	0.062116	0.018	0.04614	0.265433	0.042577	0	0.119631	0.162208	0.062116	0.018	0.04614	0.288463	1.525393	0	0.808104	2.333497	0.004713	0	0.000173	0.004886	0.032485	52.11631		
Yolo	2020	MDV	0	0	0.00038	0	0	0	0.00038	0.000433	0	0	0.000433	0	0	0	0.000433	0.005985	0	0	0.005985	0.000103	0	0	0.000103	7.9E-05	0.975403		
Yolo	2020	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2020	MDV	0	6.71E-05	7.43E-05	4.41E-05	1.24E-05	1.28E-05	0.000144	1.04E-05	0	7.35E-05	8.39E-05	4.41E-05	1.24E-05	1.28E-05	0.000153	0.001117	0	0.000516	0.001634	6.65E-06	0	3.99E-07	7.05E-06	9.58E-05	0.075163		
Yolo	2020	MH	0	1.03E-05	0.000444	0.002725	0.000775	1.64E-05	0.00396	0.000617	0	1.13E-05	0.000628	0.002725	0.000775	1.64E-05	0.004144	0.011425	0	0.000215	0.01164	9.28E-05	0	1.9E-08	9.28E-05	0.000215	0.990153		
Yolo	2020	MH	0	0	0.000258	0	0	0	0.000258	0.000293	0	0	0.000293	0	0	0	0.000293	0.000873	0	0	0.000873	1.84E-05	0	0	1.84E-05	0.000224	0.173879		
Yolo	2020	MHDT	0.000277	0.00181	0.004956	0.001744	0.000472	0.003731	0.010903	0.004187	0.000404	0.001982	0.006573	0.001744	0.000472	0.003731	0.012519	0.063819	0.004168	0.042518	0.110504	0.000181	1.57E-06	2.87E-06	0.000185	0.000423	1.974089		
Yolo	2020	MHDT	0.001115	0	0.014161	0	0	0	0.014161	0.014852	0.001269	0	0.016121	0	0	0	0.016121	0.040535	0.022819	0	0.063354	0.001588	7.03E-05	0	0.001659	0.026361	15.64582		
Yolo	2020	MHDT	7.14E-07	0	1.76E-06	0	0	0	1.76E-06	7.48E-05	5.1E-05	0	0.000126	0	0	0	0.000126	0.000343	6.2E-05	0	0.000405	0	0	0	0	0.000123	0.015159		
Yolo	2020	OBUS	5.93E-05	0.000296	0.000574	0.000183	4.77E-05	0.000188	0.000992	0.00032	8.65E-05	0.000324	0.00073	0.000183	4.77E-05	0.000188	0.001148	0.005023	0.000459	0.005995	0.011477	6.65E-05	3.05E-07	5E-07	6.73E-05	0.000165	0.717637		
Yolo	2020	OBUS	2.87E-05	0	0.001472	0	0	0	0.001472	0.001643	3.26E-05	0	0.001675	0	0	0	0.001675	0.003757	0.000356	0	0.004113	4.82E-05	8E-07	0	4.9E-05	0.000644	0.462377		
Yolo	2020	OBUS	2.62E-06	0	2.47E-05	0	0	0	2.47E-05	0.001579	0.000187	0	0.001766	0	0	0	0.001766	0.006536	0.000199	0	0.006735	0	0	0	0	0.002227	0.26857		
Yolo	2020	SBUS	0.000186	3.7E-05	0.000341	7.75E-05	2.19E-05	6.45E-05	0.000505	0.000171	0.000272	4.06E-05	0.000484	7.75E-05	2.19E-05	6.45E-05	0.000648	0.002864	0.001453	0.001041	0.005358	6.89E-06	4.82E-07	4.76E-08	7.42E-06	3.71E-05	0.079113		
Yolo	2020	SBUS	2.83E-05	0	0.000284	0	0	0	0.000284	0.000291	3.22E-05	0	0.000323	0	0	0	0.000323	0.000766	0.000617	0	0.001383	4.02E-05	3.35E-06	0	4.35E-05	0.000436	0.4105		
Yolo	2020	UBUS	0	2.47E-05	3.3E-05	8.22E-06	2.48E-06	5.25E-06	4.9E-05	1.22E-05	0	2.7E-05	3.92E-05	8.22E-06	2.48E-06	5.25E-06	5.52E-05	0.000284	0	0.000503	0.000788	1.17E-05	0	5.24E-08	1.17E-05	3.42E-05	0.124982		
Yolo	2020	UBUS	0	0	0.00029	0	0	0	0.00029	0.00033	0	0	0.00033	0	0	0	0.00033	0.000354	0	0	0.000354	3.19E-05	0	0	3.19E-05	0.00047	0.300663		
Yolo	2020	UBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2020	UBUS	0	0	0.000355	0	0	0	0.000355	0.025306	0	0	0.025306	0	0	0	0.025306	0.350646	0	0	0.350646	</							

Source: EMFAC2021 (v1.0.2) Emission

Region Type: County

Units: tons/mile

GWP

Region: Yolo

Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

1

25

298

Calendar Year: 2020

The emission rates are calculated as follows:

MTs/ton

0.907185

Season: Annual

EF_PM_D = PM_BW+PM_TW

Vehicle Classification: EMFAC2007

EF_PM = PM_TOTEX/Total VMT

Units: miles/day for CVMT and EVI

EF_Gas = Gas_TOTEX/Total VMT

EF_VOC = VOC_TOTLE/Total VMT

Region	Calendar Year	Vehicle Category	PM10_VM	PM10_VMT_Ex	PM2.5_VM	PM2.5_VMT_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D
			T_D		T_D	T_Ex																		
Yolo	2020	HHDT	1.51E-07	2.35E-08	5.08E-08	2.22E-08	2.08E-05	1.27E-05	2.85E-04	3.31E-08	3.35E-03	1.26E-06	4.71E-07	1.75473E-05	3.65E-10	2.22E-10	5.00E-09	5.81E-13	5.87E-08	2.21E-11	8.26E-12	2.66E-12	4.13E-13	8.92E-13
Yolo	2020	HHDT	1.26E-07	5.98E-08	4.04E-08	5.72E-08	4.40E-06	1.25E-07	9.00E-07	1.87E-08	1.97E-03	5.81E-09	3.10E-07	0.043397185	1.91E-07	5.43E-09	3.91E-08	8.09E-10	8.55E-05	2.52E-10	1.35E-08	5.482E-09	2.60E-09	1.752E-09
Yolo	2020	HHDT	2.00E-07	2.17E-09	6.61E-08	2.00E-09	1.53E-06	6.63E-08	1.73E-05	0.00E+00	1.76E-03	3.57E-06	3.59E-07	0.001201915	1.84E-09	7.96E-11	2.08E-08	0.00E+00	2.12E-06	4.30E-09	4.32E-10	2.407E-10	2.61E-12	7.948E-11
Yolo	2020	LDA	1.76E-08	2.00E-09	5.30E-09	1.84E-09	1.19E-07	1.86E-07	1.75E-06	3.45E-09	3.49E-04	1.68E-08	1.20E-08	0.45501476	5.39E-08	8.44E-08	7.96E-07	1.57E-09	1.59E-04	7.67E-09	5.45E-09	8.031E-09	9.11E-10	2.409E-09
Yolo	2020	LDA	1.77E-08	2.18E-08	5.32E-09	2.09E-08	4.03E-07	3.68E-08	4.39E-07	2.53E-09	2.67E-04	1.71E-09	4.21E-08	0.002298126	9.26E-10	8.46E-11	1.01E-09	5.82E-12	6.15E-07	3.93E-12	9.68E-11	4.069E-11	5.02E-11	1.222E-11
Yolo	2020	LDA	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0096235	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.312E-10	0.00E+00	3.742E-11
Yolo	2020	LDA	1.32E-08	1.33E-09	3.74E-09	1.22E-09	1.52E-08	3.86E-08	4.18E-07	1.79E-09	1.81E-04	4.74E-09	2.82E-09	0.008704089	1.32E-10	3.36E-10	3.63E-09	1.56E-11	1.58E-06	4.12E-11	2.45E-11	1.149E-10	1.15E-11	3.255E-11
Yolo	2020	LDT1	1.96E-08	3.46E-09	5.98E-09	3.18E-09	3.08E-07	5.12E-07	3.81E-06	4.09E-09	4.14E-04	3.67E-08	2.23E-08	0.047172196	1.45E-08	2.41E-08	1.80E-07	1.93E-10	1.95E-05	1.73E-09	1.05E-09	9.25E-10	1.63E-10	2.822E-10
Yolo	2020	LDT1	2.12E-08	2.84E-07	6.55E-09	2.72E-07	1.77E-06	3.19E-07	1.74E-06	4.42E-09	4.66E-04	1.48E-08	7.35E-08	1.41141E-05	2.50E-11	4.50E-12	2.46E-11	6.24E-14	6.58E-09	2.09E-13	1.04E-12	2.999E-13	4.01E-12	9.251E-14
Yolo	2020	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85446E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.002E-13	0.00E+00	2.285E-13
Yolo	2020	LDT1	1.32E-08	1.20E-09	3.74E-09	1.11E-09	1.55E-08	3.44E-08	4.16E-07	1.76E-09	1.78E-04	4.85E-09	2.84E-09	2.78854E-06	4.33E-14	9.59E-14	1.16E-12	4.91E-15	4.96E-10	1.35E-14	7.92E-15	3.68E-14	3.36E-15	1.042E-14
Yolo	2020	LDT2	1.92E-08	2.16E-09	5.85E-09	1.99E-09	2.02E-07	2.19E-07	2.14E-06	4.35E-09	4.40E-04	2.16E-08	1.61E-08	0.178855054	3.61E-08	3.93E-08	3.83E-07	7.79E-10	7.88E-05	3.86E-09	2.88E-09	3.442E-09	3.86E-10	1.047E-09
Yolo	2020	LDT2	1.88E-08	9.64E-09	5.71E-09	9.22E-09	8.16E-08	2.27E-08	1.76E-07	3.46E-09	3.65E-04	1.05E-09	5.75E-08	0.000748588	6.11E-11	1.70E-11	1.32E-10	2.59E-12	2.73E-07	7.88E-13	4.30E-11	1.411E-11	7.22E-12	4.277E-12
Yolo	2020	LDT2	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53046E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.534E-13	0.00E+00	2.149E-13
Yolo	2020	LDT2	1.32E-08	1.40E-09	3.74E-09	1.29E-09	1.57E-08	3.56E-08	4.20E-07	1.78E-09	1.80E-04	4.91E-09	2.87E-09	0.000400662	6.30E-12	1.43E-11	1.68E-10	7.12E-13	7.20E-08	1.97E-12	1.15E-12	5.288E-12	5.61E-13	1.498E-12
Yolo	2020	LHDT1	9.48E-08	2.14E-09	3.23E-08	1.97E-09	6.15E-07	4.18E-07	3.12E-06	1.03E-08	1.04E-03	3.49E-08	4.14E-08	0.02512131	1.55E-08	1.05E-08	7.84E-08	2.59E-10	2.62E-05	8.76E-10	1.04E-09	2.381E-09	5.38E-11	8.114E-10
Yolo	2020	LHDT1	9.92E-08	6.04E-08	3.34E-08	5.78E-08	3.08E-06	2.67E-07	8.10E-07	6.76E-09	7.13E-04	1.24E-08	1.12E-07	0.024246201	7.46E-08	6.47E-09	1.96E-08	1.64E-10	1.73E-05	3.00E-10	2.73E-09	2.405E-09	1.47E-09	8.098E-10
Yolo	2020	LHDT2	1.09E-07	1.63E-09	3.73E-08	1.50E-09	5.32E-07	3.11E-07	2.80E-06	1.13E-08	1.15E-03	2.98E-08	3.80E-08	0.002825911	1.50E-09	8.80E-10	7.90E-09	3.20E-11	3.24E-06	8.41E-11	1.07E-10	3.084E-10	4.61E-12	1.054E-10
Yolo	2020	LHDT2	1.14E-07	4.74E-08	3.84E-08	4.53E-08	2.10E-06	2.15E-07	5.97E-07	8.28E-09	8.74E-04	1.00E-08	1.38E-07	0.006939419	1.46E-08	1.50E-09	4.14E-09	5.75E-11	6.07E-06	6.94E-11	9.56E-10	7.879E-10	3.29E-10	2.666E-10
Yolo	2020	MCY	1.76E-08	3.97E-09	5.73E-09	3.74E-09	8.79E-07	7.13E-06	2.27E-05	2.41E-09	2.44E-04	3.43E-07	5.55E-08	0.004203794	3.69E-09	3.00E-08	9.54E-08	1.01E-11	1.03E-06	1.44E-09	2.33E-10	7.414E-11	1.67E-11	2.41E-11
Yolo	2020	MDV	1.95E-08	2.27E-09	5.94E-09	2.09E-09	2.75E-07	2.85E-07	2.50E-06	5.24E-09	5.30E-04	2.86E-08	1.95E-08	0.15743779	4.33E-08	4.49E-08	3.94E-07	8.26E-10	8.35E-05	4.50E-09	3.07E-09	3.068E-09	3.57E-10	9.348E-10
Yolo	2020	MDV	1.90E-08	7.34E-09	5.75E-09	7.02E-09	7.67E-08	1.64E-08	2.59E-07	4.47E-09	4.72E-04	7.64E-10	7.44E-08	0.00390835	3.00E-10	6.43E-11	1.01E-09	1.75E-11	1.85E-06	2.98E-12	2.91E-10	7.41E-11	2.87E-11	2.249E-11
Yolo	2020	MDV	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.1357E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.999E-13	0.00E+00	1.997E-13
Yolo	2020	MDV	1.32E-08	1.55E-09	3.74E-09	1.43E-09	1.58E-08	3.73E-08	4.25E-07	1.83E-09	1.85E-04	4.92E-09	2.89E-09	0.000649694	1.02E-11	2.43E-11	2.76E-10	1.19E-12	1.20E-07	3.19E-12	1.88E-12	8.575E-12	1.01E-12	2.428E-12
Yolo	2020	MH	6.29E-08	2.07E-09	2.07E-08	1.90E-09	5.18E-07	9.07E-07	2.67E-06	2.13E-08	2.15E-03	2.15E-08	3.10E-08	0.000737488	3.82E-10	6.69E-10	1.97E-09	1.57E-11	1.59E-06	1.58E-11	2.28E-11	4.638E-11	1.52E-12	1.526E-11
Yolo	2020	MH	6.71E-08	1.45E-07	2.17E-08	1.38E-07	5.57E-06	1.58E-07	5.35E-07	1.13E-08	1.19E-03	7.33E-09	1.88E-07	0.0002758	1.54E-09	4.35E-11	1.48E-10	3.12E-12	3.29E-07	2.02E-12	5.18E-11	1.85E-11	3.99E-11	5.988E-12
Yolo	2020	MHDT	6.29E-08	3.35E-09	2.07E-08	3.08E-09	1.79E-06	1.25E-06	1.27E-05	2.13E-08	2.15E-03	1.01E-07	7.77E-08	0.00147075	2.63E-09	1.84E-09	1.87E-08	3.13E-11	3.16E-06	1.48E-10	1.14E-10	9.249E-11	4.93E-12	3.042E-11
Yolo	2020	MHDT	6.33E-08	4.99E-08	2.08E-08	4.78E-08	3.23E-06	1.08E-07	4.81E-07	1.26E-08	1.33E-03	4.99E-09	2.10E-07	0.022256106	7.20E-08	2.39E-09	1.07E-08	2.80E-10	2.96E-05	1.11E-10	4.66E-09	1.409E-09	1.11E-09	4.637E-10
Yolo	2020	MHDT	6.36E-08	1.13E-09	2.09E-08	1.04E-09	4.10E-07	1.67E-08	3.84E-06	0.00E+00	1.24E-03	1.17E-06	2.53E-07	1.78215E-05	7.31E-12	2.98E-13	6.85E-11	0.00E+00	2.22E-08	2.08E-11	4.52E-12	1.134E-12	2.01E-14	3.733E-13
Yolo	2020	OBUS	6.27E-08	1.01E-09	2.06E-08	9.33E-10	7.53E-07	2.99E-07	3.46E-06	2.03E-08	2.05E-03	3.58E-08	4.24E-08	0.000560803	4.22E-10	1.68E-10	1.94E-09	1.14E-11	1.15E-06	2.01E-11	2.38E-11	3.517E-11	5.69E-13	1.157E-11
Yolo	2020	OBUS	6.87E-08	1.36E-07	2.27E-08	1.31E-07	4.70E-06	4.04E-07	1.13E-06	1.35E-08	1.42E-03	1.88E-08	2.24E-07	0.000615168	2.89E-09	2.49E-10	6.95E-10	8.28E-12	8.75E-07	1.15E-11	1.38E-10	4.228E-11	8.39E-11	1.399E-11
Yolo	2020	OBUS	6.41E-08	7.81E-10	2.11E-08	7.18E-10	3.50E-07	1.30E-08	3.53E-06	0.00E+00	1.22E-03	9.08E-07	2.49E-07	0.000322034	1.13E-10	4.18E-12	1.14E-09	0.00E+00	3.93E-07	2.92E-10	8.00E-11	2.064E-11	2.51E-13	6.797E-12
Yolo	2020	SBUS	5.83E-08	2.62E-09	1.95E-08	2.41E-09	1.25E-06	6.75E-07	7.17E-06	9.93E-09	1.00E-03	9.61E-08	6.05E-08	0.000126234	1.58E-10	8.53E-11	9.05E-10	1.25E-12	1.27E-07	1.21E-11	7.64E-12	7.363E-12	3.31E-13	2.466E-12
Yolo	2020	SBUS	6																					

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Yolo

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	Weighted Energy Consumption Rates				
			5.489E-09	0.0001365			
			7.25E-09	4.90E-04	1.28E-02	3.98E-02	6.73E-03
			PM2.5_E	CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Yolo	2020	HHDT	3.89E-13	5.603E-08	0	0.35303799	0
Yolo	2020	HHDT	2.48E-09	8.12E-05	0.17596278	0	0
Yolo	2020	HHDT	2.40E-12	2.136E-06	0	0	0
Yolo	2020	LDA	8.38E-10	0.0001456	0	0.03676893	0
Yolo	2020	LDA	4.80E-11	5.838E-07	0.0238902	0	0
Yolo	2020	LDA	0.00E+00	0	0	0	0.3860825
Yolo	2020	LDA	1.06E-11	1.438E-06	0	0	0.3020298
Yolo	2020	LDT1	1.50E-10	1.802E-05	0	0.04361121	0
Yolo	2020	LDT1	3.83E-12	6.257E-09	0.04166352	0	0
Yolo	2020	LDT1	0.00E+00	0	0	0	0.3860825
Yolo	2020	LDT1	3.08E-15	4.528E-10	0	0	0.3020298
Yolo	2020	LDT2	3.55E-10	7.233E-05	0	0.04644254	0
Yolo	2020	LDT2	6.90E-12	2.594E-07	0.03258357	0	0
Yolo	2020	LDT2	0.00E+00	0	0	0	0.3860825
Yolo	2020	LDT2	5.16E-13	6.571E-08	0	0	0.3020298
Yolo	2020	LHDT1	4.95E-11	2.404E-05	0	0.10982534	0
Yolo	2020	LHDT1	1.40E-09	1.644E-05	0.06372917	0	0
Yolo	2020	LHDT2	4.24E-12	2.967E-06	0	0.12077073	0
Yolo	2020	LHDT2	3.14E-10	5.763E-06	0.07808439	0	0
Yolo	2020	MCY	1.57E-11	1.027E-06	0	0.02574063	0
Yolo	2020	MDV	3.28E-10	7.669E-05	0	0.05593437	0
Yolo	2020	MDV	2.74E-11	1.752E-06	0.04217011	0	0
Yolo	2020	MDV	0.00E+00	0	0	0	0.3860825
Yolo	2020	MDV	9.27E-13	1.098E-07	0	0	0.3020298
Yolo	2020	MH	1.40E-12	1.446E-06	0	0.22686193	0
Yolo	2020	MH	3.81E-11	3.124E-07	0.10652874	0	0
Yolo	2020	MHDT	4.53E-12	2.904E-06	0	0.22679946	0
Yolo	2020	MHDT	1.06E-09	2.811E-05	0.11878546	0	0
Yolo	2020	MHDT	1.85E-14	2.18E-08	0	0	0
Yolo	2020	OBUS	5.23E-13	1.05E-06	0	0.21622644	0
Yolo	2020	OBUS	8.03E-11	8.309E-07	0.12700381	0	0
Yolo	2020	OBUS	2.31E-13	3.844E-07	0	0	0
Yolo	2020	SBUS	3.05E-13	1.173E-07	0	0.10589727	0
Yolo	2020	SBUS	1.86E-11	7.375E-07	0.12537317	0	0
Yolo	2020	UBUS	1.10E-13	1.824E-07	0	0.18151655	0
Yolo	2020	UBUS	2.76E-12	5.402E-07	0.1184223	0	0
Yolo	2020	UBUS	0.00E+00	0	0	0	1.7432441
Yolo	2020	UBUS	3.74E-13	2.593E-06	0	0	0

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Yolo
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

		192868.33		8574954.301				1005902.969																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

Units: miles/day for CVMT and EVMT

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX	ROG_IDLE X	ROG_STR EX
Yolo	2050	HHDT	6.53E-07	7.78E-07	3E-08	0	1.42E-09	3.14E-08	3.85E-07	1.87E-06	2.28E-06	0.034573	0	0.000116	0.034689	1.76E-06	0	3.55E-09	1.76E-06	1.99E-06	0	2.71E-07	2.26E-06	8.16E-06	0	2.1E-08
Yolo	2050	HHDT	0.010815	0.023539	0.009788	7.69E-05	0	0.009865	0.013142	0.0309	0.053907	480.748	34.19038	0	514.9383	0.000205	0.000838	0	0.001043	0.075742	0.005387	0	0.081129	0.004419	0.018047	0
Yolo	2050	HHDT	0.001445	0.00223	0	0	0	0	0.00314	0.004129	0.00727	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2050	HHDT	0.000273	0.000331	8.58E-06	3.41E-06	0	1.2E-05	0.000188	0.000779	0.000979	6.484736	0.896467	0	7.381203	0.005343	0.002134	0	0.007477	0.001322	0.000183	0	0.001505	7.63E-05	3.05E-05	0
Yolo	2050	LDA	0.011166	0.021134	0.001997	0	0.000292	0.002289	0.031457	0.031902	0.065647	901.2939	0	19.91829	921.2122	0.004128	0	0.011876	0.016004	0.012997	0	0.009698	0.022695	0.011615	0	0.043494
Yolo	2050	LDA	6.52E-06	1.32E-05	2.19E-06	0	0	2.19E-06	1.83E-05	1.86E-05	3.92E-05	0.413066	0	0	0.413066	5.2E-07	0	0	5.2E-07	6.51E-05	0	0	6.51E-05	1.12E-05	0	0
Yolo	2050	LDA	0.000757	0.001741	0	0	0	0	0.003938	0.002163	0.006101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2050	LDA	0.000266	0.000682	3.82E-05	0	1.28E-05	5.1E-05	0.001475	0.000761	0.002287	22.26181	0	0.867119	23.12892	7.44E-05	0	0.000644	0.000719	9.23E-05	0	0.000311	0.000403	0.000238	0	0.002678
Yolo	2050	LDT1	0.000798	0.0014	0.000126	0	2.32E-05	0.000149	0.00186	0.002279	0.004288	61.37075	0	1.666427	63.03718	0.000257	0	0.000899	0.001156	0.000784	0	0.000728	0.001512	0.000748	0	0.003418
Yolo	2050	LDT1	9.5E-09	2.68E-08	1.23E-08	0	0	1.23E-08	2.22E-08	2.71E-08	6.16E-08	0.000936	0	0	0.000936	1.92E-09	0	0	1.92E-09	1.47E-07	0	0	1.47E-07	4.13E-08	0	0
Yolo	2050	LDT1	1.21E-05	2.78E-05	0	0	0	0	6.28E-05	3.45E-05	9.73E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yolo	2050	LDT1	8.47E-06	2.17E-05	1.21E-06	0	4.59E-07	1.66E-06	4.68E-05	2.42E-05	7.27E-05	0.706389	0	0.036609	0.742998	2.32E-06	0	2.33E-05	2.56E-05	2.82E-06	0	1.11E-05	1.39E-05	7.55E-06	0	9.85E-05
Yolo	2050	LDT2	0.007216	0.012638	0.001105	0	0.000193	0.001298	0.016916	0.020617	0.038831	579.7176	0	15.52383	595.2414	0.002964	0	0.009719	0.012684	0.007391	0	0.007372	0.014763	0.008862	0	0.037734
Yolo	2050	LDT2	2.78E-05	7.85E-05	3.59E-05	0	0	3.59E-05	6.51E-05	7.94E-05	0.00018	2.031663	0	0	2.031663	5.62E-06	0	0	5.62E-06	0.00032	0	0	0.00032	0.000121	0	0

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Yolo
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category																Fuel									
			ROG_TOT	ROG_DIU	ROG_HOT	ROG_RUN	ROG_TOT	TOG_RUN	TOG_IDLE	TOG_STR	TOG_TOT	TOG_DIU	TOG_HOT	TOG_RUN	TOG_TOT	CO_RUNE	CO_IDLEX	CO_TOTE		SOx_RUN	SOx_IDLE	SOx_STRE	SOx_TOTE	NH3_RUN	Consumption		
			EX	RN	SOAK	LOSS	AL	EX	X	EX	EX	RN	SOAK	LOSS	AL	X		CO_STREX	X	EX	X	X	X	EX			
Yolo	2050	HHDT	8.18E-06	2.29E-07	2.86E-08	4.53E-07	8.89E-06	1.19E-05	0	2.3E-08	1.19E-05	2.29E-07	2.86E-08	4.53E-07	1.26E-05	0.000553	0	1.39E-05	0.000567	3.42E-07	0	1.15E-09	3.43E-07	8.67E-07	0.003658		
Yolo	2050	HHDT	0.022466	0	0	0	0.022466	0.005031	0.020545	0	0.025576	0	0	0	0.025576	0.017716	0.266383	0	0.284099	0.004552	0.000324	0	0.004876	0.081604	45.99924		
Yolo	2050	HHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	HHDT	0.000107	0	0	0	0.000107	0.005453	0.002178	0	0.007631	0	0	0	0.007631	0.041909	0.007841	0	0.049749	0	0	0	0	0.004271	0.853155		
Yolo	2050	LDA	0.055109	0.073357	0.013377	0.054831	0.196674	0.016949	0	0.047621	0.064569	0.073357	0.013377	0.054831	0.206134	2.029325	0	0.597682	2.627007	0.00891	0	0.000197	0.009107	0.16496	97.14067		
Yolo	2050	LDA	1.12E-05	0	0	0	1.12E-05	1.27E-05	0	0	1.27E-05	0	0	0	1.27E-05	0.000354	0	0	0.000354	3.91E-06	0	0	3.91E-06	7.11E-06	0.036899		
Yolo	2050	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	LDA	0.002916	0.003334	0.000609	0.00126	0.00812	0.000347	0	0.002932	0.003279	0.003334	0.000609	0.00126	0.008483	0.036985	0	0.020595	0.05758	0.00022	0	8.57E-06	0.000229	0.003151	2.438916		
Yolo	2050	LDT1	0.004166	0.008698	0.001404	0.00632	0.020588	0.001092	0	0.003742	0.004834	0.008698	0.001404	0.00632	0.021255	0.128316	0	0.045327	0.173644	0.000607	0	1.65E-05	0.000623	0.009702	6.647192		
Yolo	2050	LDT1	4.13E-08	0	0	0	4.13E-08	4.71E-08	0	0	4.71E-08	0	0	0	4.71E-08	4.4E-07	0	0	4.4E-07	8.87E-09	0	0	8.87E-09	8.62E-09	8.36E-05		
Yolo	2050	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	LDT1	0.000106	0.000134	2.32E-05	5.01E-05	0.000314	1.1E-05	0	0.000108	0.000119	0.000134	2.32E-05	5.01E-05	0.000326	0.001173	0	0.000757	0.001931	6.98E-06	0	3.62E-07	7.35E-06	0.0001	0.078348		
Yolo	2050	LDT2	0.046596	0.060123	0.009952	0.04479	0.161461	0.012932	0	0.041314	0.054246	0.060123	0.009952	0.04479	0.16911	1.303164	0	0.493812	1.796975	0.005731	0	0.000153	0.005885	0.088614	62.76747		
Yolo	2050	LDT2	0.000121	0	0	0	0.000121	0.000138	0	0	0.000138	0	0	0	0.000138	0.001288	0	0	0.001288	1.93E-05	0	0	1.93E-05	2.52E-05	0.181488		
Yolo	2050	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	LDT2	0.001084	0.001401	0.000241	0.000529	0.003256	0.000111	0	0.001104	0.001215	0.001401	0.000241	0.000529	0.003386	0.011841	0	0.007755	0.019596	7.05E-05	0	3.89E-06	7.44E-05	0.00101	0.793392		
Yolo	2050	LHDT1	0.003018	0.004432	0.000609	0.005938	0.013997	0.000379	0.000736	0.002468	0.003582	0.004432	0.000609	0.005938	0.014561	0.039611	0.006569	0.085516	0.131696	0.00049	1.85E-06	6.12E-06	0.000498	0.002985	5.313138		
Yolo	2050	LHDT1	0.004099	0	0	0	0.004099	0.00451	0.000157	0	0.004666	0	0	0	0.004666	0.01004	0.00114	0	0.011181	0.00026	1.39E-06	0	0.000261	0.009921	2.462191		
Yolo	2050	LHDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	LHDT2	0.000298	0.000517	6.76E-05	0.000696	0.001579	3.87E-05	7.24E-05	0.000243	0.000354	0.000517	6.76E-05	0.000696	0.001635	0.004675	0.000773	0.010224	0.015671	6.4E-05	2.49E-07	6.99E-07	6.5E-05	0.000348	0.693029		
Yolo	2050	LHDT2	0.00244	0	0	0	0.00244	0.002699	7.86E-05	0	0.002777	0	0	0	0.002777	0.006093	0.000572	0	0.006666	0.000145	1.14E-06	0	0.000146	0.004638	1.378881		
Yolo	2050	LHDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	MCY	0.031263	0.02026	0.035241	0.038925	0.12569	0.028528	0	0.009263	0.037792	0.02026	0.035241	0.038925	0.132219	0.286489	0	0.076528	0.363018	5.16E-05	0	3.45E-06	5.51E-05	0.000254	0.587346		
Yolo	2050	MDV	0.027408	0.039576	0.006479	0.028838	0.102301	0.007519	0	0.024366	0.031885	0.039576	0.006479	0.028838	0.106778	0.754969	0	0.285933	1.040902	0.003929	0	0.000106	0.004035	0.050054	43.03938		
Yolo	2050	MDV	7.1E-05	0	0	0	7.1E-05	8.09E-05	0	0	8.09E-05	0	0	0	8.09E-05	0.002268	0	0	0.002268	4.09E-05	0	0	4.09E-05	4.11E-05	0.385805		
Yolo	2050	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	MDV	0.000671	0.00092	0.000155	0.000352	0.002098	6.89E-05	0	0.000683	0.000752	0.00092	0.000155	0.000352	0.002179	0.007339	0	0.004799	0.012137	4.37E-05	0	2.93E-06	4.66E-05	0.000626	0.497195		
Yolo	2050	MH	2.49E-05	0.00046	6.49E-05	2.61E-06	0.000552	3.25E-05	0	2.83E-06	3.54E-05	0.00046	6.49E-05	2.61E-06	0.000563	0.000404	0	4.81E-05	0.000452	5.38E-05	0	6.72E-09	5.39E-05	0.000126	0.574419		
Yolo	2050	MH	0.000133	0	0	0	0.000133	0.000152	0	0	0.000152	0	0	0	0.000152	0.000381	0	0	0.000381	1.65E-05	0	0	1.65E-05	0.000347	0.15587		
Yolo	2050	MHDT	0.000509	0.000199	2.46E-05	0.000387	0.001119	8.41E-05	0.000146	0.000385	0.000615	0.000199	2.46E-05	0.000387	0.001225	0.000875	0.001487	0.005887	0.008249	8.36E-05	4.38E-07	6.93E-07	8.47E-05	0.000249	0.903251		
Yolo	2050	MHDT	0.001367	0	0	0	0.001367	0.000957	0.000599	0	0.001556	0	0	0	0.001556	0.006268	0.022239	0	0.028507	0.001278	5.23E-05	0	0.001331	0.030266	12.5518		
Yolo	2050	MHDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	MHDT	1.06E-05	0	0	0	1.06E-05	0.000533	0.000224	0	0.000757	0	0	0	0.000757	0.002106	0.000722	0	0.002829	0	0	0	0	0.000735	0.083024		
Yolo	2050	OBUS	9.91E-05	9.76E-05	1.47E-05	0.00011	0.000321	9.33E-06	2.83E-05	8.02E-05	0.000118	9.76E-05	1.47E-05	0.00011	0.00034	0.000162	0.00015	0.001174	0.001487	1.52E-05	8.8E-08	1.35E-07	1.54E-05	4.55E-05	0.164756		
Yolo	2050	OBUS	0.000102	0	0	0	0.000102	8.65E-05	2.93E-05	0	0.000116	0	0	0	0.000116	0.000474	0.000523	0	0.000997	6.18E-05	9.23E-07	0	6.28E-05	0.001354	0.591991		
Yolo	2050	OBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	OBUS	1.48E-05	0	0	0	1.48E-05	0.000961	9.31E-05	0	0.001054	0	0	0	0.001054	0.003832	0.000202	0	0.004033	0	0	0	0	0.001218	0.127844		
Yolo	2050	SBUS	0.000164	4.68E-05	5.15E-06	3.43E-05	0.00025	8.56E-06	0.000202	2.16E-05	0.000232	4.68E-05	5.15E-06	3.43E-05	0.000318	0.000138	0.001068	0.000404	0.00161	5.29E-06	2.91E-07	2.49E-08	5.61E-06	3.44E-05	0.059808		
Yolo	2050	SBUS	2.38E-05	0	0	0	2.38E-05	1.16E-05	1.55E-05	0	2.71E-05	0	0	0	2.71E-05	8.58E-05	0.000577	0	0.000663	1.64E-05	1.41E-06	0	1.79E-05	0.000373	0.168404		
Yolo	2050	SBUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yolo	2050	UBUS	3.77E-06	2.97E-06	7.28E-07	2.92E-06																					

Source: EMFAC2021 (v1.0.2) Emission

Region Type: County

Units: tons/mile

Region: Yolo

Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2050

The emission rates are calculated as follows:

Season: Annual

EF_PM = (PM_TOTAL - PMTW - PMBW)/Total VMT

Vehicle Classification: EMFAC2007

EF_Gas = Gas_TOTEX/Total VMT

Units: miles/day for CVMT and EVI

EF_VOC = VOC_TOTLE/Total VMT

GWP

1

25

298

MTs/ton

0.907185

Region			EF_Gas = Gas_TOTEX/Total VMT												Weighted Emission Factors (tons/mile)										
			EF_VOC = VOC_TOTLE/Total VMT												Diesel Vehicle Fleet										
			EMFAC Fleet												1.065E-07	3.596E-09	3.923E-08	7.902E-10	8.344E-05	1.67E-10	1.315E-08	6.91E-09	1.384E-09	2.233E-09	1.324E-09
Calendar Year	Vehicle Category	PM10_VM T_D	PM10_VM T_Ex	PM2.5_VM T_D	PM2.5_VM T_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	
Yolo	2050	HHDT	1.29E-07	1.80E-09	4.28E-08	1.65E-09	3.04E-06	5.09E-07	3.24E-05	1.96E-08	1.98E-03	1.01E-07	1.29E-07	2.039E-06	6.21E-12	1.04E-12	6.61E-11	4.00E-14	4.05E-09	2.06E-13	2.64E-13	2.62E-13	3.66E-15	8.74E-14	3.37E-15
Yolo	2050	HHDT	1.31E-07	2.93E-08	4.18E-08	2.80E-08	2.31E-06	6.66E-08	8.43E-07	1.45E-08	1.53E-03	3.10E-09	2.41E-07	0.0393129	9.06E-08	2.62E-09	3.31E-08	5.69E-10	6.01E-05	1.22E-10	9.46E-09	5.136E-09	1.15E-09	1.644E-09	1.10E-09
Yolo	2050	HHDT	8.48E-08	0.00E+00	2.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0099924	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.478E-10	0.00E+00	2.601E-10	0.00E+00	0.00E+00
Yolo	2050	HHDT	2.04E-07	2.53E-09	6.75E-08	2.33E-09	5.09E-07	2.26E-08	1.05E-05	0.00E+00	1.56E-03	1.58E-06	3.18E-07	0.0005523	2.81E-10	1.25E-11	5.80E-09	0.00E+00	8.61E-07	8.72E-10	1.75E-10	1.128E-10	1.40E-12	3.727E-11	1.29E-12
Yolo	2050	LDA	1.78E-08	6.42E-10	5.33E-09	5.90E-10	3.81E-08	5.51E-08	7.36E-07	2.55E-09	2.58E-04	4.49E-09	6.36E-09	0.4159931	1.58E-08	2.29E-08	3.06E-07	1.06E-09	1.07E-04	1.87E-09	2.65E-09	7.389E-09	2.67E-10	2.219E-09	2.45E-10
Yolo	2050	LDA	1.78E-08	1.05E-09	5.34E-09	1.01E-09	1.34E-08	5.38E-09	1.70E-07	1.88E-09	1.99E-04	2.50E-10	3.13E-08	0.0002426	3.24E-12	1.30E-12	4.13E-11	4.56E-13	4.82E-08	6.06E-14	7.59E-12	4.312E-12	2.55E-13	1.295E-12	2.44E-13
Yolo	2050	LDA	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.052076	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.114E-10	0.00E+00	2.031E-10	0.00E+00	0.00E+00
Yolo	2050	LDA	1.34E-08	3.05E-10	3.80E-09	2.80E-10	1.38E-08	4.86E-08	3.44E-07	1.37E-09	1.38E-04	4.30E-09	2.41E-09	0.0195004	2.70E-10	9.47E-10	6.71E-09	2.67E-11	2.70E-06	8.38E-11	4.70E-11	2.607E-10	5.94E-12	7.405E-11	5.47E-12
Yolo	2050	LDT1	1.96E-08	7.07E-10	5.99E-09	6.50E-10	4.54E-08	9.76E-08	8.23E-07	2.96E-09	2.99E-04	5.48E-09	7.17E-09	0.0245918	1.12E-09	2.40E-09	2.03E-08	7.27E-11	7.35E-06	1.35E-10	1.76E-10	4.826E-10	1.74E-11	1.472E-10	1.60E-11
Yolo	2050	LDT1	1.96E-08	4.86E-09	5.97E-09	4.65E-09	3.32E-08	1.64E-08	1.74E-07	3.52E-09	3.71E-04	7.61E-10	5.85E-08	2.941E-07	9.76E-15	4.82E-15	5.13E-14	1.03E-15	1.09E-10	2.24E-16	1.72E-14	5.758E-15	1.43E-15	1.756E-15	1.37E-15
Yolo	2050	LDT1	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0008301	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.135E-11	0.00E+00	3.239E-12	0.00E+00	0.00E+00
Yolo	2050	LDT1	1.34E-08	3.14E-10	3.80E-09	2.88E-10	1.55E-08	5.91E-08	3.64E-07	1.38E-09	1.40E-04	4.83E-09	2.62E-09	0.0006193	9.61E-12	3.66E-11	2.25E-10	8.57E-13	8.66E-08	2.99E-12	1.62E-12	8.284E-12	1.94E-13	2.353E-12	1.79E-13
Yolo	2050	LDT2	1.96E-08	6.77E-10	5.97E-09	6.22E-10	5.00E-08	8.42E-08	9.37E-07	3.07E-09	3.10E-04	6.61E-09	7.70E-09	0.2237039	1.12E-08	1.88E-08	2.10E-07	6.86E-10	6.94E-05	1.48E-09	1.72E-09	4.377E-09	1.51E-10	1.335E-09	1.39E-10
Yolo	2050	LDT2	1.96E-08	4.86E-09	5.97E-09	4.65E-09	3.34E-08	1.64E-08	1.74E-07	2.61E-09	2.75E-04	7.61E-10	4.33E-08	0.0008614	2.88E-11	1.41E-11	1.50E-10	2.25E-12	2.37E-07	6.56E-13	3.73E-11	1.686E-11	4.19E-12	5.141E-12	4.01E-12
Yolo	2050	LDT2	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0065961	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.015E-11	0.00E+00	2.574E-11	0.00E+00	0.00E+00
Yolo	2050	LDT2	1.34E-08	3.19E-10	3.80E-09	2.93E-10	1.57E-08	6.08E-08	3.66E-07	1.39E-09	1.40E-04	4.88E-09	2.64E-09	0.0062453	9.81E-11	3.80E-10	2.29E-09	8.67E-12	8.77E-07	3.05E-11	1.65E-11	8.354E-11	1.99E-12	2.373E-11	1.83E-12
Yolo	2050	LHDT1	9.48E-08	1.41E-09	3.23E-08	1.29E-09	2.01E-07	2.33E-07	2.19E-06	8.28E-09	8.37E-04	1.24E-08	1.94E-08	0.0070176	1.41E-09	1.63E-09	1.54E-08	5.81E-11	5.88E-06	8.69E-11	1.36E-10	6.653E-10	9.88E-12	2.267E-10	9.08E-12
Yolo	2050	LHDT1	9.92E-08	2.14E-08	3.34E-08	2.05E-08	3.16E-07	9.92E-08	2.71E-07	6.32E-09	6.67E-04	4.61E-09	1.05E-07	0.0048201	1.52E-09	4.78E-10	1.30E-09	3.05E-11	3.21E-06	2.22E-11	5.06E-10	4.782E-10	1.03E-10	1.61E-10	9.86E-11
Yolo	2050	LHDT1	5.18E-08	0.00E+00	1.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0108795	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.637E-10	0.00E+00	1.877E-10	0.00E+00	0.00E+00
Yolo	2050	LHDT2	1.09E-07	1.43E-09	3.73E-08	1.31E-09	1.69E-07	2.25E-07	2.24E-06	9.27E-09	9.37E-04	1.07E-08	1.76E-08	0.0008176	1.38E-10	1.84E-10	1.83E-09	7.58E-12	7.66E-07	8.79E-12	1.44E-11	8.923E-11	1.17E-12	3.051E-11	1.07E-12
Yolo	2050	LHDT2	1.14E-07	2.75E-08	3.84E-08	2.63E-08	4.48E-07	1.24E-07	3.38E-07	7.43E-09	7.84E-04	5.75E-09	1.23E-07	0.002297	1.03E-09	2.85E-10	7.77E-10	1.71E-11	1.80E-06	1.32E-11	2.84E-10	2.608E-10	6.32E-11	8.824E-11	6.04E-11
Yolo	2050	LHDT2	5.90E-08	0.00E+00	1.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0026841	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.583E-10	0.00E+00	5.304E-11	0.00E+00	0.00E+00
Yolo	2050	MCY	1.76E-08	3.85E-09	5.73E-09	3.59E-09	5.44E-07	5.01E-06	1.45E-05	2.19E-09	2.22E-04	2.02E-07	4.09E-08	0.0029279	1.59E-09	1.47E-08	4.23E-08	6.42E-12	6.50E-07	5.91E-10	1.20E-10	5.164E-11	1.13E-11	1.678E-11	1.05E-11
Yolo	2050	MDV	1.97E-08	6.84E-10	6.01E-09	6.29E-10	5.19E-08	9.42E-08	9.58E-07	3.72E-09	3.76E-04	6.80E-09	7.87E-09	0.1266559	6.57E-09	1.19E-08	1.21E-07	4.71E-10	4.76E-05	8.61E-10	9.97E-10	2.494E-09	8.66E-11	7.612E-10	7.97E-11
Yolo	2050	MDV	1.97E-08	1.13E-09	6.03E-09	1.08E-09	1.12E-08	5.91E-09	1.89E-07	3.41E-09	3.59E-04	2.75E-10	5.66E-08	0.0014013	1.57E-11	8.28E-12	2.65E-10	4.77E-12	5.04E-07	3.85E-13	7.94E-11	2.767E-11	1.58E-12	8.45E-12	1.51E-12
Yolo	2050	MDV	1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0058256	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.965E-11	0.00E+00	2.274E-11	0.00E+00	0.00E+00
Yolo	2050	MDV	1.34E-08	3.22E-10	3.80E-09	2.96E-10	1.57E-08	6.32E-08	3.66E-07	1.41E-09	1.42E-04	4.87E-09	2.63E-09	0.0038687	6.07E-11	2.45E-10	1.42E-09	5.44E-12	5.50E-07	1.89E-11	1.02E-11	5.176E-11	1.25E-12	1.471E-11	1.15E-12
Yolo	2050	MH	6.29E-08	1.65E-09	2.07E-08	1.51E-09	2.42E-07	2.18E-07	1.78E-07	2.12E-08	2.15E-03	3.42E-09	2.00E-08	0.0002959	7.16E-11	6.44E-11	5.27E-11	6.28E-12	6.35E-07	1.01E-12	5.92E-12	1.861E-11	4.87E-13	6.121E-12	4.48E-13
Yolo	2050	MH	6.71E-08	2.04E-08	2.17E-08	1.95E-08	2.72E-06	9.19E-08	2.62E-07	1.14E-08	1.20E-03	4.27E-09	1.89E-07	0.0001693	4.61E-10	1.56E-11	4.44E-11	1.93E-12	2.03E-07	7.23E-13	3.21E-11	1.136E-11	3.45E-12	3.676E-12	3.30E-12
Yolo	2050	MHDT	6.29E-08	1.85E-09	2.07E-08	1.70E-09	2.64E-07	2.23E-07	1.65E-06	1.69E-08	1.71E-03	2.31E-08	2.26E-08	0.0005848	1.54E-10	1.31E-10	9.62E-10	9.88E-12	9.99E-07	1.35E-11	1.32E-11	3.677E-11	1.08E-12	1.21E-11	9.96E-13
Yolo	2050	MHDT	6.31E-08	3.67E-09	2.08E-08	3.51E-09	8.33E-07	1.09E-08	2.28E-07	1.07E-08	1.13E-03	5.09E-10	1.77E-07	0.0145593	1.21E-08	1.59E-10	3.32E-09	1.55E-10	1.64E-05	7.40E-12	2.5				

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Yolo
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	7.925E-05	Weighted Energy Consumption Rates		
			3.04E-04	7.45E-03	2.54E-02	8.02E-02
			CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Yolo	2050	HHDT	3.746E-09	0	0.20920946	0
Yolo	2050	HHDT	5.704E-05	0.13645313	0	0
Yolo	2050	HHDT	0	0	0	1.8618404
Yolo	2050	HHDT	8.481E-07	0	0	0
Yolo	2050	LDA	9.822E-05	0	0.02723223	0
Yolo	2050	LDA	4.575E-08	0.01773958	0	0
Yolo	2050	LDA	0	0	0	0.3860825
Yolo	2050	LDA	2.462E-06	0	0	0.3020298
Yolo	2050	LDT1	6.72E-06	0	0.0315222	0
Yolo	2050	LDT1	1.037E-10	0.0331427	0	0
Yolo	2050	LDT1	0	0	0	0.3860825
Yolo	2050	LDT1	7.911E-08	0	0	0.3020298
Yolo	2050	LDT2	6.347E-05	0	0.03272121	0
Yolo	2050	LDT2	2.25E-07	0.02457014	0	0
Yolo	2050	LDT2	0	0	0	0.3860825
Yolo	2050	LDT2	8.011E-07	0	0	0.3020298
Yolo	2050	LHDT1	5.369E-06	0	0.08829377	0
Yolo	2050	LHDT1	3.053E-06	0.05957046	0	0
Yolo	2050	LHDT1	0	0	0	0.6510169
Yolo	2050	LHDT2	6.994E-07	0	0.09884675	0
Yolo	2050	LHDT2	1.71E-06	0.07000692	0	0
Yolo	2050	LHDT2	0	0	0	0.6400402
Yolo	2050	MCY	6.351E-07	0	0.02339417	0
Yolo	2050	MDV	4.347E-05	0	0.03962861	0
Yolo	2050	MDV	4.784E-07	0.0321077	0	0
Yolo	2050	MDV	0	0	0	0.3860825
Yolo	2050	MDV	5.02E-07	0	0	0.3020298
Yolo	2050	MH	5.779E-07	0	0.22639219	0
Yolo	2050	MH	1.933E-07	0.10735444	0	0
Yolo	2050	MHDT	9.101E-07	0	0.18012688	0
Yolo	2050	MHDT	1.556E-05	0.1005389	0	0
Yolo	2050	MHDT	0	0	0	1.0784126
Yolo	2050	MHDT	8.257E-08	0	0	0
Yolo	2050	OBUS	1.663E-07	0	0.17977372	0
Yolo	2050	OBUS	7.34E-07	0.10570842	0	0
Yolo	2050	OBUS	0	0	0	1.1092842
Yolo	2050	OBUS	1.269E-07	0	0	0
Yolo	2050	SBUS	6.041E-08	0	0.08630794	0
Yolo	2050	SBUS	2.088E-07	0.10944418	0	0
Yolo	2050	SBUS	0	0	0	1.0534556
Yolo	2050	UBUS	3.145E-08	0	0.09806991	0
Yolo	2050	UBUS	2.497E-09	0.06511214	0	0
Yolo	2050	UBUS	0	0	0	1.7432441
Yolo	2050	UBUS	9.818E-09	0	0	0

Region: Yuba

Regional VMT

Yuba	Daily VMT
2020	1,913,099
2050	2,201,192

Emission from VMT on County Roads

Year	Emission (tons/day)											GHG (MT/day)
	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
2020	1.13	0.66	5.00	0.01	935.95	0.06	0.06	0.66	0.01	0.17	0.01	867.65
2050	0.18	0.17	1.68	0.01	625.53	0.01	0.03	0.74	0.00	0.19	0.00	574.84

PM_D is the sum of breakwear, tirewear, and fugitive dust.

Change in Diesel PM2.5 and PM10 Emissions

Year	VMT on County Road	% diesel	Diesel PM (grams/mile)		Diesel PM (grams/day)	
			PM10	PM2.5	PM10	PM2.5
2020	1,913,099	8.7%	4.84E-03	4.63E-03	804	770
2050	2,201,192	2.9%	5.24E-04	5.02E-04	33	32
Percent Change		-66.8%			-95.9%	-95.9%

Fugitive Dust Emission Factors

3 Travel on Paved Roads
 $E(\text{lbs/VMT})=(k)(sL)^{.91}(W)^{1.02}$

Where:	PM10	Unit	Source
k= Particle Size Multiplier:	0.0022	lb/VMT	AP-42 Chapter 13.2.1, Table 13.2.1-1, PM10 emissions
sL= road surface silt loading	0.1	g/m^2	CalEEMod default
W= average weight of the vehicles traveling the road	2.4	tons	Statewide average vehicle weight in CA
PM10 Emission factor	0.00066	lbs/VMT	Public roads

Correction for Natural Precipitation⁵

3a	$E(\text{ext})=E[(1-P/4N)]$			
	Where:		Unit	Source
	Ext = annual or other long-term average emission factor		dimensionless	
	P=#days/yr with >=0.01 inch precipitation during	58	days	Note: Sacramento data is used for all counties in the plan region
	N=# days in averaging period	365	days	Sacramento data: https://wrcc.dri.edu/Climate/comp_table_show.php?type=ppt_mean
	Corrected EF PM10	0.00063	lbs/VMT	Public roads
	Corrected EF PM2.5	0.00016	lbs/VMT	Public roads

Sources

EPA. AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.1 Paved Road, Eqn. 1

Fugitive Dust Source	PM2.5/PM10	Reference
Paved road	0.25	EPA. AP-42. Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, Final Report, Oct 2005.

Region: Yuba

2020 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	3.44E-07	1.861E-08	6.81E-08	9.074E-10	9.579E-05	8.643E-10	1.509E-08	8.511E-09	5.336E-09	2.823E-09	5.106E-09	9.1E-05
EFs (tons/mile)	5.92E-07	3.46E-07	2.61E-06	4.79E-09	4.89E-04	3.06E-08	3.33E-08	2.66E-08	7.38E-09	8.35E-09	6.98E-09	4.54E-04

2050 Emission EF	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E	CO2e
Diesel EF (tons/mile)	3.90E-08	1.725E-09	1.503E-08	3.359E-10	3.547E-05	8.011E-11	5.588E-09	3.017E-09	5.78E-10	9.837E-10	5.53E-10	3.369E-05
EFs (tons/mile)	7.95E-08	7.86E-08	7.65E-07	2.79E-09	2.84E-04	5.75E-09	1.19E-08	2.17E-08	1.13E-09	6.65E-09	1.06E-09	2.61E-04

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Yuba
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

					52402.905	1625796.989	274451.2057															
	Mod el Spee																					
Region	Calendar Year	Vehicle Category	Year	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumption	NOx_RUN EX	NOx_IDLE X	NOx_STR EX	NOx_TOT EX	PM2.5_R UNEX	PM2.5_ID LEX	PM2.5_ST REX	PM2.5_T OTEX	PM2.5_P MTW			
Yuba	2020	HHDT	Aggre	Aggre Gasol	1.5057898	20.5419641	20.5419641	0	30.12784231	0	0.000627	0	7.71E-05	0.000704	4.94E-07	0	3.2E-07	8.14E-07	1.13E-07			
Yuba	2020	HHDT	Aggre	Aggre Diese	287.19377	27533.12576	27533.12576	0	3059.317504	0	0.140418	0.017999	0.007035	0.165452	0.00167	3.92E-05	0	0.00171	0.000262			
Yuba	2020	HHDT	Aggre	Aggre Natur	10.86482	726.0425756	726.0425756	0	56.25489848	0	0.001676	0.000128	0	0.001804	4.88E-07	3.58E-08	0	5.24E-07	7.2E-06			
Yuba	2020	LDA	Aggre	Aggre Gasol	21523.765	727313.1204	727313.1204	0	98949.9417	0	0.067522	0	0.038608	0.10613	0.001045	0	0.000243	0.001288	0.001603			
Yuba	2020	LDA	Aggre	Aggre Diese	110.5222	3126.090897	3126.090897	0	472.6222903	0	0.001427	0	0	0.001427	8.59E-05	0	0	8.59E-05	6.89E-06			
Yuba	2020	LDA	Aggre	Aggre Electr	147.49879	5174.979922	0	5174.979922	750.381228	1997.969364	0	0	0	0	0	0	0	0	1.14E-05			
Yuba	2020	LDA	Aggre	Aggre Plug-i	288.57828	12060.84307	6481.549156	5579.293918	1193.271205	1685.113053	4.71E-05	0	0.000152	0.000199	1.06E-05	0	3.28E-06	1.39E-05	2.66E-05			
Yuba	2020	LDT1	Aggre	Aggre Gasol	3271.4222	84004.42974	84004.42974	0	13762.82422	0	0.029124	0	0.010691	0.039815	0.000258	0	7.27E-05	0.00033	0.000185			
Yuba	2020	LDT1	Aggre	Aggre Diese	2.5438542	18.77553993	18.77553993	0	7.715552804	0	3.62E-05	0	0	3.62E-05	5.07E-06	0	0	5.07E-06	4.14E-08			
Yuba	2020	LDT1	Aggre	Aggre Electr	0.0313445	1.170964548	0	1.170964548	0.162678008	0.452088961	0	0	0	0	0	0	0	0	2.58E-09			
Yuba	2020	LDT1	Aggre	Aggre Plug-i	0.0860388	3.967279476	2.071415019	1.895864457	0.355770509	0.572607572	1.5E-08	0	4.52E-08	6.02E-08	3.06E-09	0	9.05E-10	3.96E-09	8.75E-09			
Yuba	2020	LDT2	Aggre	Aggre Gasol	9247.082	300841.5563	300841.5563	0	42224.20339	0	0.055315	0	0.02815	0.083465	0.000467	0	0.000111	0.000578	0.000663			
Yuba	2020	LDT2	Aggre	Aggre Diese	18.044212	683.7083988	683.7083988	0	86.52987882	0	0.000175	0	0	0.000175	7.82E-06	0	0	7.82E-06	1.51E-06			
Yuba	2020	LDT2	Aggre	Aggre Electr	0.6507172	20.15206249	0	20.15206249	3.37722201	7.780359362	0	0	0	0	0	0	0	0	4.44E-08			
Yuba	2020	LDT2	Aggre	Aggre Plug-i	13.030282	591.0362215	311.2833048	279.7529167	53.88021459	84.4937188	2.26E-06	0	6.85E-06	9.11E-06	5.41E-07	0	1.61E-07	7.01E-07	1.3E-06			
Yuba	2020	LHDT1	Aggre	Aggre Gasol	1325.3295	35257.47326	35257.47326	0	19745.43514	0	0.018045	5.98E-05	0.015784	0.033889	9.76E-05	0	1.23E-05	0.00011	7.77E-05			
Yuba	2020	LHDT1	Aggre	Aggre Diese	2037.3878	58361.36025	58361.36025	0	25627.77596	0	0.223246	0.005544	0	0.22879	0.004033	6.12E-05	0	0.004094	0.000193			
Yuba	2020	LHDT2	Aggre	Aggre Gasol	117.44511	3378.634778	3378.634778	0	1749.757219	0	0.001088	5.3E-06	0.001355	0.002448	6.8E-06	0	7.51E-07	7.55E-06	7.45E-06			
Yuba	2020	LHDT2	Aggre	Aggre Diese	563.04029	17695.03389	17695.03389	0	7082.338573	0	0.044935	0.001486	0	0.046421	0.000912	1.67E-05	0	0.000929	5.85E-05			
Yuba	2020	MCY	Aggre	Aggre Gasol	1889.4443	8642.155108	8642.155108	0	3778.888692	0	0.007146	0	0.000814	0.007961	1.63E-05	0	1.53E-05	3.16E-05	9.53E-06			
Yuba	2020	MDV	Aggre	Aggre Gasol	10249.544	300003.2323	300003.2323	0	46072.95254	0	0.080369	0	0.039515	0.119884	0.000528	0	0.000146	0.000674	0.000661			
Yuba	2020	MDV	Aggre	Aggre Diese	235.85467	8624.640168	8624.640168	0	1122.34355	0	0.001133	0	0	0.001133	8.76E-05	0	0	8.76E-05	1.9E-05			
Yuba	2020	MDV	Aggre	Aggre Electr	1.966339	60.89556025	0	60.89556025	10.20529916	23.51071224	0	0	0	0	0	0	0	0	1.34E-07			
Yuba	2020	MDV	Aggre	Aggre Plug-i	25.190384	1107.181445	596.2112436	510.9702016	104.162236	154.3282302	4.33E-06	0	1.32E-05	1.76E-05	1.14E-06	0	3.43E-07	1.49E-06	2.44E-06			
Yuba	2020	MH	Aggre	Aggre Gasol	262.20654	1794.478008	1794.478008	0	26.23114176	0	0.001499	0	1.13E-05	0.00151	4.17E-06	0	1.57E-08	4.19E-06	5.93E-06			
Yuba	2020	MH	Aggre	Aggre Diese	71.236432	502.670494	502.670494	0	7.123643227	0	0.003507	0	0	0.003507	9.34E-05	0	0	9.34E-05	2.22E-06			
Yuba	2020	MHDT	Aggre	Aggre Gasol	61.618606	1823.130201	1823.130201	0	1232.865074	0	0.003531	5.72E-06	0.000628	0.004165	5.92E-06	0	1.95E-06	7.87E-06	6.03E-06			
Yuba	2020	MHDT	Aggre	Aggre Diese	391.43534	15814.70842	15814.70842	0	4193.469334	0	0.062481	0.010588	0.005566	0.078635	0.001003	5.43E-05	0	0.001058	5.23E-05			
Yuba	2020	OBUS	Aggre	Aggre Gasol	26.238446	1001.995408	1001.995408	0	524.9788176	0	0.00117	1.88E-06	0.000256	0.001428	8.67E-07	0	1.3E-07	9.97E-07	3.31E-06			
Yuba	2020	OBUS	Aggre	Aggre Diese	13.549588	1076.518789	1076.518789	0	186.3156965	0	0.004195	0.000428	0.000288	0.004911	0.000105	1.43E-06	0	0.000107	3.56E-06			
Yuba	2020	SBUS	Aggre	Aggre Gasol	16.411552	758.5531469	758.5531469	0	65.64620667	0	9.27E-05	1.68E-05	4.21E-05	0.000152	8.55E-07	0	5.02E-08	9.05E-07	1.67E-06			
Yuba	2020	SBUS	Aggre	Aggre Diese	143.22534	3293.431679	3293.431679	0	2073.902851	0	0.020625	0.003812	0.000803	0.025241	9.61E-05	4.25E-06	0	0.0001	1.09E-05			
Yuba	2020	UBUS	Aggre	Aggre Diese	48.962024	4481.35521	4481.35521	0	195.8480941	0	0.003859	0	0	0.003859	2.33E-05	0	0	2.33E-05	2.53E-05			

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Yuba

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

8.6E-07

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX
Yuba	2020	HHDT	9.66E-07	1.89E-06	5.23E-07	0	3.37E-07	8.6E-07	4.53E-07	2.76E-06	4.07E-06	0.065289	0	0.003975	0.069264	3.4E-05	0	2.61E-10	3.4E-05	1.28E-05	0	1.41E-06	1.42E-05	0.0003
Yuba	2020	HHDT	0.000979	0.002951	0.001746	4.1E-05	0	0.001787	0.001049	0.002797	0.005633	57.78552	2.85827	0	60.64379	0.000115	5.46E-05	0	0.00017	0.009104	0.00045	0	0.009554	0.002487
Yuba	2020	HHDT	5.56E-05	6.34E-05	5.31E-07	3.89E-08	0	5.7E-07	2.88E-05	0.000159	0.000188	1.327938	0.087192	0	1.41513	0.004632	0.000286	0	0.004918	0.000271	1.78E-05	0	0.000288	6.62E-05
Yuba	2020	LDA	0.002015	0.004906	0.001136	0	0.000265	0.001401	0.006414	0.005756	0.013571	243.6679	0	8.497158	252.165	0.003437	0	0.010862	0.014299	0.005845	0	0.00417	0.010014	0.014571
Yuba	2020	LDA	8.69E-06	0.000101	8.98E-05	0	0	8.98E-05	2.76E-05	2.48E-05	0.000142	0.814865	0	0	0.814865	6.52E-06	0	0	6.52E-06	0.000128	0	0	0.000128	0.00014
Yuba	2020	LDA	8.7E-06	2.01E-05	0	0	0	0	4.56E-05	2.49E-05	7.05E-05	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuba	2020	LDA	1.78E-05	5.83E-05	1.15E-05	0	3.57E-06	1.51E-05	0.000106	5.08E-05	0.000172	2.014351	0	0.090204	2.104554	6.35E-06	0	5.61E-05	6.24E-05	8.52E-06	0	2.74E-05	3.6E-05	2.01E-05
Yuba	2020	LDT1	0.000291	0.000806	0.00028	0	7.9E-05	0.000359	0.000741	0.00083	0.00193	33.4821	0	1.589307	35.07141	0.001383	0	0.003041	0.004424	0.001842	0	0.00079	0.002631	0.006557
Yuba	2020	LDT1	7.24E-08	5.18E-06	5.3E-06	0	0	5.3E-06	1.66E-07	2.07E-07	5.67E-06	0.008584	0	0	0.008584	2.57E-07	0	0	2.57E-07	1.35E-06	0	0	1.35E-06	5.54E-06
Yuba	2020	LDT1	1.96E-09	4.55E-09	0	0	0	0	1.03E-08	5.61E-09	1.59E-08	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuba	2020	LDT1	5.85E-09	1.86E-08	3.33E-09	0	9.84E-10	4.31E-09	3.5E-08	1.67E-08	5.6E-08	0.000645	0	2.99E-05	0.000675	2.05E-09	0	1.69E-08	1.89E-08	2.77E-09	0	8.31E-09	1.11E-08	6.43E-09
Yuba	2020	LDT2	0.000992	0.002233	0.000507	0	0.000121	0.000628	0.002653	0.002834	0.006115	128.4688	0	4.747144	133.216	0.00185	0	0.005937	0.007787	0.003687	0	0.002328	0.006015	0.008093
Yuba	2020	LDT2	2.11E-06	1.14E-05	8.17E-06	0	0	8.17E-06	6.03E-06	6.04E-06	2.02E-05	0.240399	0	0	0.240399	7.69E-07	0	0	7.69E-07	3.79E-05	0	0	3.79E-05	1.65E-05
Yuba	2020	LDT2	3.38E-08	7.82E-08	0	0	0	0	1.78E-07	9.66E-08	2.74E-07	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuba	2020	LDT2	8.72E-07	2.88E-06	5.88E-07	0	1.75E-07	7.63E-07	5.21E-06	2.49E-06	8.47E-06	0.09686	0	0.004885	0.101746	3.07E-07	0	2.55E-06	2.86E-06	4.15E-07	0	1.26E-06	1.67E-06	9.66E-07
Yuba	2020	LHDT1	0.001061	0.001249	0.000106	0	1.34E-05	0.00012	0.000311	0.003031	0.003462	38.30278	0.181274	0.546979	39.03103	0.000835	0.000171	0.000909	0.001914	0.000931	4.03E-06	0.00107	0.002005	0.004336
Yuba	2020	LHDT1	0.001756	0.006043	0.004215	6.4E-05	0	0.004279	0.000772	0.005018	0.010069	40.63546	0.314029	0	40.94949	0.000852	1.14E-05	0	0.000864	0.006402	4.95E-05	0	0.006452	0.018349
Yuba	2020	LHDT2	0.000119	0.000134	7.4E-06	0	8.17E-07	8.22E-06	2.98E-05	0.000339	0.000377	3.971196	0.018475	0.050759	4.04043	3.98E-05	1.58E-05	7.26E-05	0.000128	6E-05	3.88E-07	9.78E-05	0.000158	0.000189
Yuba	2020	LHDT2	0.000621	0.001608	0.000953	1.75E-05	0	0.000971	0.000234	0.001775	0.00298	15.26507	0.137392	0	15.40246	0.000198	3.16E-06	0	0.000201	0.002405	2.16E-05	0	0.002427	0.004256
Yuba	2020	MCY	4E-05	8.11E-05	1.73E-05	0	1.62E-05	3.35E-05	3.81E-05	0.000114	0.000186	1.840729	0	0.248984	2.089713	0.002017	0	0.000968	0.002985	0.000449	0	4.58E-05	0.000495	0.014318
Yuba	2020	MDV	0.001015	0.00235	0.000574	0	0.000159	0.000732	0.002646	0.0029	0.006277	153.5202	0	6.261292	159.7815	0.00287	0	0.008512	0.011382	0.004825	0	0.002845	0.00767	0.014344
Yuba	2020	MDV	2.72E-05	0.000134	9.16E-05	0	0	9.16E-05	7.61E-05	7.76E-05	0.000245	3.91226	0	0	3.91226	7.63E-06	0	0	7.63E-06	0.000616	0	0	0.000616	0.000164
Yuba	2020	MDV	1.02E-07	2.36E-07	0	0	0	0	5.37E-07	2.92E-07	8.29E-07	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuba	2020	MDV	1.63E-06	5.56E-06	1.24E-06	0	3.73E-07	1.62E-06	9.76E-06	4.66E-06	1.6E-05	0.185398	0	0.011792	0.19719	5.88E-07	0	4.93E-06	5.52E-06	7.93E-07	0	2.42E-06	3.22E-06	1.85E-06
Yuba	2020	MH	3.15E-05	4.16E-05	4.53E-06	0	1.7E-08	4.55E-06	2.37E-05	9.01E-05	0.000118	3.751653	0	0.000961	3.752614	5.7E-05	0	1.2E-06	5.82E-05	7.88E-05	0	1.06E-06	7.98E-05	0.000276
Yuba	2020	MH	8.81E-06	0.000104	9.76E-05	0	0	9.76E-05	8.87E-06	2.52E-05	0.000132	0.602536	0	0	0.602536	4.37E-06	0	0	4.37E-06	9.49E-05	0	0	9.49E-05	9.4E-05
Yuba	2020	MHDT	3.2E-05	4.59E-05	6.44E-06	0	2.12E-06	8.56E-06	2.41E-05	9.15E-05	0.000124	3.694846	0.037769	0.070463	3.803078	0.000151	1.37E-05	7.07E-05	0.000235	0.000139	3.16E-07	3.31E-05	0.000172	0.000843
Yuba	2020	MHDT	0.000276	0.001386	0.001049	5.68E-05	0	0.001106	0.000209	0.000789	0.002104	20.13502	1.090877	0	21.2259	9.82E-05	1.02E-05	0	0.000108	0.003172	0.000172	0	0.003344	0.002115
Yuba	2020	OBUS	1.76E-05	2.19E-05	9.43E-07	0	1.42E-07	1.08E-06	1.33E-05	5.01E-05	6.45E-05	2.073073	0.011334	0.019848	2.104255	3.27E-05	5.32E-06	2.44E-05	6.24E-05	5.17E-05	1.31E-07	1.69E-05	6.88E-05	0.000161
Yuba	2020	OBUS	2.69E-05	0.000137	0.00011	1.49E-06	0	0.000112	1.42E-05	7.68E-05	0.000203	1.797732	0.063106	0	1.860839	1.07E-05	1.24E-06	0	1.2E-05	0.000283	9.94E-06	0	0.000293	0.000231
Yuba	2020	SBUS	1.31E-05	1.57E-05	9.3E-07	0	5.46E-08	9.85E-07	6.69E-06	3.76E-05	4.52E-05	0.661556	0.045905	0.004076	0.711537	2.18E-06	4.47E-05	4.77E-06	5.17E-05	9.5E-06	1.72E-06	4.32E-06	1.55E-05	9.37E-06
Yuba	2020	SBUS	5.71E-05	0.000168	0.0001	4.44E-06	0	0.000105	4.36E-05	0.000163	0.000312	4.251984	0.369796	0	4.621779	1.47E-05	1.4E-06	0	1.61E-05	0.00067	5.83E-05	0	0.000728	0.000317
Yuba	2020	UBUS	0.00019	0.000239	2.44E-05	0	0	2.44E-05	0.000101	0.000543	0.000669	5.457239	0	0	5.457239	1.44E-05	0	0	1.44E-05	0.00086	0	0	0.00086	0.00031

Source: EMFAC2021 (v1.0.2) Emissi
Region Type: County
Region: Yuba
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2007
Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category																		Fuel									
			ROG_IDLE EX	ROG_STR EX	ROG_TOT RN	ROG_DIU SOAK	ROG_HOT LOSS	ROG_RUN AL	ROG_TOT EX	TOG_RUN X	TOG_IDLE EX	TOG_STR EX	TOG_TOT RN	TOG_DIU SOAK	TOG_HOT LOSS	TOG_RUN AL	TOG_TOT X	CO_RUNE CO_IDLEX	CO_STREX X	CO_TOTE EX	SOX_RUN EX	SOX_IDLE X	SOX_STRE X	SOX_TOTE X	NH3_RUN EX	Consumption			
Yuba	2020	HHDT	0	1.37E-09	0.0003	2.34E-05	1.16E-05	5.39E-05	0.000389	0.000354	0	1.5E-09	0.000354	2.34E-05	1.16E-05	5.39E-05	0.000443	0.008631	0	4.4E-07	0.008632	6.45E-07	0	3.93E-08	6.85E-07	2.43E-07	0.007304		
Yuba	2020	HHDT	0.001175	0	0.003662	0	0	0	0.003662	0.002831	0.001338	0	0.004169	0	0	0	0.004169	0.009382	0.014085	0	0.023466	0.000547	2.71E-05	0	0.000574	0.005345	5.417286		
Yuba	2020	HHDT	4.09E-06	0	7.03E-05	0	0	0	7.03E-05	0.004727	0.000292	0	0.005019	0	0	0	0.005019	0.021432	0.000918	0	0.02235	0	0	0	0.000497	0.163567			
Yuba	2020	LDA	0	0.0541	0.068671	0.046339	0.013176	0.034289	0.162475	0.021251	0	0.059232	0.080483	0.046339	0.013176	0.034289	0.174287	0.943	0	0.502166	1.445165	0.002409	0	8.4E-05	0.002493	0.024522	26.59049		
Yuba	2020	LDA	0	0	0.00014	0	0	0	0.00014	0.00016	0	0	0.00016	0	0	0	0.00016	0.001419	0	0	0.001419	7.72E-06	0	0	7.72E-06	1.07E-05	0.072792		
Yuba	2020	LDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yuba	2020	LDA	0	0.000228	0.000248	0.000171	5.38E-05	4.77E-05	0.000521	2.94E-05	0	0.00025	0.000279	0.000171	5.38E-05	4.77E-05	0.000552	0.003281	0	0.001763	0.005044	1.99E-05	0	8.92E-07	2.08E-05	0.000251	0.221923		
Yuba	2020	LDT1	0	0.017731	0.024288	0.019878	0.005202	0.016423	0.065792	0.009563	0	0.019413	0.028976	0.019878	0.005202	0.016423	0.07048	0.290257	0	0.171869	0.462126	0.000331	0	1.57E-05	0.000347	0.00363	3.698237		
Yuba	2020	LDT1	0	0	5.54E-06	0	0	0	5.54E-06	6.3E-06	0	0	6.3E-06	0	0	0	6.3E-06	2.87E-05	0	0	2.87E-05	8.13E-08	0	0	8.13E-08	6.42E-08	0.000767		
Yuba	2020	LDT1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yuba	2020	LDT1	0	6.81E-08	7.45E-08	3.62E-08	1.08E-08	1.08E-08	1.32E-07	9.38E-09	0	7.45E-08	8.39E-08	3.62E-08	1.08E-08	1.08E-08	1.42E-07	1.05E-06	0	5.26E-07	1.58E-06	6.37E-09	0	2.96E-10	6.67E-09	9.59E-08	7.11E-05		
Yuba	2020	LDT2	0	0.030787	0.03888	0.022397	0.006141	0.016801	0.084219	0.011803	0	0.033708	0.04551	0.022397	0.006141	0.016801	0.09085	0.496757	0	0.27802	0.774777	0.00127	0	4.69E-05	0.001317	0.010849	14.04746		
Yuba	2020	LDT2	0	0	1.65E-05	0	0	0	1.65E-05	1.88E-05	0	0	1.88E-05	0	0	0	1.88E-05	0.000158	0	0	0.000158	2.28E-06	0	0	2.28E-06	2.34E-06	0.021475		
Yuba	2020	LDT2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yuba	2020	LDT2	0	1.03E-05	1.13E-05	5.91E-06	1.72E-06	1.73E-06	2.06E-05	1.41E-06	0	1.13E-05	1.27E-05	5.91E-06	1.72E-06	1.73E-06	2.21E-05	0.000158	0	7.96E-05	0.000238	9.58E-07	0	4.83E-08	1.01E-06	1.43E-05	0.010729		
Yuba	2020	LHDT1	0.000683	0.004876	0.009896	0.006271	0.001678	0.009131	0.026975	0.006328	0.000997	0.005339	0.012663	0.006271	0.001678	0.009131	0.029743	0.088732	0.005433	0.065848	0.160013	0.000379	1.79E-06	5.41E-06	0.000386	0.001738	4.115774		
Yuba	2020	LHDT1	0.000247	0	0.018596	0	0	0	0.018596	0.020889	0.000281	0	0.02117	0	0	0	0.02117	0.056283	0.002043	0	0.058326	0.000385	2.98E-06	0	0.000388	0.00712	3.658002		
Yuba	2020	LHDT2	6.06E-05	0.000374	0.000624	0.000415	0.000109	0.000557	0.001705	0.000276	8.85E-05	0.00041	0.000774	0.000415	0.000109	0.000557	0.001855	0.004623	0.000484	0.005861	0.010968	3.93E-05	1.83E-07	5.02E-07	3.99E-05	0.000168	0.426058		
Yuba	2020	LHDT2	6.81E-05	0	0.004324	0	0	0	0.004324	0.004845	7.76E-05	0	0.004922	0	0	0	0.004922	0.012032	0.000565	0	0.012596	0.000145	1.3E-06	0	0.000146	0.002883	1.375896		
Yuba	2020	MCY	0	0.00746	0.021777	0.010732	0.014819	0.015914	0.063242	0.016718	0	0.008104	0.024821	0.010732	0.014819	0.015914	0.066286	0.163478	0	0.036773	0.20025	1.82E-05	0	2.46E-06	2.07E-05	7.9E-05	0.220358		
Yuba	2020	MDV	0	0.047833	0.062178	0.028453	0.008073	0.022065	0.120769	0.020109	0	0.052363	0.072472	0.028453	0.008073	0.022065	0.131064	0.650629	0	0.347187	0.997816	0.001518	0	6.19E-05	0.00158	0.010787	16.84876		
Yuba	2020	MDV	0	0	0.000164	0	0	0	0.000164	0.000187	0	0	0.000187	0	0	0	0.000187	0.002218	0	0	0.002218	3.71E-05	0	0	3.71E-05	2.95E-05	0.349481		
Yuba	2020	MDV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yuba	2020	MDV	0	1.99E-05	2.18E-05	1.28E-05	3.57E-06	3.72E-06	4.19E-05	2.7E-06	0	2.18E-05	2.45E-05	1.28E-05	3.57E-06	3.72E-06	4.46E-05	0.000302	0	0.000154	0.000456	1.83E-06	0	1.17E-07	1.95E-06	2.76E-05	0.020793		
Yuba	2020	MH	0	5.63E-06	0.000282	0.001758	0.0005	1.1E-05	0.002551	0.000395	0	6.16E-06	0.000402	0.001758	0.0005	1.1E-05	0.002671	0.007475	0	0.000121	0.007597	3.71E-05	0	9.5E-09	3.71E-05	8.78E-05	0.395708		
Yuba	2020	MH	0	0	9.4E-05	0	0	0	9.4E-05	0.000107	0	0	0.000107	0	0	0	0.000107	0.000355	0	0	0.000355	5.71E-06	0	0	5.71E-06	5E-05	0.053824		
Yuba	2020	MHDT	6.45E-05	0.000451	0.001358	0.000527	0.000156	0.00118	0.003221	0.00123	9.41E-05	0.000494	0.001818	0.000527	0.000156	0.00118	0.003681	0.019159	0.000977	0.010941	0.031077	3.65E-05	3.73E-07	6.97E-07	3.76E-05	8.69E-05	0.40103		
Yuba	2020	MHDT	0.000219	0	0.002334	0	0	0	0.002334	0.002408	0.00025	0	0.002657	0	0	0	0.002657	0.006136	0.003239	0	0.009375	0.000191	1.03E-05	0	0.000201	0.002834	1.896101		
Yuba	2020	OBUS	2.15E-05	0.000137	0.000319	8.69E-05	2.36E-05	9.77E-05	0.000527	0.000235	3.14E-05	0.000149	0.000416	8.69E-05	2.36E-05	9.77E-05	0.000624	0.003713	0.000166	0.002934	0.006813	2.05E-05	1.12E-07	1.96E-07	2.08E-05	4.97E-05	0.221891		
Yuba	2020	OBUS	2.68E-05	0	0.000258	0	0	0	0.000258	0.000263	3.05E-05	0	0.000293	0	0	0	0.000293	0.000685	0.000308	0	0.000993	1.7E-05	5.98E-07	0	1.76E-05	0.000219	0.166228		
Yuba	2020	SBUS	0.000193	2.64E-05	0.000228	1.08E-05	3.05E-06	6.76E-06	0.000249	1.37E-05	0.000281	2.89E-05	0.000323	1.08E-05	3.05E-06	6.76E-06	0.000344	0.000151	0.001488	0.000716	0.002356	6.54E-06	4.54E-07	4.03E-08	7.03E-06	3.76E-05	0.075031		
Yuba	2020	SBUS	3.02E-05	0	0.000347	0	0	0	0.000347	0.000361	3.44E-05	0	0.000395	0	0	0	0.000395	0.000896	0.00056	0	0.001455	4.03E-05	3.5E-06	0	4.38E-05	0.000373	0.412862		
Yuba	2020	UBUS	0	0	0.00031	0	0	0	0.00031	0.000353	0	0	0.000353	0	0	0	0.000353	0.000329	0	0	0.000329	5.17E-05	0	0	5.17E-05	0.000754	0.487493		

Source: EMFAC2021 (v1.0.2) Emission

Region Type: County

Units: tons/mile

Region: Yuba

Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

Calendar Year: 2020

The emission rates are calculated as follows:

Season: Annual

EF_PM_D = PM_BW+PM_TW

Vehicle Classification: EMFAC2007

EF_PM = PM_TOTEX/Total VMT

Units: miles/day for CVMT and EVT

EF_Gas = Gas_TOTEX/Total VMT

EF_VOC = VOC_TOTLE/Total VMT

GWP

1

25

298

MTs/ton

0.907185

Vehicle Classification: EMFAC2007			EF_PM = PM_TOTEX/Total VMT											Weighted Emission Factors (tons/mile)										
Units: miles/day for CVMT and EVI			EF_Gas = Gas_TOTEX/Total VMT											Diesel Vehicle Fleet										
			EF_VOC = VOC_TOTLE/Total VMT											EMFAC Fleet										
Region	Calendar Year	Vehicle Category	PM10_VM	PM10_VMT_Ex	PM2.5_VM	PM2.5_VM	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D
			T_D	T_Ex	T_D	T_Ex																		
Yuba	2020	HHDT	1.56E-07	4.19E-08	5.26E-08	3.96E-08	3.43E-05	1.89E-05	4.20E-04	3.33E-08	3.37E-03	1.65E-06	6.90E-07	1.2635E-05	4.33E-10	2.39E-10	5.31E-09	4.21E-13	4.26E-08	2.09E-11	8.72E-12	1.98E-12	5.29E-13	6.64E-13
Yuba	2020	HHDT	1.40E-07	6.49E-08	4.51E-08	6.21E-08	6.01E-06	1.33E-07	8.52E-07	2.09E-08	2.20E-03	6.18E-09	3.47E-07	0.016935156	1.02E-07	2.25E-09	1.44E-08	3.53E-10	3.73E-05	1.05E-10	5.88E-09	2.365E-09	1.10E-09	7.634E-10
Yuba	2020	HHDT	2.59E-07	7.85E-10	8.65E-08	7.22E-10	2.48E-06	9.68E-08	3.08E-05	0.00E+00	1.95E-03	6.77E-06	3.97E-07	0.000446576	1.11E-09	4.32E-11	1.37E-08	0.00E+00	8.70E-07	3.03E-09	1.77E-10	1.155E-10	3.51E-13	3.865E-11
Yuba	2020	LDA	1.67E-08	1.97E-09	4.97E-09	1.77E-09	1.46E-07	2.23E-07	1.99E-06	3.43E-09	3.47E-04	1.97E-08	1.38E-08	0.447357896	6.53E-08	9.99E-08	8.89E-07	1.53E-09	1.55E-04	8.79E-09	6.16E-09	7.485E-09	8.62E-10	2.225E-09
Yuba	2020	LDA	1.68E-08	2.87E-08	4.98E-09	2.75E-08	4.56E-07	4.49E-08	4.54E-07	2.47E-09	2.61E-04	2.08E-09	4.11E-08	0.001922805	8.77E-10	8.63E-11	8.73E-10	4.75E-12	5.01E-07	4.01E-12	7.90E-11	3.222E-11	5.52E-11	9.582E-12
Yuba	2020	LDA	1.36E-08	0.00E+00	3.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.003183042	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.336E-11	0.00E+00	1.237E-11	
Yuba	2020	LDA	1.30E-08	1.25E-09	3.68E-09	1.15E-09	1.65E-08	4.32E-08	4.18E-07	1.73E-09	1.74E-04	5.18E-09	2.98E-09	0.007418419	1.22E-10	3.20E-10	3.10E-09	1.28E-11	1.29E-06	3.84E-11	2.21E-11	9.668E-11	9.29E-12	2.73E-11
Yuba	2020	LDT1	1.87E-08	4.27E-09	5.66E-09	3.93E-09	4.74E-07	7.83E-07	5.50E-06	4.13E-09	4.17E-04	5.27E-08	3.13E-08	0.051669692	2.45E-08	4.05E-08	2.84E-07	2.13E-10	2.16E-05	2.72E-09	1.62E-09	9.662E-10	2.21E-10	2.926E-10
Yuba	2020	LDT1	1.98E-08	2.82E-07	6.06E-09	2.70E-07	1.93E-06	2.95E-07	1.53E-06	4.33E-09	4.57E-04	1.37E-08	7.20E-08	1.15485E-05	2.22E-11	3.41E-12	1.77E-11	5.00E-14	5.28E-09	1.58E-13	8.32E-13	2.291E-13	3.26E-12	6.999E-14
Yuba	2020	LDT1	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.2024E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.803E-15	0.00E+00	2.796E-15	
Yuba	2020	LDT1	1.30E-08	1.09E-09	3.68E-09	9.99E-10	1.52E-08	3.33E-08	3.98E-07	1.68E-09	1.70E-04	4.77E-09	2.79E-09	2.44021E-06	3.71E-14	8.14E-14	9.71E-13	4.10E-15	4.15E-10	1.16E-14	6.81E-15	3.18E-14	2.65E-15	8.979E-15
Yuba	2020	LDT2	1.82E-08	2.09E-09	5.50E-09	1.92E-09	2.77E-07	2.80E-07	2.58E-06	4.38E-09	4.43E-04	2.59E-08	2.00E-08	0.18504251	5.13E-08	5.18E-08	4.77E-07	8.10E-10	8.19E-05	4.79E-09	3.70E-09	3.375E-09	3.86E-10	1.018E-09
Yuba	2020	LDT2	1.77E-08	1.20E-08	5.30E-09	1.14E-08	2.56E-07	2.42E-08	2.31E-07	3.33E-09	3.52E-04	1.12E-09	5.54E-08	0.000420537	1.08E-10	1.02E-11	9.73E-11	1.40E-12	1.48E-07	4.73E-13	2.33E-11	7.424E-12	5.03E-12	2.228E-12
Yuba	2020	LDT2	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23952E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.687E-13	0.00E+00	4.812E-14	
Yuba	2020	LDT2	1.30E-08	1.29E-09	3.68E-09	1.19E-09	1.54E-08	3.49E-08	4.02E-07	1.70E-09	1.72E-04	4.84E-09	2.83E-09	0.000363536	5.60E-12	1.27E-11	1.46E-10	6.19E-13	6.26E-08	1.76E-12	1.03E-12	4.737E-12	4.69E-13	1.338E-12
Yuba	2020	LHDT1	9.48E-08	3.39E-09	3.23E-08	3.12E-09	9.61E-07	7.65E-07	4.54E-06	1.09E-08	1.11E-03	5.43E-08	5.69E-08	0.02168627	2.08E-08	1.66E-08	9.84E-08	2.37E-10	2.40E-05	1.18E-09	1.23E-09	2.056E-09	7.36E-11	7.004E-10
Yuba	2020	LHDT1	9.92E-08	7.33E-08	3.34E-08	7.02E-08	3.92E-06	3.19E-07	9.99E-07	6.65E-09	7.02E-04	1.48E-08	1.11E-07	0.035897077	1.41E-07	1.14E-08	3.59E-08	2.39E-10	2.52E-05	5.31E-10	3.97E-09	3.561E-09	2.63E-09	1.199E-09
Yuba	2020	LHDT2	1.09E-07	2.43E-09	3.73E-08	2.24E-09	7.24E-07	5.05E-07	3.25E-06	1.18E-08	1.20E-03	3.80E-08	4.68E-08	0.002078141	1.51E-09	1.05E-09	6.75E-09	2.46E-11	2.49E-06	7.89E-11	9.73E-11	2.268E-10	5.05E-12	7.754E-11
Yuba	2020	LHDT2	1.14E-07	5.49E-08	3.84E-08	5.25E-08	2.62E-06	2.44E-07	7.12E-07	8.25E-09	8.70E-04	1.13E-08	1.37E-07	0.010883914	2.86E-08	2.66E-09	7.75E-09	8.98E-11	9.47E-06	1.24E-10	1.49E-09	1.236E-09	5.97E-10	4.181E-10
Yuba	2020	MCY	1.76E-08	3.88E-09	5.73E-09	3.66E-09	9.21E-07	7.32E-06	2.32E-05	2.39E-09	2.42E-04	3.45E-07	5.72E-08	0.005315642	4.90E-09	3.89E-08	1.23E-07	1.27E-11	1.29E-06	1.84E-09	3.04E-10	9.375E-11	2.06E-11	3.047E-11
Yuba	2020	MDV	1.85E-08	2.44E-09	5.59E-09	2.25E-09	4.00E-07	4.03E-07	3.33E-06	5.27E-09	5.33E-04	3.79E-08	2.56E-08	0.184526872	7.37E-08	7.43E-08	6.14E-07	9.72E-10	9.83E-05	7.00E-09	4.72E-09	3.411E-09	4.50E-10	1.031E-09
Yuba	2020	MDV	1.78E-08	1.06E-08	5.35E-09	1.02E-08	1.31E-07	1.91E-08	2.57E-07	4.30E-09	4.54E-04	8.85E-10	7.15E-08	0.005304869	6.97E-10	1.01E-10	1.36E-09	2.28E-11	2.41E-06	4.69E-12	3.79E-10	9.453E-11	5.63E-11	2.841E-11
Yuba	2020	MDV	1.36E-08	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74558E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.097E-13	0.00E+00	1.454E-13	
Yuba	2020	MDV	1.30E-08	1.46E-09	3.68E-09	1.34E-09	1.59E-08	3.78E-08	4.12E-07	1.76E-09	1.78E-04	4.98E-09	2.91E-09	0.000681008	1.08E-11	2.57E-11	2.81E-10	1.20E-12	1.21E-07	3.39E-12	1.98E-12	8.872E-12	9.94E-13	2.505E-12
Yuba	2020	MH	6.34E-08	2.54E-09	2.09E-08	2.33E-09	8.42E-07	1.42E-06	4.23E-06	2.07E-08	2.09E-03	3.24E-08	4.45E-08	0.001103753	9.29E-10	1.57E-09	4.67E-09	2.28E-11	2.31E-06	3.58E-11	4.91E-11	6.999E-11	2.80E-12	2.304E-11
Yuba	2020	MH	6.77E-08	1.94E-07	2.19E-08	1.86E-07	6.98E-06	1.87E-07	7.06E-07	1.14E-08	1.20E-03	8.69E-09	1.89E-07	0.000309184	2.16E-09	5.78E-11	2.18E-10	3.51E-12	3.71E-07	2.69E-12	5.84E-11	2.093E-11	6.00E-11	6.779E-12
Yuba	2020	MHDT	6.34E-08	4.70E-09	2.09E-08	4.32E-09	2.28E-06	1.77E-06	1.70E-05	2.06E-08	2.09E-03	1.29E-07	9.46E-08	0.001121376	2.56E-09	1.98E-09	1.91E-08	2.31E-11	2.34E-06	1.45E-10	1.06E-10	7.111E-11	5.27E-12	2.34E-11
Yuba	2020	MHDT	6.31E-08	6.99E-08	2.08E-08	6.69E-08	4.97E-06	1.48E-07	5.93E-07	1.27E-08	1.34E-03	6.86E-09	2.11E-07	0.009727357	4.84E-08	1.44E-09	5.77E-09	1.24E-10	1.31E-05	6.67E-11	2.06E-09	6.14E-10	6.80E-10	2.02E-10
Yuba	2020	OBUS	6.33E-08	1.08E-09	2.08E-08	9.95E-10	1.43E-06	5.26E-07	6.80E-06	2.08E-08	2.10E-03	6.23E-08	6.86E-08	0.00061631	8.78E-10	3.24E-10	4.19E-09	1.28E-11	1.29E-06	3.84E-11	4.23E-11	3.9E-11	6.67E-13	1.283E-11
Yuba	2020	OBUS	8.46E-08	1.04E-07	2.83E-08	9.93E-08	4.56E-06	2.39E-07	9.23E-07	1.64E-08	1.73E-03	1.11E-08	2.72E-07	0.000662148	3.02E-09	1.58E-10	6.11E-10	1.08E-11	1.14E-06	7.36E-12	1.80E-10	5.602E-11	6.87E-11	1.873E-11
Yuba	2020	SBUS	5.83E-08	1.30E-09	1.95E-08	1.19E-09	2.00E-07	3.28E-07	3.11E-06	9.27E-09	9.38E-04	6.81E-08	2.05E-08	0.000466573	9.32E-11	1.53E-10	1.45E-09	4.33E-12	4.38E-07	3.18E-11	9.56E-12	2.722E-11	6.06E-13	9.114E-12
Yuba	2020	SBUS	6.27E-08	3.19E-08	2.06E-08	3.05E-08	7.66E-06	1.05E-07	4.42E-07	1.33E-08	1.40E-03	4.90E-09	2.21E-07	0.002025734	1.55E-08	2.14E-10	8.95E-10	2.69E-11	2.84E-06	9.92E-12	4.48E-10	1.271E-10	6.45E-11	4.18E-11
Yuba	2020	UBUS	1.44E-07	5.44E-09	4.81E-08	5.20E-09	8.61E-07	6.92E-08	7.34E-08	1.15E-08	1.22E-03	3.21E-09	1.92E-07	0.002756405	2.37E-09	1.91E-10	2.02E-10	3.18E-11	3.36E-06	8.85E-12	5.29E-10	3.964E-10	1.50E-11	1.325E-10

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Yuba

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category	Weighted Energy Consumption Rates				
			5.106E-09	9.1E-05			
			6.98E-09	4.54E-04	8.56E-03	4.12E-02	3.81E-03
			PM2.5_E	CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile
Yuba	2020	HHDT	5.01E-13	4.148E-08	0	0.35555719	0
Yuba	2020	HHDT	1.05E-09	3.543E-05	0.19675522	0	0
Yuba	2020	HHDT	3.22E-13	9.062E-07	0	0	0
Yuba	2020	LDA	7.92E-10	0.0001426	0	0.03655989	0
Yuba	2020	LDA	5.28E-11	4.761E-07	0.02328516	0	0
Yuba	2020	LDA	0.00E+00	0	0	0	0.3860825
Yuba	2020	LDA	8.54E-12	1.181E-06	0	0	0.3020298
Yuba	2020	LDT1	2.03E-10	2.007E-05	0	0.0440243	0
Yuba	2020	LDT1	3.12E-12	5.018E-09	0.04083947	0	0
Yuba	2020	LDT1	0.00E+00	0	0	0	0.3860825
Yuba	2020	LDT1	2.44E-15	3.786E-10	0	0	0.3020298
Yuba	2020	LDT2	3.55E-10	7.544E-05	0	0.04669387	0
Yuba	2020	LDT2	4.81E-12	1.405E-07	0.03140926	0	0
Yuba	2020	LDT2	0.00E+00	0	0	0	0.3860825
Yuba	2020	LDT2	4.31E-13	5.709E-08	0	0	0.3020298
Yuba	2020	LHDT1	6.76E-11	2.214E-05	0	0.11673479	0
Yuba	2020	LHDT1	2.52E-09	2.393E-05	0.06267849	0	0
Yuba	2020	LHDT2	4.65E-12	2.283E-06	0	0.12610368	0
Yuba	2020	LHDT2	5.71E-10	9.001E-06	0.07775606	0	0
Yuba	2020	MCY	1.94E-11	1.29E-06	0	0.025498	0
Yuba	2020	MDV	4.15E-10	9.059E-05	0	0.05616192	0
Yuba	2020	MDV	5.39E-11	2.286E-06	0.04052118	0	0
Yuba	2020	MDV	0.00E+00	0	0	0	0.3860825
Yuba	2020	MDV	9.14E-13	1.106E-07	0	0	0.3020298
Yuba	2020	MH	2.58E-12	2.108E-06	0	0.22051452	0
Yuba	2020	MH	5.74E-11	3.521E-07	0.10707664	0	0
Yuba	2020	MHDT	4.84E-12	2.154E-06	0	0.21996775	0
Yuba	2020	MHDT	6.51E-10	1.24E-05	0.11989481	0	0
Yuba	2020	OBUS	6.13E-13	1.186E-06	0	0.22144913	0
Yuba	2020	OBUS	6.58E-11	1.087E-06	0.15441252	0	0
Yuba	2020	SBUS	5.57E-13	4.003E-07	0	0.09891292	0
Yuba	2020	SBUS	6.17E-11	2.7E-06	0.12535912	0	0
Yuba	2020	UBUS	1.43E-11	3.188E-06	0.1087825	0	0

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

		Mod		62426.643		2688065.413		307388.9782												
	Calendar	Vehicle	el	Spee						Energy	NOx_RUN	NOx_IDLE	NOx_STR	NOx_TOT	PM2.5_R	PM2.5_ID	PM2.5_ST	PM2.5_T	PM2.5_P	
Region	Year	Category	Year	d	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Consumption	EX	X	EX	EX	UNEX	LEX	REX	OTEX	MTW
Yuba	2050	HHDT	Aggre	Aggre	Gasol	0.0346298	5.096348048	5.096348048	0	0.692873136	0	1.32E-05	0	1.63E-06	1.48E-05	6E-09	0	3.65E-10	6.36E-09	2.81E-08
Yuba	2050	HHDT	Aggre	Aggre	Diese	341.88472	36288.61833	36288.61833	0	4388.680782	0	0.049401	0.017641	0.012605	0.079647	0.000948	7.43E-06	0	0.000956	0.000352
Yuba	2050	HHDT	Aggre	Aggre	Electr	218.87448	12852.85388		0	12852.85388	1906.614501		0	0	0	0	0	0	0	0.000118
Yuba	2050	LHDT	Aggre	Aggre	Natur	11.093182	723.6520679	723.6520679	0	72.7165749	0	0.000296	6.68E-05	0	0.000362	9.42E-07	2.01E-07	0	1.14E-06	7.18E-06
Yuba	2050	LDA	Aggre	Aggre	Gasol	28251.189	1273749.244	1273749.244	0	130319.576	0	0.028329	0	0.023829	0.052158	0.000614	0	0.000104	0.000717	0.002808
Yuba	2050	LDA	Aggre	Aggre	Diese	17.813233	739.3502226	739.3502226	0	79.49052271	0	7.76E-06	0	0	7.76E-06	6.67E-07	0	0	6.67E-07	1.63E-06
Yuba	2050	LDA	Aggre	Aggre	Electr	3929.4861	165031.049		0	165031.049	18243.8626	63715.60567	0	0	0	0	0	0	0	0.000364
Yuba	2050	LDA	Aggre	Aggre	Plug-i	1336.2106	59998.22574	24433.08094	35565.14479	5525.230982	10741.73374	0.000182	0	0.000702	0.000884	1.18E-05	0	4.59E-06	1.64E-05	0.000132
Yuba	2050	LDT1	Aggre	Aggre	Gasol	1508.5385	63562.79622	63562.79622	0	6820.90271	0	0.001447	0	0.001311	0.002757	3.18E-05	0	5.82E-06	3.77E-05	0.00014
Yuba	2050	LDT1	Aggre	Aggre	Diese	0.0174217	0.767605519	0.767605519	0	0.080277391	0	2.4E-08	0	0	2.4E-08	3.41E-09	0	0	3.41E-09	1.69E-09
Yuba	2050	LDT1	Aggre	Aggre	Electr	47.09357	1994.61638		0	1994.61638	219.2376547	770.0865475	0	0	0	0	0	0	0	4.4E-06
Yuba	2050	LDT1	Aggre	Aggre	Plug-i	35.903011	1614.802785	656.8848771	957.917908	148.458949	289.3197588	4.89E-06	0	1.89E-05	2.37E-05	3.14E-07	0	1.2E-07	4.33E-07	3.56E-06
Yuba	2050	LDT2	Aggre	Aggre	Gasol	13329.036	583479.4673	583479.4673	0	61184.22091	0	0.014262	0	0.01381	0.028072	0.000286	0	4.98E-05	0.000335	0.001286
Yuba	2050	LDT2	Aggre	Aggre	Diese	50.80251	2237.048707	2237.048707	0	233.8569505	0	7.08E-05	0	0	7.08E-05	9.92E-06	0	0	9.92E-06	4.93E-06
Yuba	2050	LDT2	Aggre	Aggre	Electr	541.24828	15894.8161		0	15894.8161	2521.131954	6136.710886	0	0	0	0	0	0	0	3.5E-05
Yuba	2050	LDT2	Aggre	Aggre	Plug-i	367.99979	16307.05745	6639.097739	9667.959708	1521.679118	2920.011983	4.94E-05	0	0.000193	0.000243	3.2E-06	0	1.25E-06	4.45E-06	3.6E-05
Yuba	2050	LHDT1	Aggre	Aggre	Gasol	419.21601	16240.59527	16240.59527	0	6245.693973	0	0.000334	1.14E-05	0.002909	0.003255	2.05E-05	0	5.91E-07	2.11E-05	3.58E-05
Yuba	2050	LHDT1	Aggre	Aggre	Diese	333.11996	11715.37888	11715.37888	0	4190.22999	0	0.003767	0.000415	0	0.004182	0.000242	9.67E-06	0	0.000252	3.87E-05
Yuba	2050	LHDT1	Aggre	Aggre	Electr	567.08147	26174.5727		0	26174.5727	7932.671993	17040.41254	0	0	0	0	0	0	0	5.77E-05
Yuba	2050	LHDT2	Aggre	Aggre	Gasol	48.548184	1873.995168	1873.995168	0	723.2956018	0	3.81E-05	1.08E-06	0.000257	0.000296	2.4E-06	0	7.11E-08	2.47E-06	4.13E-06
Yuba	2050	LHDT2	Aggre	Aggre	Diese	183.48962	5896.591537	5896.591537	0	2308.068607	0	0.003152	0.000269	0	0.003422	0.000172	5.3E-06	0	0.000177	1.95E-05
Yuba	2050	LHDT2	Aggre	Aggre	Electr	144.81648	6450.927288		0	6450.927288	1916.048869	4128.89793	0	0	0	0	0	0	0	1.42E-05
Yuba	2050	MCY	Aggre	Aggre	Gasol	1337.7638	7146.028581	7146.028581	0	2675.527692	0	0.003714	0	0.000191	0.003905	1.54E-05	0	9.12E-06	2.45E-05	7.88E-06
Yuba	2050	MDV	Aggre	Aggre	Gasol	7675.5135	312414.4191	312414.4191	0	34756.75265	0	0.007856	0	0.008249	0.016105	0.000156	0	2.91E-05	0.000185	0.000689
Yuba	2050	MDV	Aggre	Aggre	Diese	93.985583	3534.140801	3534.140801	0	410.8891624	0	5.01E-05	0	0	5.01E-05	4.39E-06	0	0	4.39E-06	7.79E-06
Yuba	2050	MDV	Aggre	Aggre	Electr	481.76446	14022.25903		0	14022.25903	2236.615795	5413.749307	0	0	0	0	0	0	0	3.09E-05
Yuba	2050	MDV	Aggre	Aggre	Plug-i	227.67481	9499.634492	3870.428046	5629.206447	941.4353392	1700.188124	2.88E-05	0	0.00012	0.000148	1.89E-06	0	7.88E-07	2.67E-06	2.09E-05
Yuba	2050	MH	Aggre	Aggre	Gasol	59.952914	711.3227861	711.3227861	0	5.997689528	0	0.00017	0	2.4E-06	0.000173	1.02E-06	0	2.26E-09	1.02E-06	2.35E-06
Yuba	2050	MH	Aggre	Aggre	Diese	37.089767	391.9941525	391.9941525	0	3.708976693	0	0.001093	0	0	0.001093	7.85E-06	0	0	7.85E-06	1.73E-06
Yuba	2050	MHDT	Aggre	Aggre	Gasol	24.333952	1457.363479	1457.363479	0	486.8737056	0	0.000102	1.44E-06	0.000272	0.000375	2.11E-06	0	2.55E-07	2.36E-06	4.82E-06
Yuba	2050	MHDT	Aggre	Aggre	Diese	362.23458	15339.83898	15339.83898	0	4035.516672	0	0.005075	0.002722	0.005207	0.013005	5.19E-05	1.04E-06	0	5.29E-05	5.07E-05
Yuba	2050	MHDT	Aggre	Aggre	Electr	412.77455	18745.30779		0	18745.30779	4859.817324	20215.34197	0	0	0	0	0	0	0	6.2E-05
Yuba	2050	OBUS	Aggre	Aggre	Gasol	6.1096223	261.8498317	261.8498317	0	122.2413222	0	7.65E-05	3.2E-07	4.47E-05	0.000121	3.43E-07	0	3.27E-08	3.76E-07	8.66E-07
Yuba	2050	OBUS	Aggre	Aggre	Diese	19.185396	1351.81458	1351.81458	0	255.8508125	0	0.001394	0.00014	0.000256	0.00179	2.13E-05	1.18E-07	0	2.14E-05	4.47E-06
Yuba	2050	OBUS	Aggre	Aggre	Electr	4.7635322	357.9164518		0	357.9164518	95.30875299	395.0547577	0	0	0	0	0	0	0	1.18E-06
Yuba	2050	SBUS	Aggre	Aggre	Gasol	10.828415	656.4194094	656.4194094	0	43.31366115	0	0.000131	9.55E-06	6.14E-05	0.000202	8.52E-07	0	3.84E-08	8.91E-07	1.45E-06
Yuba	2050	SBUS	Aggre	Aggre	Diese	72.511338	1518.514274	1518.514274	0	1049.964174	0	0.000456	0.000405	0.000599	0.00146	4.78E-06	1.84E-07	0	4.96E-06	5.02E-06
Yuba	2050	SBUS	Aggre	Aggre	Electr	77.568828	1971.219612		0	1971.219612	1089.2599	2076.59232	0	0	0	0	0	0	0	6.3E-06
Yuba	2050	UBUS	Aggre	Aggre	Electr	73.173479	6697.361084		0	6697.361084	292.6939157	11675.13532	0	0	0	0	0	0	0	3.78E-05

Units: miles/day for CVMT and EVMT

Region	Calendar Year	Vehicle Category	PM2.5_P MBW	PM2.5_T OTAL	PM10_RU NEX	PM10_IDL EX	PM10_ST REX	PM10_TO TEX	PM10_P MTW	PM10_P MBW	PM10_TO TAL	CO2_RUN EX	CO2_IDLE X	CO2_STRE X	CO2_TOT EX	CH4_RUN EX	CH4_IDLE X	CH4_STRE X	CH4_TOT EX	N2O_RUN EX	N2O_IDLE X	N2O_STR EX	N2O_TOT EX	ROG_RUN EX	ROG_IDLE X	ROG_STR EX
Yuba	2050	HHDT	1.98E-07	2.32E-07	6.52E-09	0	3.97E-10	6.92E-09	1.12E-07	6.56E-07	6.84E-07	0.009021	0	3.25E-05	0.009053	3.95E-07	0	1.06E-09	3.96E-07	5.6E-07	0	7.81E-08	6.38E-07	1.76E-06	0	6.05E-09
Yuba	2050	HHDT	0.001241	0.002549	0.000991	7.76E-06	0	0.000999	0.001408	0.003546	0.005952	55.41315	3.43756	0	58.85071	2.2E-05	8.39E-05	0	0.000106	0.000873	0.000542	0	0.009272	0.000475	0.001806	0
Yuba	2050	HHDT	0.000256	0.000374	0	0	0	0	0.000472	0.000732	0.001204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuba	2050	HHDT	5.17E-05	6E-05	1.02E-06	2.19E-07	0	1.24E-06	2.87E-05	0.000148	0.000178	1.03239	0.1005	0	1.13289	0.000822	0.000165	0	0.000987	0.00021	2.05E-05	0	0.000231	1.17E-05	2.36E-06	0
Yuba	2050	LDA	0.003732	0.007258	0.000668	0	0.000113	0.00078	0.011233	0.010664	0.022677	315.386	0	7.657381	323.0433	0.001418	0	0.004645	0.006063	0.004698	0	0.003846	0.008545	0.004029	0	0.017097
Yuba	2050	LDA	2.17E-06	4.47E-06	6.97E-07	0	0	6.97E-07	6.52E-06	6.2E-06	1.34E-05	0.141384	0	0	0.141384	1.71E-07	0	0	1.71E-07	2.23E-05	0	0	2.23E-05	3.69E-06	0	0
Yuba	2050	LDA	0.00028	0.000644	0	0	0	0	0.001455	0.0008	0.002255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuba	2050	LDA	9.38E-05	0.000242	1.28E-05	0	4.99E-06	1.78E-05	0.000529	0.000268	0.000815	7.725439	0	0.337384	8.062823	2.45E-05	0	0.000252	0.000277	3.15E-05	0	0.00012	0.000151	7.95E-05	0	0.001057
Yuba	2050	LDT1	0.00022	0.000398	3.46E-05	0	6.33E-06	4.1E-05	0.000561	0.000629	0.001231	18.07108	0	0.465841	18.53692	7.22E-05	0	0.000253	0.000325	0.000236	0	0.000206	0.000442	0.000207	0	0.000951
Yuba	2050	LDT1	2.65E-09	7.75E-09	3.56E-09	0	0	3.56E-09	6.77E-09	7.58E-09	1.79E-08	0.000274	0	0	0.000274	5.33E-10	0	0	5.33E-10	4.32E-08	0	0	4.32E-08	1.15E-08	0	0
Yuba	2050	LDT1	3.38E-06	7.78E-06	0	0	0	0	1.76E-05	9.67E-06	2.73E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuba	2050	LDT1	2.53E-06	6.52E-06	3.41E-07	0	1.3E-07	4.71E-07	1.42E-05	7.22E-06	2.19E-05	0.207717	0	0.010403	0.21812	6.6E-07	0	6.78E-06	7.44E-06	8.48E-07	0	3.23E-06	4.07E-06	2.14E-06	0	2.84E-05
Yuba	2050	LDT2	0.002014	0.003636	0.000311	0	5.42E-05	0.000365	0.005145	0.005754	0.011264	172.544	0	4.408021	176.9521	0.000844	0	0.002803	0.003647	0.002253	0	0.002126	0.004379	0.002502	0	0.010781
Yuba	2050	LDT2	7.72E-06	2.26E-05	1.04E-05	0	0	1.04E-05	1.97E-05	2.21E-05	5.22E-05	0.591276	0	0	0.591276	1.55E-06	0	0	1.55E-06	9.32E-05	0	0	9.32E-05	3.34E-05	0	0

Units: miles/day for CVMT and EVMT

[illegible]

Source: EMFAC2021 (v1.0.2) Emission

Region Type: County

Units: tons/mile

GWP

Region: Yuba

Trip-based and Evaporation based emissions are included in an overall VMT-based emission rate.

1

25

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Calendar Year: 2050

The emission rates are calculated as follows:

MTs/ton

0.907185

Season: Annual

EF_PM = (PM_TOTAL - PMTW - PMBW)/Total VMT

Vehicle Classification: EMFAC2007

EF_Gas = Gas_TOTEX/Total VMT

Units: miles/day for CVMT and EVI

EF_VOC = VOC_TOTLE/Total VMT

Vehicle Classification: EMFAC2007				EF_Gas = Gas_TOTEX/Total VMT											Weighted Emission Factors (tons/mile)																					
Units: miles/day for CVMT and EVI				EF_VOC = VOC_TOTLE/Total VMT											Diesel Vehicle Fleet											3.896E-08	1.725E-09	1.503E-08	3.359E-10	3.547E-05	8.011E-11	5.588E-09	3.017E-09	5.78E-10	9.837E-10	5.53E-10
				EMFAC Fleet											7.95E-08	7.86E-08	7.65E-07	2.79E-09	2.84E-04	5.75E-09	1.19E-08	2.17E-08	1.13E-09	6.65E-09	1.06E-09											
Region	Calendar Year	Vehicle Category		PM10_VM T_D	PM10_VM T_Ex	PM2.5_VM T_D	PM2.5_VM T_Ex	NOx_VMT	ROG_VMT	CO_VMT	SOx_VMT	CO2_VMT	CH4_VMT	N2O_VMT	%VMT	NOx	ROG	CO	SOx	CO2	CH4	N2O	PM10_D	PM10_E	PM2.5_D	PM2.5_E										
Yuba	2050	HHDT		1.33E-07	1.36E-09	4.43E-08	1.25E-09	2.91E-06	3.84E-07	3.31E-05	1.76E-08	1.78E-03	7.77E-08	1.25E-07	1.896E-06	5.52E-12	7.27E-13	6.27E-11	3.33E-14	3.37E-09	1.47E-13	2.37E-13	2.52E-13	2.58E-15	8.40E-14	2.37E-15										
Yuba	2050	HHDT		1.37E-07	2.75E-08	4.39E-08	2.63E-08	2.19E-06	6.29E-08	7.89E-07	1.54E-08	1.62E-03	2.92E-09	2.56E-07	0.0134999	2.96E-08	8.48E-10	1.06E-08	2.07E-10	2.19E-05	3.94E-11	3.45E-09	1.843E-09	3.72E-10	5.926E-10	3.55E-10										
Yuba	2050	HHDT		9.37E-08	0.00E+00	2.91E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0047815	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.478E-10	0.00E+00	1.392E-10	0.00E+00										
Yuba	2050	HHDT		2.44E-07	1.72E-09	8.13E-08	1.58E-09	5.01E-07	1.95E-08	1.25E-05	0.00E+00	1.57E-03	1.36E-06	3.19E-07	0.0002692	1.35E-10	5.25E-12	3.37E-09	0.00E+00	4.21E-07	3.67E-10	8.59E-11	6.56E-11	4.63E-13	2.189E-11	4.25E-13										
Yuba	2050	LDA		1.72E-08	6.13E-10	5.13E-09	5.63E-10	4.09E-08	6.36E-08	7.57E-07	2.51E-09	2.54E-04	4.76E-09	6.71E-09	0.4738535	1.94E-08	3.01E-08	3.59E-07	1.19E-09	1.20E-04	2.26E-09	3.18E-09	8.146E-09	2.90E-10	2.433E-09	2.67E-10										
Yuba	2050	LDA		1.72E-08	9.43E-10	5.14E-09	9.02E-10	1.05E-08	4.99E-09	1.62E-07	1.81E-09	1.91E-04	2.32E-10	3.01E-08	0.000275	2.89E-12	1.37E-12	4.45E-11	4.98E-13	5.26E-08	6.38E-14	8.29E-12	4.731E-12	2.59E-13	1.413E-12	2.48E-13										
Yuba	2050	LDA		1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.061394	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.39E-10	0.00E+00	2.395E-10	0.00E+00										
Yuba	2050	LDA		1.33E-08	2.97E-10	3.77E-09	2.73E-10	1.47E-08	5.64E-08	3.47E-07	1.33E-09	1.34E-04	4.61E-09	2.52E-09	0.0223202	3.29E-10	1.26E-09	7.75E-09	2.97E-11	3.00E-06	1.03E-10	5.64E-11	2.966E-10	6.63E-12	8.412E-11	6.10E-12										
Yuba	2050	LDT1		1.87E-08	6.44E-10	5.67E-09	5.93E-10	4.34E-08	8.50E-08	7.85E-07	2.88E-09	2.92E-04	5.12E-09	6.96E-09	0.0236463	1.03E-09	2.01E-09	1.86E-08	6.82E-11	6.90E-06	1.21E-10	1.65E-10	4.427E-10	1.52E-11	1.341E-10	1.40E-11										
Yuba	2050	LDT1		1.87E-08	4.64E-09	5.66E-09	4.44E-09	3.12E-08	1.50E-08	1.59E-07	3.39E-09	3.57E-04	6.94E-10	5.63E-08	2.856E-07	8.92E-15	4.27E-15	4.54E-14	9.67E-16	1.02E-10	1.98E-16	1.61E-14	5.337E-15	1.33E-15	1.616E-15	1.27E-15										
Yuba	2050	LDT1		1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.000742	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.014E-11	0.00E+00	2.895E-12	0.00E+00										
Yuba	2050	LDT1		1.33E-08	2.92E-10	3.77E-09	2.68E-10	1.47E-08	5.43E-08	3.47E-07	1.34E-09	1.35E-04	4.61E-09	2.52E-09	0.0006007	8.84E-12	3.26E-11	2.08E-10	8.02E-13	8.11E-08	2.77E-12	1.52E-12	7.983E-12	1.75E-13	2.264E-12	1.61E-13										
Yuba	2050	LDT2		1.87E-08	6.25E-10	5.66E-09	5.75E-10	4.81E-08	7.61E-08	8.99E-07	3.00E-09	3.03E-04	6.25E-09	7.50E-09	0.217063	1.04E-08	1.65E-08	1.95E-07	6.51E-10	6.58E-05	1.36E-09	1.63E-09	4.055E-09	1.36E-10	1.228E-09	1.25E-10										
Yuba	2050	LDT2		1.87E-08	4.64E-09	5.65E-09	4.44E-09	3.16E-08	1.49E-08	1.59E-07	2.50E-09	2.64E-04	6.94E-10	4.16E-08	0.0008322	2.63E-11	1.24E-11	1.32E-10	2.08E-12	2.20E-07	5.78E-13	3.47E-11	1.554E-11	3.86E-12	4.706E-12	3.69E-12										
Yuba	2050	LDT2		1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0059131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.081E-11	0.00E+00	2.307E-11	0.00E+00										
Yuba	2050	LDT2		1.33E-08	2.97E-10	3.77E-09	2.73E-10	1.49E-08	5.57E-08	3.49E-07	1.34E-09	1.36E-04	4.66E-09	2.54E-09	0.0060665	9.03E-11	3.38E-10	2.12E-09	8.13E-12	8.23E-07	2.83E-11	1.54E-11	8.061E-11	1.80E-12	2.286E-11	1.65E-12										
Yuba	2050	LHDT1		9.48E-08	1.41E-09	3.23E-08	1.30E-09	2.00E-07	2.12E-07	2.16E-06	8.26E-09	8.35E-04	1.20E-08	1.92E-08	0.0060417	1.21E-09	1.28E-09	1.30E-08	4.99E-11	5.05E-06	7.25E-11	1.16E-10	5.727E-10	8.52E-12	1.951E-10	7.83E-12										
Yuba	2050	LHDT1		9.92E-08	2.24E-08	3.34E-08	2.15E-08	3.57E-07	1.03E-07	2.81E-07	6.34E-09	6.69E-04	4.79E-09	1.05E-07	0.0043583	1.56E-09	4.50E-10	1.23E-09	2.76E-11	2.91E-06	2.09E-11	4.59E-10	4.324E-10	9.78E-11	1.456E-10	9.36E-11										
Yuba	2050	LHDT1		5.18E-08	0.00E+00	1.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0097373	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.045E-10	0.00E+00	1.68E-10	0.00E+00										
Yuba	2050	LHDT2		1.09E-07	1.43E-09	3.73E-08	1.32E-09	1.58E-07	1.99E-07	2.22E-06	9.23E-09	9.33E-04	1.02E-08	1.69E-08	0.0006972	1.10E-10	1.39E-10	1.54E-09	6.43E-12	6.51E-07	7.10E-12	1.18E-11	7.608E-11	1.00E-12	2.601E-11	9.19E-13										
Yuba	2050	LHDT2		1.14E-07	3.14E-08	3.84E-08	3.01E-08	5.80E-07	1.38E-07	3.78E-07	7.51E-09	7.93E-04	6.39E-09	1.25E-07	0.0021936	1.27E-09	3.02E-10	8.30E-10	1.65E-11	1.74E-06	1.40E-11	2.74E-10	2.491E-10	6.89E-11	8.427E-11	6.60E-11										
Yuba	2050	LHDT2		5.90E-08	0.00E+00	1.98E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0023998	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.415E-10	0.00E+00	4.742E-11	0.00E+00										
Yuba	2050	MCY		1.76E-08	3.68E-09	5.73E-09	3.43E-09	5.47E-07	5.25E-06	1.43E-05	2.16E-09	2.19E-04	1.98E-07	4.10E-08	0.0026584	1.45E-09	1.39E-08	3.81E-08	5.74E-12	5.81E-07	5.27E-10	1.09E-10	4.689E-11	9.79E-12	1.524E-11	9.13E-12										
Yuba	2050	MDV		1.88E-08	6.45E-10	5.70E-09	5.93E-10	5.15E-08	9.23E-08	9.36E-07	3.65E-09	3.69E-04	6.73E-09	7.84E-09	0.1162228	5.99E-09	1.07E-08	1.09E-07	4.24E-10	4.29E-05	7.82E-10	9.11E-10	2.184E-09	7.49E-11	6.619E-10	6.89E-11										
Yuba	2050	MDV		1.89E-08	1.30E-09	5.73E-09	1.24E-09	1.42E-08	5.80E-09	1.78E-07	3.31E-09	3.49E-04	2.69E-10	5.50E-08	0.0013148	1.86E-11	7.62E-12	2.34E-10	4.35E-12	4.59E-07	3.54E-13	7.23E-11	2.483E-11	1.71E-12	7.531E-12	1.63E-12										
Yuba	2050	MDV		1.37E-08	0.00E+00	3.90E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0052165	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.132E-11	0.00E+00	2.036E-11	0.00E+00										
Yuba	2050	MDV		1.33E-08	3.06E-10	3.77E-09	2.82E-10	1.56E-08	6.17E-08	3.58E-07	1.36E-09	1.38E-04	4.88E-09	2.63E-09	0.003534	5.52E-11	2.18E-10	1.26E-09	4.81E-12	4.87E-07	1.73E-11	9.28E-12	4.697E-11	1.08E-12	1.332E-11	9.95E-13										
Yuba	2050	MH		6.34E-08	1.56E-09	2.09E-08	1.43E-09	2.43E-07	2.19E-07	1.88E-07	2.06E-08	2.08E-03	3.26E-09	2.01E-08	0.0002646	6.43E-11	5.79E-11	4.97E-11	5.45E-12	5.51E-07	8.62E-13	5.31E-12	1.678E-11	4.12E-13	5.523E-12	3.79E-13										
Yuba	2050	MH		6.77E-08	2.09E-08	2.19E-08	2.00E-08	2.79E-06	8.49E-08	2.42E-07	1.15E-08	1.21E-03	3.94E-09	1.91E-07	0.0001458	4.06E-10	1.24E-11	3.53E-11	1.67E-12	1.77E-07	5.75E-13	2.78E-11	9.87E-12	3.05E-12	3.197E-12	2.92E-12										
Yuba	2050	MHDT		6.34E-08	1.76E-09	2.09E-08	1.62E-09	2.57E-07	2.06E-07	1.58E-06	1.64E-08	1.66E-03	2.21E-08	2.22E-08	0.0005422	1.39E-10	1.12E-10	8.58E-10	8.88E-12	8.98E-07	1.20E-11	1.20E-11	3.438E-11	9.55E-13	1.132E-11											

Source: EMFAC2021 (v1.0.2) Emissi

Region Type: County

Region: Yuba

Calendar Year: 2050

Season: Annual

Vehicle Classification: EMFAC2007

Units: miles/day for CVMT and EVI

Region	Calendar Year	Vehicle Category		Weighted Energy Consumption Rates			
			3.369E-05				
			2.61E-04	3.17E-03	2.57E-02	6.77E-02	
			CO2e	Diesel gallons per mile	Gasoline gallons per mile	KWh per mile	
Yuba	2050	HHDT	3.123E-09	0	0.18731891	0	
Yuba	2050	HHDT	2.079E-05	0.14486941	0	0	
Yuba	2050	HHDT	0	0	0	1.870484	
Yuba	2050	HHDT	4.139E-07	0	0	0	
Yuba	2050	LDA	0.0001099	0	0.0267435	0	
Yuba	2050	LDA	4.996E-08	0.01708229	0	0	
Yuba	2050	LDA	0	0	0	0.3860825	
Yuba	2050	LDA	2.739E-06	0	0	0.3020298	
Yuba	2050	LDT1	6.303E-06	0	0.03075219	0	
Yuba	2050	LDT1	9.693E-11	0.03192477	0	0	
Yuba	2050	LDT1	0	0	0	0.3860825	
Yuba	2050	LDT1	7.408E-08	0	0	0.3020298	
Yuba	2050	LDT2	6.019E-05	0	0.03197949	0	
Yuba	2050	LDT2	2.089E-07	0.02361079	0	0	
Yuba	2050	LDT2	0	0	0	0.3860825	
Yuba	2050	LDT2	7.511E-07	0	0	0.3020298	
Yuba	2050	LHDT1	4.61E-06	0	0.08806419	0	
Yuba	2050	LHDT1	2.769E-06	0.05974668	0	0	
Yuba	2050	LHDT1	0	0	0	0.6510293	
Yuba	2050	LHDT2	5.936E-07	0	0.09840986	0	
Yuba	2050	LHDT2	1.652E-06	0.070826	0	0	
Yuba	2050	LHDT2	0	0	0	0.6400472	
Yuba	2050	MCY	5.684E-07	0	0.02304316	0	
Yuba	2050	MDV	3.917E-05	0	0.03890805	0	
Yuba	2050	MDV	4.361E-07	0.03119534	0	0	
Yuba	2050	MDV	0	0	0	0.3860825	
Yuba	2050	MDV	4.444E-07	0	0	0.3020298	
Yuba	2050	MH	5.017E-07	0	0.21975287	0	
Yuba	2050	MH	1.679E-07	0.10825049	0	0	
Yuba	2050	MHDT	8.182E-07	0	0.17466297	0	
Yuba	2050	MHDT	6.252E-06	0.10304442	0	0	
Yuba	2050	MHDT	0	0	0	1.0784214	
Yuba	2050	OBUS	1.512E-07	0	0.17943752	0	
Yuba	2050	OBUS	7.051E-07	0.13187111	0	0	
Yuba	2050	OBUS	0	0	0	1.1037625	
Yuba	2050	SBUS	1.974E-07	0	0.09299962	0	
Yuba	2050	SBUS	6.535E-07	0.10880138	0	0	
Yuba	2050	SBUS	0	0	0	1.0534556	
Yuba	2050	UBUS	0	0	0	1.7432441	

CalEEMod Land Use Input

Residential Modeling

Residential Type	DU/acre Max in PD	Modeled CalEEMod Type	Year 2020		Year 2050	
			Acres	DU	Acres	DU
Rural Residential	1	Single Family	3,089	76129	3,089	73778
Large Lot Single Family	8	Single Family		295001		356594
Small Lot Single Family	25	Single Family		275968		356594
Attached	50	Condo/Townhouse High Rise	6,911	304517	6,911	442668
Single Family total			3,089	647098	3,089	786966
Condo/Townhouse High Rise			6,911	304,517	6,911	442,668
All residential total			10,000	951615	10,000	1229634

CalEEMod size limit for all land uses 10000 acres

Non-Residential Modeling

Employment Data

	Existing (2020)	End state - 2050	Percent 2020	Percent 2050
Total Employees	1,127,549	1,390,571	1.000000049	1
Education	88663.43418	102591.0232	7.9%	7.4%
Food	83578.68214	108487.6682	7.4%	7.8%
Government	137585.9812	156035.0464	12.2%	11.2%
Industrial	181763.3476	213646.306	16.1%	15.4%
Medical	116473.0147	158634.0262	10.3%	11.4%
Office	246448.1849	327781.8612	21.9%	23.6%
Other	3916.096968	4923.244295	0.3%	0.4%
Retail	146266.0013	170873.9989	13.0%	12.3%
Service	122854.3123	147597.8257	10.9%	10.6%

Source: Table 2.x Housing and Employment Distribution (MTP2025_EIR_tables_LU_May_2005.xlsx)

Modeled Non-Residential Land Use Size and Employee

Bold are input in CalEEMod

Employment Category	Land Use Subtype Modeled	Modeled SF/employee	Modeled employee (2020)	Modeled KSF (2020)	Modeled employee (2050)	Modeled KSF (2050)	CalEEMod Run
Education	Elementary School	206	22165.85854	4,566	25647.7558	5,283	SACOG_2020_education_CV, SACOG_2050_education_CV
	Middle School	206	22165.85854	4,566	25647.7558	5,283	
	High School	206	22165.85854	4,566	25647.7558	5,283	
	University/College	206	22165.85854	4,566	25647.7558	5,283	
Food	Restaurant	388	41789.34107	16214	27122	10523	SACOG_2020_other_CV, SACOG_2050_other1_CV, SACOG_2050_other2_CV
	Supermarket	704	41789.34107	29420	27122	19094	
Government	General Office	206	137585.9812	28343	156035	32143	
Industrial	Refrigerated Warehouse-Rail	979	60587.78252	59315	71215	69720	
	General Heavy industry	724	60587.78252	43866	71215	51560	
	Industrial Park	558	60587.78252	33808	71215	39738	
Medical	Medical Office Building	466	116473.0147	54276	158634	73923	
Office	General Office	288	246448.1849	70977	327782	94401	
Other	General Office	288	3916.096968	1128	4923	1418	
Retail	Strip Mall	704	146266.0013	102971	170874	120295	
Service	Hotel/Motel	1152	122854.3123	141528	147598	170033	
rooms				471761		566776	

Note: Assume hotel 300 sf per room

Assuming number of employee evenly distributed among modeled subtypes for each employee category.

The building square feet were estimated using SF per employee data from the following table:

SF per employee

Land Use category	SF/employee
Regional Retail	704
Other Retail/Svc.	325
Downtown OfficeSpace2	249
Suburban Office Space	288
Hotel/Motel	1,152
R & D/Flex Space	466
Light Manufacturing	558
Heavy Manufacturing'	724
Warehouse	979
Government Offices	206
Restaurant3	388

source:

Table IN-1

San Diego Unified Port District

Southern California Association of Governments (SCAG). 2001. Employment Density

Study Summary Repon. October 31. Available Online:

http://www.scag.ca.gov/pdfs/Employment_Density_Study.pdf

SACOG_2020_res_CV Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SACOG_2020_res_CV
Operational Year	2020
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.6
Location	38.83369493052828, -121.44891327644663
County	Placer-Sacramento
City	Unincorporated
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	469
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	647,098	Dwelling Unit	3,089	1,261,841,100	0.00	—	1,688,926	—

Condo/Townhouse High Rise	304,517	Dwelling Unit	6,911	442,275	0.00	—	794,789	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	530,220	495,257	19,968	748,516	1,515	103,019	0.00	103,019	101,589	0.00	101,589	11,853,488	18,098,300	29,951,788	74,231	796	9,040	32,053,782
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	530,220	495,257	19,968	748,516	1,515	103,019	0.00	103,019	101,589	0.00	101,589	11,853,488	18,098,300	29,951,788	74,231	796	9,040	32,053,782
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	142,687	134,569	8,993	170,078	369	23,508	0.00	23,508	23,187	0.00	23,187	2,960,499	12,816,194	15,776,693	47,530	362	9,040	17,081,911
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26,040	24,559	1,641	31,039	67.4	4,290	0.00	4,290	4,232	0.00	4,232	490,144	2,121,867	2,612,012	7,869	60.0	1,497	2,828,105

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	529,540	494,917	14,155	746,042	1,478	102,549	—	102,549	101,119	—	101,119	11,469,756	6,812,610	18,282,366	34,437	559	—	19,310,010
Energy	680	340	5,813	2,474	37.1	470	—	470	470	—	470	—	11,230,949	11,230,949	1,276	89.4	—	11,289,504
Water	—	—	—	—	—	—	—	—	—	—	—	59,933	54,741	114,673	6,154	147	—	312,361
Waste	—	—	—	—	—	—	—	—	—	—	—	323,800	0.00	323,800	32,363	0.00	—	1,132,866
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,040	9,040
Total	530,220	495,257	19,968	748,516	1,515	103,019	0.00	103,019	101,589	0.00	101,589	11,853,488	18,098,300	29,951,788	74,231	796	9,040	32,053,782
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	529,540	494,917	14,155	746,042	1,478	102,549	—	102,549	101,119	—	101,119	11,469,756	6,812,610	18,282,366	34,437	559	—	19,310,010
Energy	680	340	5,813	2,474	37.1	470	—	470	470	—	470	—	11,230,949	11,230,949	1,276	89.4	—	11,289,504
Water	—	—	—	—	—	—	—	—	—	—	—	59,933	54,741	114,673	6,154	147	—	312,361
Waste	—	—	—	—	—	—	—	—	—	—	—	323,800	0.00	323,800	32,363	0.00	—	1,132,866
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,040	9,040
Total	530,220	495,257	19,968	748,516	1,515	103,019	0.00	103,019	101,589	0.00	101,589	11,853,488	18,098,300	29,951,788	74,231	796	9,040	32,053,782
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	142,007	134,229	3,180	167,604	332	23,038	—	23,038	22,717	—	22,717	2,576,767	1,530,504	4,107,271	7,737	126	—	4,338,139

Energy	680	340	5,813	2,474	37.1	470	—	470	470	—	470	—	11,230,9	11,230,9	1,276	89.4	—	11,289,5
Water	—	—	—	—	—	—	—	—	—	—	—	59,933	54,741	114,673	6,154	147	—	312,361
Waste	—	—	—	—	—	—	—	—	—	—	—	323,800	0.00	323,800	32,363	0.00	—	1,132,866
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,040	9,040
Total	142,687	134,569	8,993	170,078	369	23,508	0.00	23,508	23,187	0.00	23,187	2,960,499	12,816,194	15,776,693	47,530	362	9,040	17,081,911
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	25,916	24,497	580	30,588	60.6	4,204	—	4,204	4,146	—	4,146	426,613	253,392	680,006	1,281	20.8	—	718,228
Energy	124	62.1	1,061	451	6.77	85.8	—	85.8	85.8	—	85.8	—	1,859,412	1,859,412	211	14.8	—	1,869,106
Water	—	—	—	—	—	—	—	—	—	—	—	9,923	9,063	18,986	1,019	24.4	—	51,715
Waste	—	—	—	—	—	—	—	—	—	—	—	53,609	0.00	53,609	5,358	0.00	—	187,559
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,497	1,497
Total	26,040	24,559	1,641	31,039	67.4	4,290	0.00	4,290	4,232	0.00	4,232	490,144	2,121,867	2,612,012	7,869	60.0	1,497	2,828,105

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	3,083,200	3,083,200	499	60.5	—	3,113,687
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	768,848	768,848	124	15.1	—	776,451
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,852,048	3,852,048	623	75.5	—	3,890,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	3,083,200	3,083,200	499	60.5	—	3,113,687
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	768,848	768,848	124	15.1	—	776,451
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,852,048	3,852,048	623	75.5	—	3,890,138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	510,459	510,459	82.6	10.0	—	515,506
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	127,292	127,292	20.6	2.50	—	128,550
Total	—	—	—	—	—	—	—	—	—	—	—	—	637,751	637,751	103	12.5	—	644,057

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	556	278	4,753	2,022	30.3	384	—	384	384	—	384	—	6,032,846	6,032,846	534	11.4	—	6,049,579
Condo/Townhouse High Rise	124	62.0	1,060	451	6.77	85.7	—	85.7	85.7	—	85.7	—	1,346,054	1,346,054	119	2.53	—	1,349,787
Total	680	340	5,813	2,474	37.1	470	—	470	470	—	470	—	7,378,900	7,378,900	653	13.9	—	7,399,366
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	556	278	4,753	2,022	30.3	384	—	384	384	—	384	—	6,032,846	6,032,846	534	11.4	—	6,049,579
Condo/Townhouse High Rise	124	62.0	1,060	451	6.77	85.7	—	85.7	85.7	—	85.7	—	1,346,054	1,346,054	119	2.53	—	1,349,787
Total	680	340	5,813	2,474	37.1	470	—	470	470	—	470	—	7,378,900	7,378,900	653	13.9	—	7,399,366
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	102	50.8	867	369	5.54	70.1	—	70.1	70.1	—	70.1	—	998,807	998,807	88.4	1.88	—	1,001,577

Condo/Townhouse	22.6	11.3	194	82.4	1.24	15.6	—	15.6	15.6	—	15.6	—	222,855	222,855	19.7	0.42	—	223,473
Total	124	62.1	1,061	451	6.77	85.8	—	85.8	85.8	—	85.8	—	1,221,661	1,221,661	108	2.30	—	1,225,050

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	499,821	465,198	14,155	746,042	1,478	102,549	—	102,549	101,119	—	101,119	11,469,756	6,812,610	18,282,366	34,437	559	—	19,310,010
Consumer Products	27,013	27,013	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2,706	2,706	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	529,540	494,917	14,155	746,042	1,478	102,549	—	102,549	101,119	—	101,119	11,469,756	6,812,610	18,282,366	34,437	559	—	19,310,010
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	499,821	465,198	14,155	746,042	1,478	102,549	—	102,549	101,119	—	101,119	11,469,756	6,812,610	18,282,366	34,437	559	—	19,310,010
Consumer Products	27,013	27,013	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	2,706	2,706	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	529,540	494,917	14,155	746,042	1,478	102,549	—	102,549	101,119	—	101,119	11,469,756	6,812,610	18,282,366	34,437	559	—	19,310,010
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	20,493	19,073	580	30,588	60.6	4,204	—	4,204	4,146	—	4,146	426,613	253,392	680,006	1,281	20.8	—	718,228
Consumer Products	4,930	4,930	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	494	494	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	25,916	24,497	580	30,588	60.6	4,204	—	4,204	4,146	—	4,146	426,613	253,392	680,006	1,281	20.8	—	718,228

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	40,754	37,224	77,978	4,185	100	—	212,406
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	19,178	17,517	36,696	1,969	47.1	—	99,956
Total	—	—	—	—	—	—	—	—	—	—	—	59,933	54,741	114,673	6,154	147	—	312,361

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	40,754	37,224	77,978	4,185	100	—	212,406
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	19,178	17,517	36,696	1,969	47.1	—	99,956
Total	—	—	—	—	—	—	—	—	—	—	—	59,933	54,741	114,673	6,154	147	—	312,361
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	6,747	6,163	12,910	693	16.6	—	35,166
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	3,175	2,900	6,075	326	7.79	—	16,549
Total	—	—	—	—	—	—	—	—	—	—	—	9,923	9,063	18,986	1,019	24.4	—	51,715

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	202,440	0.00	202,440	20,233	0.00	—	708,269

Condo/T High Rise	—	—	—	—	—	—	—	—	—	—	—	121,360	0.00	121,360	12,129	0.00	—	424,596
Total	—	—	—	—	—	—	—	—	—	—	—	323,800	0.00	323,800	32,363	0.00	—	1,132,866
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	202,440	0.00	202,440	20,233	0.00	—	708,269
Condo/T ownhou se High Rise	—	—	—	—	—	—	—	—	—	—	—	121,360	0.00	121,360	12,129	0.00	—	424,596
Total	—	—	—	—	—	—	—	—	—	—	—	323,800	0.00	323,800	32,363	0.00	—	1,132,866
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	33,516	0.00	33,516	3,350	0.00	—	117,262
Condo/T ownhou se High Rise	—	—	—	—	—	—	—	—	—	—	—	20,092	0.00	20,092	2,008	0.00	—	70,297
Total	—	—	—	—	—	—	—	—	—	—	—	53,609	0.00	53,609	5,358	0.00	—	187,559

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,037	9,037
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.17	3.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,040	9,040
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,037	9,037
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.17	3.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,040	9,040
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,496	1,496
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,497	1,497

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetati on	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	97065
Gas Fireplaces	323549
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	226484
Conventional Wood Stoves	32355
Catalytic Wood Stoves	32355
Non-Catalytic Wood Stoves	32355
Pellet Wood Stoves	0
Condo/Townhouse High Rise	—
Wood Fireplaces	0
Gas Fireplaces	91355
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	213162
Conventional Wood Stoves	0
Catalytic Wood Stoves	0

Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
2556123834.375	852,041,278	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Single Family Housing	5,516,969,429	204	0.0330	0.0040	18,824,097,243
Condo/Townhouse High Rise	1,375,750,236	204	0.0330	0.0040	4,200,048,317

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	21,267,797,885	0.00
Condo/Townhouse High Rise	10,008,385,142	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	375,627	—
Condo/Townhouse High Rise	225,183	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat
Extreme Precipitation	5.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.7
AQ-PM	15.1

AQ-DPM	14.1
Drinking Water	39.7
Lead Risk Housing	5.49
Pesticides	84.3
Toxic Releases	16.8
Traffic	5.90
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	76.6
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	87.0
Solid Waste	97.9
Sensitive Population	—
Asthma	26.1
Cardio-vascular	64.3
Low Birth Weights	9.64
Socioeconomic Factor Indicators	—
Education	26.9
Housing	10.8
Linguistic	27.3
Poverty	30.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.68150905

Employed	52.68831002
Median HI	80.45682022
Education	—
Bachelor's or higher	68.40754523
High school enrollment	5.671756705
Preschool enrollment	30.89952521
Transportation	—
Auto Access	54.54895419
Active commuting	15.8475555
Social	—
2-parent households	79.26344155
Voting	94.30257924
Neighborhood	—
Alcohol availability	92.66007956
Park access	11.4718337
Retail density	3.06685487
Supermarket access	2.399589375
Tree canopy	10.02181445
Housing	—
Homeownership	81.9196715
Housing habitability	62.8127807
Low-inc homeowner severe housing cost burden	58.02643398
Low-inc renter severe housing cost burden	14.53868857
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	93.45566534
Arthritis	71.8
Asthma ER Admissions	71.5

High Blood Pressure	85.1
Cancer (excluding skin)	40.8
Asthma	65.7
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	91.2
Life Expectancy at Birth	75.3
Cognitively Disabled	96.3
Physically Disabled	86.7
Heart Attack ER Admissions	61.3
Mental Health Not Good	73.6
Chronic Kidney Disease	90.3
Obesity	70.2
Pedestrian Injuries	44.4
Physical Health Not Good	87.1
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	64.6
No Leisure Time for Physical Activity	81.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	0.5
Elderly	55.1
English Speaking	69.8
Foreign-born	37.6
Outdoor Workers	58.7

Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	4.8
Traffic Access	23.0
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	91.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Characteristics: Utility Information	—
Land Use	Used single family housing to model Rural Residential, Large Lot Single Family, Small Lot single Family, and Condo/Townhouse High Rise for Attached Residential per 2025 Blueprint data. Used upper limit in CalEEMod 3,089 acres for Single family and 10,000 acres (limit for all land use acreage combined) - 3,089 acres = 6911 acres for Condo/Townhouse High Rise.

SACOG_2020_education_CV Detailed Report

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4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SACOG_2020_education_CV
Operational Year	2020
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.6
Location	38.83369493052828, -121.44891327644663
County	Placer-Sacramento
City	Unincorporated
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	469
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Junior High School	22,166	Employee	605	26,364,349	0.00	0.00	—	—
University/College (4yr)	22,166	Employee	359	15,644,370	0.00	0.00	—	—

Elementary School	22,166	Employee	518	22,568,235	0.00	0.00	—	—
High School	22,166	Employee	605	26,364,349	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,203	2,147	1,021	858	6.13	77.6	0.00	77.6	77.6	0.00	77.6	42,550	1,466,567	1,509,117	4,412	17.7	351	1,625,036
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,203	2,147	1,021	858	6.13	77.6	0.00	77.6	77.6	0.00	77.6	42,550	1,466,567	1,509,117	4,412	17.7	351	1,625,036
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,203	2,147	1,021	858	6.13	77.6	0.00	77.6	77.6	0.00	77.6	42,550	1,466,567	1,509,117	4,412	17.7	351	1,625,036
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	402	392	186	157	1.12	14.2	0.00	14.2	14.2	0.00	14.2	7,045	242,807	249,852	730	2.93	58.2	269,043

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2,091	2,091	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	112	56.2	1,021	858	6.13	77.6	—	77.6	77.6	—	77.6	—	1,462,619	1,462,619	147	7.08	—	1,468,411
Water	—	—	—	—	—	—	—	—	—	—	—	4,323	3,948	8,271	444	10.6	—	22,528
Waste	—	—	—	—	—	—	—	—	—	—	—	38,228	0.00	38,228	3,821	0.00	—	133,745
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Total	2,203	2,147	1,021	858	6.13	77.6	0.00	77.6	77.6	0.00	77.6	42,550	1,466,567	1,509,117	4,412	17.7	351	1,625,036
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2,091	2,091	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	112	56.2	1,021	858	6.13	77.6	—	77.6	77.6	—	77.6	—	1,462,619	1,462,619	147	7.08	—	1,468,411
Water	—	—	—	—	—	—	—	—	—	—	—	4,323	3,948	8,271	444	10.6	—	22,528
Waste	—	—	—	—	—	—	—	—	—	—	—	38,228	0.00	38,228	3,821	0.00	—	133,745
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Total	2,203	2,147	1,021	858	6.13	77.6	0.00	77.6	77.6	0.00	77.6	42,550	1,466,567	1,509,117	4,412	17.7	351	1,625,036
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2,091	2,091	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	112	56.2	1,021	858	6.13	77.6	—	77.6	77.6	—	77.6	—	1,462,619	1,462,619	147	7.08	—	1,468,411
Water	—	—	—	—	—	—	—	—	—	—	—	4,323	3,948	8,271	444	10.6	—	22,528

Waste	—	—	—	—	—	—	—	—	—	—	—	38,228	0.00	38,228	3,821	0.00	—	133,745
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Total	2,203	2,147	1,021	858	6.13	77.6	0.00	77.6	77.6	0.00	77.6	42,550	1,466,567	1,509,117	4,412	17.7	351	1,625,036
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	382	382	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	20.5	10.3	186	157	1.12	14.2	—	14.2	14.2	—	14.2	—	242,153	242,153	24.4	1.17	—	243,112
Water	—	—	—	—	—	—	—	—	—	—	—	716	654	1,369	73.5	1.76	—	3,730
Waste	—	—	—	—	—	—	—	—	—	—	—	6,329	0.00	6,329	633	0.00	—	22,143
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.2	58.2
Total	402	392	186	157	1.12	14.2	0.00	14.2	14.2	0.00	14.2	7,045	242,807	249,852	730	2.93	58.2	269,043

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	67,528	67,528	10.9	1.32	—	68,196

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	51,138	51,138	8.27	1.00	—	51,643
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	57,805	57,805	9.35	1.13	—	58,377
High School	—	—	—	—	—	—	—	—	—	—	—	—	67,528	67,528	10.9	1.32	—	68,196
Total	—	—	—	—	—	—	—	—	—	—	—	—	244,000	244,000	39.5	4.78	—	246,412
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	67,528	67,528	10.9	1.32	—	68,196
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	51,138	51,138	8.27	1.00	—	51,643
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	57,805	57,805	9.35	1.13	—	58,377
High School	—	—	—	—	—	—	—	—	—	—	—	—	67,528	67,528	10.9	1.32	—	68,196
Total	—	—	—	—	—	—	—	—	—	—	—	—	244,000	244,000	39.5	4.78	—	246,412
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	11,180	11,180	1.81	0.22	—	11,291
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	8,466	8,466	1.37	0.17	—	8,550
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	9,570	9,570	1.55	0.19	—	9,665
High School	—	—	—	—	—	—	—	—	—	—	—	—	11,180	11,180	1.81	0.22	—	11,291

Total	—	—	—	—	—	—	—	—	—	—	—	—	40,397	40,397	6.54	0.79	—	40,796

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	33.7	16.8	306	257	1.84	23.3	—	23.3	23.3	—	23.3	—	365,083	365,083	32.3	0.69	—	366,095
University/College (4yr)	16.2	8.11	147	124	0.88	11.2	—	11.2	11.2	—	11.2	—	175,938	175,938	15.6	0.33	—	176,426
Elementary School	28.8	14.4	262	220	1.57	19.9	—	19.9	19.9	—	19.9	—	312,516	312,516	27.7	0.59	—	313,382
High School	33.7	16.8	306	257	1.84	23.3	—	23.3	23.3	—	23.3	—	365,083	365,083	32.3	0.69	—	366,095
Total	112	56.2	1,021	858	6.13	77.6	—	77.6	77.6	—	77.6	—	1,218,619	1,218,619	108	2.29	—	1,221,999
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	33.7	16.8	306	257	1.84	23.3	—	23.3	23.3	—	23.3	—	365,083	365,083	32.3	0.69	—	366,095
University/College (4yr)	16.2	8.11	147	124	0.88	11.2	—	11.2	11.2	—	11.2	—	175,938	175,938	15.6	0.33	—	176,426
Elementary School	28.8	14.4	262	220	1.57	19.9	—	19.9	19.9	—	19.9	—	312,516	312,516	27.7	0.59	—	313,382

High School	33.7	16.8	306	257	1.84	23.3	—	23.3	23.3	—	23.3	—	365,083	365,083	32.3	0.69	—	366,095
Total	112	56.2	1,021	858	6.13	77.6	—	77.6	77.6	—	77.6	—	1,218,619	1,218,619	108	2.29	—	1,221,999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	6.14	3.07	55.8	46.9	0.34	4.24	—	4.24	4.24	—	4.24	—	60,444	60,444	5.35	0.11	—	60,611
University/College (4yr)	2.96	1.48	26.9	22.6	0.16	2.05	—	2.05	2.05	—	2.05	—	29,129	29,129	2.58	0.05	—	29,209
Elementary School	5.26	2.63	47.8	40.2	0.29	3.63	—	3.63	3.63	—	3.63	—	51,741	51,741	4.58	0.10	—	51,884
High School	6.14	3.07	55.8	46.9	0.34	4.24	—	4.24	4.24	—	4.24	—	60,444	60,444	5.35	0.11	—	60,611
Total	20.5	10.3	186	157	1.12	14.2	—	14.2	14.2	—	14.2	—	201,756	201,756	17.9	0.38	—	202,316

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1,946	1,946	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	144	144	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	2,091	2,091	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1,946	1,946	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	144	144	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2,091	2,091	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	355	355	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	26.4	26.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	382	382	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Junior High School	—	—	—	—	—	—	—	—	—	—	—	1,042	952	1,993	107	2.56	—	5,430
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	349	319	668	35.9	0.86	—	1,820
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,254	1,145	2,399	129	3.08	—	6,536
High School	—	—	—	—	—	—	—	—	—	—	—	1,678	1,532	3,210	172	4.12	—	8,743
Total	—	—	—	—	—	—	—	—	—	—	—	4,323	3,948	8,271	444	10.6	—	22,528
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	1,042	952	1,993	107	2.56	—	5,430
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	349	319	668	35.9	0.86	—	1,820
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,254	1,145	2,399	129	3.08	—	6,536
High School	—	—	—	—	—	—	—	—	—	—	—	1,678	1,532	3,210	172	4.12	—	8,743
Total	—	—	—	—	—	—	—	—	—	—	—	4,323	3,948	8,271	444	10.6	—	22,528
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	172	158	330	17.7	0.42	—	899
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	57.8	52.8	111	5.94	0.14	—	301

Element School	—	—	—	—	—	—	—	—	—	—	—	208	190	397	21.3	0.51	—	1,082
High School	—	—	—	—	—	—	—	—	—	—	—	278	254	531	28.5	0.68	—	1,448
Total	—	—	—	—	—	—	—	—	—	—	—	716	654	1,369	73.5	1.76	—	3,730

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436
Elementary School	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436
High School	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436
Total	—	—	—	—	—	—	—	—	—	—	—	38,228	0.00	38,228	3,821	0.00	—	133,745
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436

University/College	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436
Elementary School	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436
High School	—	—	—	—	—	—	—	—	—	—	—	9,557	0.00	9,557	955	0.00	—	33,436
Total	—	—	—	—	—	—	—	—	—	—	—	38,228	0.00	38,228	3,821	0.00	—	133,745
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	1,582	0.00	1,582	158	0.00	—	5,536
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1,582	0.00	1,582	158	0.00	—	5,536
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,582	0.00	1,582	158	0.00	—	5,536
High School	—	—	—	—	—	—	—	—	—	—	—	1,582	0.00	1,582	158	0.00	—	5,536
Total	—	—	—	—	—	—	—	—	—	—	—	6,329	0.00	6,329	633	0.00	—	22,143

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	102	102

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.4	60.4
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	87.2	87.2
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	102	102
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	102	102
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.4	60.4
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	87.2	87.2
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	102	102
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.9	16.9
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.0	10.0
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.9	16.9

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.2	58.2

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	136,411,955	45,470,652	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Junior High School	120,832,959	204	0.0330	0.0040	1,139,155,769
University/College (4yr)	91,503,819	204	0.0330	0.0040	548,973,814

Elementary School	103,434,627	204	0.0330	0.0040	975,132,559
High School	120,832,959	204	0.0330	0.0040	1,139,155,769

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Junior High School	543,659,374	0.00
University/College (4yr)	182,244,951	0.00
Elementary School	654,409,231	0.00
High School	875,418,743	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Junior High School	17,733	—
University/College (4yr)	17,733	—
Elementary School	17,733	—
High School	17,733	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Junior High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

Junior High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Junior High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Junior High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat
Extreme Precipitation	5.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.7
AQ-PM	15.1
AQ-DPM	14.1
Drinking Water	39.7
Lead Risk Housing	5.49
Pesticides	84.3
Toxic Releases	16.8
Traffic	5.90
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	76.6
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	87.0
Solid Waste	97.9
Sensitive Population	—
Asthma	26.1
Cardio-vascular	64.3
Low Birth Weights	9.64
Socioeconomic Factor Indicators	—
Education	26.9
Housing	10.8
Linguistic	27.3
Poverty	30.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.68150905
Employed	52.68831002
Median HI	80.45682022
Education	—
Bachelor's or higher	68.40754523
High school enrollment	5.671756705
Preschool enrollment	30.89952521
Transportation	—
Auto Access	54.54895419
Active commuting	15.8475555
Social	—
2-parent households	79.26344155
Voting	94.30257924
Neighborhood	—
Alcohol availability	92.66007956
Park access	11.4718337
Retail density	3.06685487
Supermarket access	2.399589375
Tree canopy	10.02181445
Housing	—
Homeownership	81.9196715
Housing habitability	62.8127807
Low-inc homeowner severe housing cost burden	58.02643398
Low-inc renter severe housing cost burden	14.53868857

Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	93.45566534
Arthritis	71.8
Asthma ER Admissions	71.5
High Blood Pressure	85.1
Cancer (excluding skin)	40.8
Asthma	65.7
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	91.2
Life Expectancy at Birth	75.3
Cognitively Disabled	96.3
Physically Disabled	86.7
Heart Attack ER Admissions	61.3
Mental Health Not Good	73.6
Chronic Kidney Disease	90.3
Obesity	70.2
Pedestrian Injuries	44.4
Physical Health Not Good	87.1
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	64.6
No Leisure Time for Physical Activity	81.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	0.5
Elderly	55.1
English Speaking	69.8
Foreign-born	37.6
Outdoor Workers	58.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	4.8
Traffic Access	23.0
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	91.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	—
Land Use	Used single family housing to model Rural Residential, Large Lot Single Family, Small Lot single Family, and Condo/Townhouse High Rise for Attached Residential per 2025 Blueprint data. Used upper limit in CalEEMod 3,089 acres for Single family and 10,000 acres (limit for all land use acreage combined) - 3,089 acres = 6911 acres for Condo/Townhouse High Rise.

SACOG_2020_other_CV Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SACOG_2020_other_CV
Operational Year	2020
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.6
Location	38.83369493052828, -121.44891327644663
County	Placer-Sacramento
City	Unincorporated
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	469
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	0.00	Employee	0.00	0.00	0.00	0.00	1,688,926	—
High School	0.00	Employee	0.00	0.00	0.00	0.00	794,789	—

Junior High School	0.00	Employee	0.00	0.00	0.00	0.00	—	—
University/College (4yr)	0.00	Employee	0.00	0.00	0.00	0.00	—	—
Quality Restaurant	16,214	1000sqft	372	16,214,000	0.00	—	—	—
Supermarket	29,420	1000sqft	675	29,420,000	0.00	—	—	—
General Office Building	28,343	1000sqft	651	28,343,000	0.00	—	—	—
Refrigerated Warehouse-Rail	59,315	1000sqft	1,362	59,315,000	0.00	—	—	—
General Heavy Industry	43,866	1000sqft	1,007	43,866,000	0.00	—	—	—
Industrial Park	33,808	1000sqft	776	33,808,000	0.00	—	—	—
Medical Office Building	54,276	1000sqft	1,246	54,276,000	0.00	—	—	—
General Office Building	70,977	1000sqft	1,629	70,977,000	0.00	—	—	—
General Office Building	1,128	1000sqft	25.9	1,128,000	0.00	—	—	—
Strip Mall	102,971	1000sqft	1,000	102,971,000	0.00	—	—	—
Hotel	471,761	Room	1,000	684,996,972	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	26,849	26,359	8,917	7,491	53.5	678	0.00	678	678	0.00	678	904,983	18,110,4	19,015,4	93,020	561	8,798,75	30,306,8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26,849	26,359	8,917	7,491	53.5	678	0.00	678	678	0.00	678	904,983	18,110,4 85	19,015,4 68	93,020	561	8,798,75 6	30,306,8 76
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26,849	26,359	8,917	7,491	53.5	678	0.00	678	678	0.00	678	904,983	18,110,4 85	19,015,4 68	93,020	561	8,798,75 6	30,306,8 76
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4,900	4,811	1,627	1,367	9.76	124	0.00	124	124	0.00	124	149,830	2,998,39 8	3,148,22 8	15,400	92.9	1,456,73 5	5,017,64 9

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	25,868	25,868	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	981	490	8,917	7,491	53.5	678	—	678	678	—	678	—	17,962,6 17	17,962,6 17	2,126	164	—	18,064,5 35
Water	—	—	—	—	—	—	—	—	—	—	—	161,893	147,869	309,761	16,624	397	—	843,765
Waste	—	—	—	—	—	—	—	—	—	—	—	743,090	0.00	743,090	74,269	0.00	—	2,599,81 9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,798,75 6	8,798,75 6
Total	26,849	26,359	8,917	7,491	53.5	678	0.00	678	678	0.00	678	904,983	18,110,4 85	19,015,4 68	93,020	561	8,798,75 6	30,306,8 76

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	25,868	25,868	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	981	490	8,917	7,491	53.5	678	—	678	678	—	678	—	17,962,617	17,962,617	2,126	164	—	18,064,535
Water	—	—	—	—	—	—	—	—	—	—	—	161,893	147,869	309,761	16,624	397	—	843,765
Waste	—	—	—	—	—	—	—	—	—	—	—	743,090	0.00	743,090	74,269	0.00	—	2,599,819
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,798,756	8,798,756
Total	26,849	26,359	8,917	7,491	53.5	678	0.00	678	678	0.00	678	904,983	18,110,485	19,015,468	93,020	561	8,798,756	30,306,876
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	25,868	25,868	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	981	490	8,917	7,491	53.5	678	—	678	678	—	678	—	17,962,617	17,962,617	2,126	164	—	18,064,535
Water	—	—	—	—	—	—	—	—	—	—	—	161,893	147,869	309,761	16,624	397	—	843,765
Waste	—	—	—	—	—	—	—	—	—	—	—	743,090	0.00	743,090	74,269	0.00	—	2,599,819
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,798,756	8,798,756
Total	26,849	26,359	8,917	7,491	53.5	678	0.00	678	678	0.00	678	904,983	18,110,485	19,015,468	93,020	561	8,798,756	30,306,876
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	4,721	4,721	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	179	89.5	1,627	1,367	9.76	124	—	124	124	—	124	—	2,973,916	2,973,916	352	27.1	—	2,990,790
Water	—	—	—	—	—	—	—	—	—	—	—	26,803	24,481	51,285	2,752	65.8	—	139,695

Waste	—	—	—	—	—	—	—	—	—	—	—	123,027	0.00	123,027	12,296	0.00	—	430,430
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,456,735	1,456,735
Total	4,900	4,811	1,627	1,367	9.76	124	0.00	124	124	0.00	124	149,830	2,998,398	3,148,228	15,400	92.9	1,456,735	5,017,649

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	363,845	363,845	58.9	7.13	—	367,442
Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	842,084	842,084	136	16.5	—	850,411
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,174,892	1,174,892	190	23.0	—	1,186,509
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	811,057	811,057	131	15.9	—	819,077
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	253,237	253,237	41.0	4.97	—	255,741
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	395,436	395,436	64.0	7.75	—	399,346
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	634,840	634,840	103	12.4	—	641,118
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	501,346	501,346	81.1	9.83	—	506,303
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	2,345,915	2,345,915	380	46.0	—	2,369,112
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,322,652	7,322,652	1,185	144	—	7,395,059
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	363,845	363,845	58.9	7.13	—	367,442
Superm arket	—	—	—	—	—	—	—	—	—	—	—	—	842,084	842,084	136	16.5	—	850,411
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,174,892	1,174,892	190	23.0	—	1,186,509
Refriger ated Wareho use-Rail	—	—	—	—	—	—	—	—	—	—	—	—	811,057	811,057	131	15.9	—	819,077
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	253,237	253,237	41.0	4.97	—	255,741
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	395,436	395,436	64.0	7.75	—	399,346
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	634,840	634,840	103	12.4	—	641,118
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	501,346	501,346	81.1	9.83	—	506,303
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	2,345,915	2,345,915	380	46.0	—	2,369,112
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,322,652	7,322,652	1,185	144	—	7,395,059
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	60,239	60,239	9.75	1.18	—	60,834
Superm arket	—	—	—	—	—	—	—	—	—	—	—	—	139,417	139,417	22.6	2.73	—	140,795
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	194,517	194,517	31.5	3.81	—	196,440
Refriger ated Wareho use-Rail	—	—	—	—	—	—	—	—	—	—	—	—	134,280	134,280	21.7	2.63	—	135,608
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	41,926	41,926	6.78	0.82	—	42,341
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	65,469	65,469	10.6	1.28	—	66,116
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	105,105	105,105	17.0	2.06	—	106,144
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	83,004	83,004	13.4	1.63	—	83,824
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	388,393	388,393	62.8	7.62	—	392,233
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,212,349	1,212,349	196	23.8	—	1,224,336

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Element School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	58.4	29.2	531	446	3.18	40.3	—	40.3	40.3	—	40.3	—	633,180	633,180	56.0	1.19	—	634,936
Supermarket	26.3	13.1	239	201	1.43	18.2	—	18.2	18.2	—	18.2	—	285,101	285,101	25.2	0.54	—	285,892
General Office Building	85.7	42.8	779	654	4.67	59.2	—	59.2	59.2	—	59.2	—	929,355	929,355	82.2	1.75	—	931,932
Refrigerated Warehouse-Rail	8.69	4.35	79.0	66.4	0.47	6.01	—	6.01	6.01	—	6.01	—	94,310	94,310	8.35	0.18	—	94,571
General Heavy Industry	53.7	26.9	488	410	2.93	37.1	—	37.1	37.1	—	37.1	—	582,842	582,842	51.6	1.10	—	584,459
Industrial Park	28.8	14.4	262	220	1.57	19.9	—	19.9	19.9	—	19.9	—	312,795	312,795	27.7	0.59	—	313,662
Medical Office Building	46.3	23.1	421	354	2.53	32.0	—	32.0	32.0	—	32.0	—	502,167	502,167	44.4	0.95	—	503,560
Strip Mall	26.2	13.1	239	200	1.43	18.1	—	18.1	18.1	—	18.1	—	284,651	284,651	25.2	0.54	—	285,440
Hotel	647	323	5,880	4,939	35.3	447	—	447	447	—	447	—	7,015,565	7,015,565	621	13.2	—	7,035,023
Total	981	490	8,917	7,491	53.5	678	—	678	678	—	678	—	10,639,964	10,639,964	942	20.0	—	10,669,476

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	58.4	29.2	531	446	3.18	40.3	—	40.3	40.3	—	40.3	—	633,180	633,180	56.0	1.19	—	634,936
Supermarket	26.3	13.1	239	201	1.43	18.2	—	18.2	18.2	—	18.2	—	285,101	285,101	25.2	0.54	—	285,892
General Office Building	85.7	42.8	779	654	4.67	59.2	—	59.2	59.2	—	59.2	—	929,355	929,355	82.2	1.75	—	931,932
Refrigerated Warehouse-Rail	8.69	4.35	79.0	66.4	0.47	6.01	—	6.01	6.01	—	6.01	—	94,310	94,310	8.35	0.18	—	94,571
General Heavy Industry	53.7	26.9	488	410	2.93	37.1	—	37.1	37.1	—	37.1	—	582,842	582,842	51.6	1.10	—	584,459
Industrial Park	28.8	14.4	262	220	1.57	19.9	—	19.9	19.9	—	19.9	—	312,795	312,795	27.7	0.59	—	313,662
Medical Office Building	46.3	23.1	421	354	2.53	32.0	—	32.0	32.0	—	32.0	—	502,167	502,167	44.4	0.95	—	503,560
Strip Mall	26.2	13.1	239	200	1.43	18.1	—	18.1	18.1	—	18.1	—	284,651	284,651	25.2	0.54	—	285,440

Hotel	647	323	5,880	4,939	35.3	447	—	447	447	—	447	—	7,015,56	7,015,56	621	13.2	—	7,035,02
Total	981	490	8,917	7,491	53.5	678	—	678	678	—	678	—	10,639,964	10,639,964	942	20.0	—	10,669,476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	10.7	5.33	96.8	81.4	0.58	7.36	—	7.36	7.36	—	7.36	—	104,830	104,830	9.28	0.20	—	105,121
Supermarket	4.80	2.40	43.6	36.6	0.26	3.31	—	3.31	3.31	—	3.31	—	47,202	47,202	4.18	0.09	—	47,333
General Office Building	15.6	7.82	142	119	0.85	10.8	—	10.8	10.8	—	10.8	—	153,865	153,865	13.6	0.29	—	154,292
Refrigerated Warehouse-Rail	1.59	0.79	14.4	12.1	0.09	1.10	—	1.10	1.10	—	1.10	—	15,614	15,614	1.38	0.03	—	15,657
General Heavy Industry	9.81	4.90	89.1	74.9	0.53	6.78	—	6.78	6.78	—	6.78	—	96,496	96,496	8.54	0.18	—	96,764
Industrial Park	5.26	2.63	47.8	40.2	0.29	3.64	—	3.64	3.64	—	3.64	—	51,787	51,787	4.58	0.10	—	51,930
Medical Office Building	8.45	4.22	76.8	64.5	0.46	5.84	—	5.84	5.84	—	5.84	—	83,139	83,139	7.36	0.16	—	83,370

Strip Mall	4.79	2.39	43.5	36.6	0.26	3.31	—	3.31	3.31	—	3.31	—	47,127	47,127	4.17	0.09	—	47,258
Hotel	118	59.0	1,073	901	6.44	81.6	—	81.6	81.6	—	81.6	—	1,161,507	1,161,507	103	2.19	—	1,164,728
Total	179	89.5	1,627	1,367	9.76	124	—	124	124	—	124	—	1,761,568	1,761,568	156	3.32	—	1,766,453

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	24,082	24,082	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1,787	1,787	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	25,868	25,868	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	24,082	24,082	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	1,787	1,787	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	25,868	25,868	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	4,395	4,395	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	326	326	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4,721	4,721	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

University/College	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	9,431	8,614	18,045	968	23.1	—	49,152
Supermarket	—	—	—	—	—	—	—	—	—	—	—	6,949	6,347	13,297	714	17.1	—	36,219
General Office Building	—	—	—	—	—	—	—	—	—	—	—	34,211	31,247	65,458	3,513	84.0	—	178,301
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	26,284	24,007	50,292	2,699	64.5	—	136,990
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	19,438	17,754	37,193	1,996	47.7	—	101,310
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	14,981	13,684	28,665	1,538	36.8	—	78,081
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	13,051	11,920	24,971	1,340	32.0	—	68,019
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	14,616	13,350	27,965	1,501	35.9	—	76,176
Hotel	—	—	—	—	—	—	—	—	—	—	—	22,932	20,945	43,877	2,355	56.3	—	119,517
Total	—	—	—	—	—	—	—	—	—	—	—	161,893	147,869	309,761	16,624	397	—	843,765
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	9,431	8,614	18,045	968	23.1	—	49,152
Supermarket	—	—	—	—	—	—	—	—	—	—	—	6,949	6,347	13,297	714	17.1	—	36,219
General Office Building	—	—	—	—	—	—	—	—	—	—	—	34,211	31,247	65,458	3,513	84.0	—	178,301
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	26,284	24,007	50,292	2,699	64.5	—	136,990
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	19,438	17,754	37,193	1,996	47.7	—	101,310
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	14,981	13,684	28,665	1,538	36.8	—	78,081
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	13,051	11,920	24,971	1,340	32.0	—	68,019
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	14,616	13,350	27,965	1,501	35.9	—	76,176
Hotel	—	—	—	—	—	—	—	—	—	—	—	22,932	20,945	43,877	2,355	56.3	—	119,517
Total	—	—	—	—	—	—	—	—	—	—	—	161,893	147,869	309,761	16,624	397	—	843,765
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1,561	1,426	2,987	160	3.83	—	8,138
Supermarket	—	—	—	—	—	—	—	—	—	—	—	1,151	1,051	2,201	118	2.82	—	5,996
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5,664	5,173	10,837	582	13.9	—	29,520
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	4,352	3,975	8,326	447	10.7	—	22,680
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	3,218	2,939	6,158	330	7.90	—	16,773
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,480	2,265	4,746	255	6.09	—	12,927
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	2,161	1,974	4,134	222	5.30	—	11,261
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2,420	2,210	4,630	248	5.94	—	12,612
Hotel	—	—	—	—	—	—	—	—	—	—	—	3,797	3,468	7,264	390	9.32	—	19,787
Total	—	—	—	—	—	—	—	—	—	—	—	26,803	24,481	51,285	2,752	65.8	—	139,695

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	7,974	0.00	7,974	797	0.00	—	27,897
Supermarket	—	—	—	—	—	—	—	—	—	—	—	89,425	0.00	89,425	8,938	0.00	—	312,869
General Office Building	—	—	—	—	—	—	—	—	—	—	—	50,346	0.00	50,346	5,032	0.00	—	176,143
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	30,049	0.00	30,049	3,003	0.00	—	105,132
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	29,315	0.00	29,315	2,930	0.00	—	102,563
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	22,593	0.00	22,593	2,258	0.00	—	79,046

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	315,916	0.00	315,916	31,575	0.00	—	1,105,281
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	58,270	0.00	58,270	5,824	0.00	—	203,866
Hotel	—	—	—	—	—	—	—	—	—	—	—	139,202	0.00	139,202	13,913	0.00	—	487,021
Total	—	—	—	—	—	—	—	—	—	—	—	743,090	0.00	743,090	74,269	0.00	—	2,599,819
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	7,974	0.00	7,974	797	0.00	—	27,897
Supermarket	—	—	—	—	—	—	—	—	—	—	—	89,425	0.00	89,425	8,938	0.00	—	312,869
General Office Building	—	—	—	—	—	—	—	—	—	—	—	50,346	0.00	50,346	5,032	0.00	—	176,143
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	30,049	0.00	30,049	3,003	0.00	—	105,132
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	29,315	0.00	29,315	2,930	0.00	—	102,563

Industria Park	—	—	—	—	—	—	—	—	—	—	—	22,593	0.00	22,593	2,258	0.00	—	79,046
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	315,916	0.00	315,916	31,575	0.00	—	1,105,281
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	58,270	0.00	58,270	5,824	0.00	—	203,866
Hotel	—	—	—	—	—	—	—	—	—	—	—	139,202	0.00	139,202	13,913	0.00	—	487,021
Total	—	—	—	—	—	—	—	—	—	—	—	743,090	0.00	743,090	74,269	0.00	—	2,599,819
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Element ary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1,320	0.00	1,320	132	0.00	—	4,619
Superm arket	—	—	—	—	—	—	—	—	—	—	—	14,805	0.00	14,805	1,480	0.00	—	51,799
General Office Building	—	—	—	—	—	—	—	—	—	—	—	8,335	0.00	8,335	833	0.00	—	29,162
Refriger ated Wareho use-Rail	—	—	—	—	—	—	—	—	—	—	—	4,975	0.00	4,975	497	0.00	—	17,406
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	4,853	0.00	4,853	485	0.00	—	16,980

Industria Park	—	—	—	—	—	—	—	—	—	—	—	3,741	0.00	3,741	374	0.00	—	13,087
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	52,303	0.00	52,303	5,228	0.00	—	182,992
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	9,647	0.00	9,647	964	0.00	—	33,752
Hotel	—	—	—	—	—	—	—	—	—	—	—	23,046	0.00	23,046	2,303	0.00	—	80,632
Total	—	—	—	—	—	—	—	—	—	—	—	123,027	0.00	123,027	12,296	0.00	—	430,430

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25,347	25,347
Superm arket	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,099,334	6,099,334

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	244	244
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,580,760	1,580,760
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,419	11,419
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,800	8,800
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,387	1,387
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	641	641
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,070,824	1,070,824
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,798,756	8,798,756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25,347	25,347
Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,099,334	6,099,334
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	244	244
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,580,760	1,580,760
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,419	11,419
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,800	8,800
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,387	1,387
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	641	641
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,070,824	1,070,824
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,798,756	8,798,756
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

University/College	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,196	4,196
Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,009,814	1,009,814
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40.4	40.4
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	261,713	261,713
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,890	1,890
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,457	1,457
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	230	230
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	106	106
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	177,287	177,287
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,456,735	1,456,735

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetati on	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Elementary School	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	647098
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
High School	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	304517
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,687,972,458	562,657,486	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Elementary School	0.00	204	0.0330	0.0040	0.00
High School	0.00	204	0.0330	0.0040	0.00
Junior High School	0.00	204	0.0330	0.0040	0.00
University/College (4yr)	0.00	204	0.0330	0.0040	0.00
Quality Restaurant	651,050,847	204	0.0330	0.0040	1,975,689,966
Supermarket	1,506,795,818	204	0.0330	0.0040	889,592,152
General Office Building	593,200,186	204	0.0330	0.0040	818,234,644
Refrigerated Warehouse-Rail	1,451,276,919	204	0.0330	0.0040	294,271,670
General Heavy Industry	453,133,920	204	0.0330	0.0040	1,818,623,288
Industrial Park	707,579,010	204	0.0330	0.0040	976,003,840
Medical Office Building	1,135,960,671	204	0.0330	0.0040	1,566,894,949
General Office Building	1,485,501,521	204	0.0330	0.0040	2,049,036,457
General Office Building	23,608,292	204	0.0330	0.0040	32,564,255
Strip Mall	897,091,034	204	0.0330	0.0040	888,186,729
Hotel	4,197,697,674	204	0.0330	0.0040	21,890,441,788

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	0.00	0.00
High School	0.00	0.00
Junior High School	0.00	0.00
University/College (4yr)	0.00	0.00
Quality Restaurant	4,921,495,613	0.00
Supermarket	3,626,550,882	0.00
General Office Building	5,037,507,620	0.00
Refrigerated Warehouse-Rail	13,716,593,750	0.00
General Heavy Industry	10,144,012,500	0.00
Industrial Park	7,818,100,000	0.00
Medical Office Building	6,810,581,659	0.00
General Office Building	12,615,008,232	0.00
General Office Building	200,483,668	0.00
Strip Mall	7,627,321,609	0.00
Hotel	11,967,052,782	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	0.00	—
High School	0.00	—
Junior High School	0.00	—
University/College (4yr)	0.00	—

Quality Restaurant	14,795	—
Supermarket	165,929	—
General Office Building	26,359	—
Refrigerated Warehouse-Rail	55,756	—
General Heavy Industry	54,394	—
Industrial Park	41,922	—
Medical Office Building	586,181	—
General Office Building	66,009	—
General Office Building	1,049	—
Strip Mall	108,120	—
Hotel	258,289	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Junior High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Junior High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Junior High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Junior High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Quality Restaurant	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Supermarket	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Supermarket	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat
Extreme Precipitation	5.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.7
AQ-PM	15.1
AQ-DPM	14.1
Drinking Water	39.7
Lead Risk Housing	5.49
Pesticides	84.3
Toxic Releases	16.8
Traffic	5.90
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	76.6
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	87.0
Solid Waste	97.9
Sensitive Population	—
Asthma	26.1
Cardio-vascular	64.3
Low Birth Weights	9.64

Socioeconomic Factor Indicators	—
Education	26.9
Housing	10.8
Linguistic	27.3
Poverty	30.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.68150905
Employed	52.68831002
Median HI	80.45682022
Education	—
Bachelor's or higher	68.40754523
High school enrollment	5.671756705
Preschool enrollment	30.89952521
Transportation	—
Auto Access	54.54895419
Active commuting	15.8475555
Social	—
2-parent households	79.26344155
Voting	94.30257924
Neighborhood	—
Alcohol availability	92.66007956
Park access	11.4718337
Retail density	3.06685487

Supermarket access	2.399589375
Tree canopy	10.02181445
Housing	—
Homeownership	81.9196715
Housing habitability	62.8127807
Low-inc homeowner severe housing cost burden	58.02643398
Low-inc renter severe housing cost burden	14.53868857
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	93.45566534
Arthritis	71.8
Asthma ER Admissions	71.5
High Blood Pressure	85.1
Cancer (excluding skin)	40.8
Asthma	65.7
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	91.2
Life Expectancy at Birth	75.3
Cognitively Disabled	96.3
Physically Disabled	86.7
Heart Attack ER Admissions	61.3
Mental Health Not Good	73.6
Chronic Kidney Disease	90.3
Obesity	70.2
Pedestrian Injuries	44.4
Physical Health Not Good	87.1
Stroke	88.3

Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	64.6
No Leisure Time for Physical Activity	81.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	0.5
Elderly	55.1
English Speaking	69.8
Foreign-born	37.6
Outdoor Workers	58.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	4.8
Traffic Access	23.0
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	91.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	—
Land Use	Manually set strip mall and hotel acreage to remain in acreage limit of CalEEMod.

SACOG_2050_res_CV Detailed Report

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4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SACOG_2050_res_CV
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.6
Location	38.83369493052828, -121.44891327644663
County	Placer-Sacramento
City	Unincorporated
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	469
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	786,966	Dwelling Unit	3,089	1,534,583,700	0.00	—	2,053,981	—

Condo/Townhouse High Rise	442	Dwelling Unit	6,911	442,275	0.00	—	1,154	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	644,672	602,227	22,996	909,757	1,834	125,182	0.00	125,182	123,443	0.00	123,443	14,244,868	15,623,912	29,868,779	72,240	815	10,994	31,928,625
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	644,672	602,227	22,996	909,757	1,834	125,182	0.00	125,182	123,443	0.00	123,443	14,244,868	15,623,912	29,868,779	72,240	815	10,994	31,928,625
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	173,376	163,578	9,649	206,291	441	28,485	0.00	28,485	28,095	0.00	28,095	3,429,690	9,200,097	12,629,787	39,767	287	10,994	13,720,635
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31,641	29,853	1,761	37,648	80.4	5,199	0.00	5,199	5,127	0.00	5,127	567,824	1,523,181	2,091,005	6,584	47.6	1,820	2,271,608

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	643,996	601,889	17,214	907,297	1,797	124,714	—	124,714	122,976	—	122,976	13,948,904	8,285,133	22,234,036	41,881	680	—	23,483,802
Energy	677	338	5,782	2,460	36.9	467	—	467	467	—	467	—	7,338,779	7,338,779	649	13.8	—	7,359,134
Water	—	—	—	—	—	—	—	—	—	—	—	49,591	0.00	49,591	5,085	121	—	212,719
Waste	—	—	—	—	—	—	—	—	—	—	—	246,373	0.00	246,373	24,624	0.00	—	861,976
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,994	10,994
Total	644,672	602,227	22,996	909,757	1,834	125,182	0.00	125,182	123,443	0.00	123,443	14,244,868	15,623,912	29,868,779	72,240	815	10,994	31,928,625
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	643,996	601,889	17,214	907,297	1,797	124,714	—	124,714	122,976	—	122,976	13,948,904	8,285,133	22,234,036	41,881	680	—	23,483,802
Energy	677	338	5,782	2,460	36.9	467	—	467	467	—	467	—	7,338,779	7,338,779	649	13.8	—	7,359,134
Water	—	—	—	—	—	—	—	—	—	—	—	49,591	0.00	49,591	5,085	121	—	212,719
Waste	—	—	—	—	—	—	—	—	—	—	—	246,373	0.00	246,373	24,624	0.00	—	861,976
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,994	10,994
Total	644,672	602,227	22,996	909,757	1,834	125,182	0.00	125,182	123,443	0.00	123,443	14,244,868	15,623,912	29,868,779	72,240	815	10,994	31,928,625
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	172,699	163,240	3,867	203,831	404	28,018	—	28,018	27,627	—	27,627	3,133,726	1,861,317	4,995,044	9,409	153	—	5,275,813

Energy	677	338	5,782	2,460	36.9	467	—	467	467	—	467	—	7,338,779	7,338,779	649	13.8	—	7,359,134
Water	—	—	—	—	—	—	—	—	—	—	—	49,591	0.00	49,591	5,085	121	—	212,719
Waste	—	—	—	—	—	—	—	—	—	—	—	246,373	0.00	246,373	24,624	0.00	—	861,976
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,994	10,994
Total	173,376	163,578	9,649	206,291	441	28,485	0.00	28,485	28,095	0.00	28,095	3,429,690	9,200,097	12,629,787	39,767	287	10,994	13,720,635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	31,518	29,791	706	37,199	73.7	5,113	—	5,113	5,042	—	5,042	518,824	308,162	826,987	1,558	25.3	—	873,471
Energy	123	61.7	1,055	449	6.73	85.3	—	85.3	85.3	—	85.3	—	1,215,019	1,215,019	108	2.29	—	1,218,389
Water	—	—	—	—	—	—	—	—	—	—	—	8,210	0.00	8,210	842	20.0	—	35,218
Waste	—	—	—	—	—	—	—	—	—	—	—	40,790	0.00	40,790	4,077	0.00	—	142,710
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,820	1,820
Total	31,641	29,853	1,761	37,648	80.4	5,199	0.00	5,199	5,127	0.00	5,127	567,824	1,523,181	2,091,005	6,584	47.6	1,820	2,271,608

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	676	338	5,780	2,460	36.9	467	—	467	467	—	467	—	7,336,825	7,336,825	649	13.8	—	7,357,175
Condo/Townhouse High Rise	0.18	0.09	1.54	0.65	0.01	0.12	—	0.12	0.12	—	0.12	—	1,954	1,954	0.17	< 0.005	—	1,959
Total	677	338	5,782	2,460	36.9	467	—	467	467	—	467	—	7,338,779	7,338,779	649	13.8	—	7,359,134
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	676	338	5,780	2,460	36.9	467	—	467	467	—	467	—	7,336,825	7,336,825	649	13.8	—	7,357,175
Condo/Townhouse High Rise	0.18	0.09	1.54	0.65	0.01	0.12	—	0.12	0.12	—	0.12	—	1,954	1,954	0.17	< 0.005	—	1,959
Total	677	338	5,782	2,460	36.9	467	—	467	467	—	467	—	7,338,779	7,338,779	649	13.8	—	7,359,134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	123	61.7	1,055	449	6.73	85.3	—	85.3	85.3	—	85.3	—	1,214,695	1,214,695	107	2.29	—	1,218,064
Condo/Townhouse High Rise	0.03	0.02	0.28	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	—	323	323	0.03	< 0.005	—	324

Total	123	61.7	1,055	449	6.73	85.3	—	85.3	85.3	—	85.3	—	1,215,01	1,215,01	108	2.29	—	1,218,38

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	607,856	565,749	17,214	907,297	1,797	124,714	—	124,714	122,976	—	122,976	13,948,904	8,285,133	22,234,036	41,881	680	—	23,483,802
Consumer Products	32,850	32,850	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3,290	3,290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	643,996	601,889	17,214	907,297	1,797	124,714	—	124,714	122,976	—	122,976	13,948,904	8,285,133	22,234,036	41,881	680	—	23,483,802
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	607,856	565,749	17,214	907,297	1,797	124,714	—	124,714	122,976	—	122,976	13,948,904	8,285,133	22,234,036	41,881	680	—	23,483,802
Consumer Products	32,850	32,850	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3,290	3,290	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	643,996	601,889	17,214	907,297	1,797	124,714	—	124,714	122,976	—	122,976	13,948,9	8,285,13	22,234,0	41,881	680	—	23,483,8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	24,922	23,196	706	37,199	73.7	5,113	—	5,113	5,042	—	5,042	518,824	308,162	826,987	1,558	25.3	—	873,471
Consumer Products	5,995	5,995	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	600	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	31,518	29,791	706	37,199	73.7	5,113	—	5,113	5,042	—	5,042	518,824	308,162	826,987	1,558	25.3	—	873,471

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	49,563	0.00	49,563	5,082	121	—	212,599
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.85	0.07	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	49,591	0.00	49,591	5,085	121	—	212,719
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	49,563	0.00	49,563	5,082	121	—	212,599
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.85	0.07	—	119
Total	—	—	—	—	—	—	—	—	—	—	—	49,591	0.00	49,591	5,085	121	—	212,719
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	8,206	0.00	8,206	841	20.0	—	35,198
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	4.61	0.00	4.61	0.47	0.01	—	19.8
Total	—	—	—	—	—	—	—	—	—	—	—	8,210	0.00	8,210	842	20.0	—	35,218

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	246,197	0.00	246,197	24,606	0.00	—	861,359

Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	616
Total	—	—	—	—	—	—	—	—	—	—	—	246,373	0.00	246,373	24,624	0.00	—	861,976
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	246,197	0.00	246,197	24,606	0.00	—	861,359
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	616
Total	—	—	—	—	—	—	—	—	—	—	—	246,373	0.00	246,373	24,624	0.00	—	861,976
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	40,761	0.00	40,761	4,074	0.00	—	142,608
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	29.2	0.00	29.2	2.92	0.00	—	102
Total	—	—	—	—	—	—	—	—	—	—	—	40,790	0.00	40,790	4,077	0.00	—	142,710

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,991	10,991
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.17	3.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,994	10,994
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,991	10,991
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.17	3.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,994	10,994
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,820	1,820
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,820	1,820

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetati on	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	118045
Gas Fireplaces	393483
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	275438
Conventional Wood Stoves	39348
Catalytic Wood Stoves	39348
Non-Catalytic Wood Stoves	39348
Pellet Wood Stoves	0
Condo/Townhouse High Rise	—
Wood Fireplaces	0
Gas Fireplaces	133
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	309
Conventional Wood Stoves	0
Catalytic Wood Stoves	0

Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3108427599.375	1,036,142,533	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	6,709,443,336	0.00	0.0000	0.0000	22,892,860,913
Condo/Townhouse High Rise	1,996,872	0.00	0.0000	0.0000	6,096,282

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	25,864,759,017	0.00
Condo/Townhouse High Rise	14,526,960	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	456,818	—
Condo/Townhouse High Rise	327	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat
Extreme Precipitation	5.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.7
AQ-PM	15.1

AQ-DPM	14.1
Drinking Water	39.7
Lead Risk Housing	5.49
Pesticides	84.3
Toxic Releases	16.8
Traffic	5.90
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	76.6
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	87.0
Solid Waste	97.9
Sensitive Population	—
Asthma	26.1
Cardio-vascular	64.3
Low Birth Weights	9.64
Socioeconomic Factor Indicators	—
Education	26.9
Housing	10.8
Linguistic	27.3
Poverty	30.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.68150905

Employed	52.68831002
Median HI	80.45682022
Education	—
Bachelor's or higher	68.40754523
High school enrollment	5.671756705
Preschool enrollment	30.89952521
Transportation	—
Auto Access	54.54895419
Active commuting	15.8475555
Social	—
2-parent households	79.26344155
Voting	94.30257924
Neighborhood	—
Alcohol availability	92.66007956
Park access	11.4718337
Retail density	3.06685487
Supermarket access	2.399589375
Tree canopy	10.02181445
Housing	—
Homeownership	81.9196715
Housing habitability	62.8127807
Low-inc homeowner severe housing cost burden	58.02643398
Low-inc renter severe housing cost burden	14.53868857
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	93.45566534
Arthritis	71.8
Asthma ER Admissions	71.5

High Blood Pressure	85.1
Cancer (excluding skin)	40.8
Asthma	65.7
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	91.2
Life Expectancy at Birth	75.3
Cognitively Disabled	96.3
Physically Disabled	86.7
Heart Attack ER Admissions	61.3
Mental Health Not Good	73.6
Chronic Kidney Disease	90.3
Obesity	70.2
Pedestrian Injuries	44.4
Physical Health Not Good	87.1
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	64.6
No Leisure Time for Physical Activity	81.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	0.5
Elderly	55.1
English Speaking	69.8
Foreign-born	37.6
Outdoor Workers	58.7

Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	4.8
Traffic Access	23.0
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	91.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Characteristics: Utility Information	Zeroed out GHG in intensity factors due to CA's carbon neutrality goal by 2045
Land Use	Used single family housing to model Rural Residential, Large Lot Single Family, Small Lot single Family, and Condo/Townhouse High Rise for Attached Residential per 2025 Blueprint data. Used upper limit in CalEEMod 3,089 acres for Single family and 10,000 acres (limit for all land use acreage combined) - 3,089 acres = 6911 acres for Condo/Townhouse High Rise.

SACOG_2050_education_CV Detailed Report

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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SACOG_2050_education_CV
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.6
Location	38.83369493052828, -121.44891327644663
County	Placer-Sacramento
City	Unincorporated
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	469
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Junior High School	25,648	Employee	700	30,505,857	0.00	0.00	—	—
University/College (4yr)	25,648	Employee	416	18,101,904	0.00	0.00	—	—

Elementary School	25,648	Employee	599	26,113,421	0.00	0.00	—	—
High School	25,648	Employee	700	30,505,857	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,549	2,484	1,182	993	7.09	89.8	0.00	89.8	89.8	0.00	89.8	49,234	1,410,049	1,459,283	5,059	14.8	406	1,590,575
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,549	2,484	1,182	993	7.09	89.8	0.00	89.8	89.8	0.00	89.8	49,234	1,410,049	1,459,283	5,059	14.8	406	1,590,575
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,549	2,484	1,182	993	7.09	89.8	0.00	89.8	89.8	0.00	89.8	49,234	1,410,049	1,459,283	5,059	14.8	406	1,590,575
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	465	453	216	181	1.29	16.4	0.00	16.4	16.4	0.00	16.4	8,151	233,450	241,601	837	2.46	67.3	263,338

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2,419	2,419	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	130	65.0	1,182	993	7.09	89.8	—	89.8	89.8	—	89.8	—	1,410,049	1,410,049	125	2.66	—	1,413,960
Water	—	—	—	—	—	—	—	—	—	—	—	5,002	0.00	5,002	513	12.2	—	21,454
Waste	—	—	—	—	—	—	—	—	—	—	—	44,233	0.00	44,233	4,421	0.00	—	154,755
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	406	406
Total	2,549	2,484	1,182	993	7.09	89.8	0.00	89.8	89.8	0.00	89.8	49,234	1,410,049	1,459,283	5,059	14.8	406	1,590,575
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2,419	2,419	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	130	65.0	1,182	993	7.09	89.8	—	89.8	89.8	—	89.8	—	1,410,049	1,410,049	125	2.66	—	1,413,960
Water	—	—	—	—	—	—	—	—	—	—	—	5,002	0.00	5,002	513	12.2	—	21,454
Waste	—	—	—	—	—	—	—	—	—	—	—	44,233	0.00	44,233	4,421	0.00	—	154,755
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	406	406
Total	2,549	2,484	1,182	993	7.09	89.8	0.00	89.8	89.8	0.00	89.8	49,234	1,410,049	1,459,283	5,059	14.8	406	1,590,575
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2,419	2,419	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	130	65.0	1,182	993	7.09	89.8	—	89.8	89.8	—	89.8	—	1,410,049	1,410,049	125	2.66	—	1,413,960
Water	—	—	—	—	—	—	—	—	—	—	—	5,002	0.00	5,002	513	12.2	—	21,454

Waste	—	—	—	—	—	—	—	—	—	—	—	44,233	0.00	44,233	4,421	0.00	—	154,755
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	406	406
Total	2,549	2,484	1,182	993	7.09	89.8	0.00	89.8	89.8	0.00	89.8	49,234	1,410,049	1,459,283	5,059	14.8	406	1,590,575
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	441	441	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	23.7	11.9	216	181	1.29	16.4	—	16.4	16.4	—	16.4	—	233,450	233,450	20.7	0.44	—	234,097
Water	—	—	—	—	—	—	—	—	—	—	—	828	0.00	828	84.9	2.02	—	3,552
Waste	—	—	—	—	—	—	—	—	—	—	—	7,323	0.00	7,323	732	0.00	—	25,621
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	67.3	67.3
Total	465	453	216	181	1.29	16.4	0.00	16.4	16.4	0.00	16.4	8,151	233,450	241,601	837	2.46	67.3	263,338

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	38.9	19.5	354	297	2.12	26.9	—	26.9	26.9	—	26.9	—	422,433	422,433	37.4	0.80	—	423,604
University/College (4yr)	18.8	9.38	171	143	1.02	13.0	—	13.0	13.0	—	13.0	—	203,576	203,576	18.0	0.38	—	204,140
Elementary School	33.3	16.7	303	255	1.82	23.0	—	23.0	23.0	—	23.0	—	361,608	361,608	32.0	0.68	—	362,611
High School	38.9	19.5	354	297	2.12	26.9	—	26.9	26.9	—	26.9	—	422,433	422,433	37.4	0.80	—	423,604
Total	130	65.0	1,182	993	7.09	89.8	—	89.8	89.8	—	89.8	—	1,410,049	1,410,049	125	2.66	—	1,413,960
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	38.9	19.5	354	297	2.12	26.9	—	26.9	26.9	—	26.9	—	422,433	422,433	37.4	0.80	—	423,604
University/College (4yr)	18.8	9.38	171	143	1.02	13.0	—	13.0	13.0	—	13.0	—	203,576	203,576	18.0	0.38	—	204,140
Elementary School	33.3	16.7	303	255	1.82	23.0	—	23.0	23.0	—	23.0	—	361,608	361,608	32.0	0.68	—	362,611

High School	38.9	19.5	354	297	2.12	26.9	—	26.9	26.9	—	26.9	—	422,433	422,433	37.4	0.80	—	423,604
Total	130	65.0	1,182	993	7.09	89.8	—	89.8	89.8	—	89.8	—	1,410,049	1,410,049	125	2.66	—	1,413,960
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	7.11	3.55	64.6	54.3	0.39	4.91	—	4.91	4.91	—	4.91	—	69,939	69,939	6.19	0.13	—	70,133
University/College (4yr)	3.43	1.71	31.1	26.2	0.19	2.37	—	2.37	2.37	—	2.37	—	33,704	33,704	2.98	0.06	—	33,798
Elementary School	6.08	3.04	55.3	46.5	0.33	4.20	—	4.20	4.20	—	4.20	—	59,868	59,868	5.30	0.11	—	60,034
High School	7.11	3.55	64.6	54.3	0.39	4.91	—	4.91	4.91	—	4.91	—	69,939	69,939	6.19	0.13	—	70,133
Total	23.7	11.9	216	181	1.29	16.4	—	16.4	16.4	—	16.4	—	233,450	233,450	20.7	0.44	—	234,097

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2,252	2,252	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	167	167	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	2,419	2,419	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2,252	2,252	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	167	167	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2,419	2,419	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	411	411	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	30.5	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	441	441	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Junior High School	—	—	—	—	—	—	—	—	—	—	—	1,205	0.00	1,205	124	2.94	—	5,171
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	404	0.00	404	41.4	0.98	—	1,733
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,451	0.00	1,451	149	3.54	—	6,224
High School	—	—	—	—	—	—	—	—	—	—	—	1,941	0.00	1,941	199	4.73	—	8,326
Total	—	—	—	—	—	—	—	—	—	—	—	5,002	0.00	5,002	513	12.2	—	21,454
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	1,205	0.00	1,205	124	2.94	—	5,171
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	404	0.00	404	41.4	0.98	—	1,733
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,451	0.00	1,451	149	3.54	—	6,224
High School	—	—	—	—	—	—	—	—	—	—	—	1,941	0.00	1,941	199	4.73	—	8,326
Total	—	—	—	—	—	—	—	—	—	—	—	5,002	0.00	5,002	513	12.2	—	21,454
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	200	0.00	200	20.5	0.49	—	856
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	66.9	0.00	66.9	6.86	0.16	—	287

Element School	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.6	0.59	—	1,030
High School	—	—	—	—	—	—	—	—	—	—	—	321	0.00	321	33.0	0.78	—	1,378
Total	—	—	—	—	—	—	—	—	—	—	—	828	0.00	828	84.9	2.02	—	3,552

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689
Elementary School	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689
High School	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689
Total	—	—	—	—	—	—	—	—	—	—	—	44,233	0.00	44,233	4,421	0.00	—	154,755
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689

University/College	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689
Elementary School	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689
High School	—	—	—	—	—	—	—	—	—	—	—	11,058	0.00	11,058	1,105	0.00	—	38,689
Total	—	—	—	—	—	—	—	—	—	—	—	44,233	0.00	44,233	4,421	0.00	—	154,755
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	1,831	0.00	1,831	183	0.00	—	6,405
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1,831	0.00	1,831	183	0.00	—	6,405
Elementary School	—	—	—	—	—	—	—	—	—	—	—	1,831	0.00	1,831	183	0.00	—	6,405
High School	—	—	—	—	—	—	—	—	—	—	—	1,831	0.00	1,831	183	0.00	—	6,405
Total	—	—	—	—	—	—	—	—	—	—	—	7,323	0.00	7,323	732	0.00	—	25,621

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	118	118

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	69.9	69.9
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	101	101
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	118	118
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	406	406
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	118	118
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	69.9	69.9
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	101	101
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	118	118
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	406	406
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19.5	19.5
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.6	11.6
Element ary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.7	16.7
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19.5	19.5

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	67.3	67.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetati on	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	157,840,559	52,613,520	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Junior High School	139,814,299	0.00	0.0000	0.0000	1,318,102,828
University/College (4yr)	105,877,920	0.00	0.0000	0.0000	635,210,703

Elementary School	119,682,907	0.00	0.0000	0.0000	1,128,313,625
High School	139,814,299	0.00	0.0000	0.0000	1,318,102,828

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Junior High School	629,061,428	0.00
University/College (4yr)	210,873,342	0.00
Elementary School	757,208,696	0.00
High School	1,012,936,025	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Junior High School	20,518	—
University/College (4yr)	20,518	—
Elementary School	20,518	—
High School	20,518	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Junior High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

Junior High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Junior High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Junior High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat
Extreme Precipitation	5.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.7
AQ-PM	15.1
AQ-DPM	14.1
Drinking Water	39.7
Lead Risk Housing	5.49
Pesticides	84.3
Toxic Releases	16.8
Traffic	5.90
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	76.6
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	87.0
Solid Waste	97.9
Sensitive Population	—
Asthma	26.1
Cardio-vascular	64.3
Low Birth Weights	9.64
Socioeconomic Factor Indicators	—
Education	26.9
Housing	10.8
Linguistic	27.3
Poverty	30.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.68150905
Employed	52.68831002
Median HI	80.45682022
Education	—
Bachelor's or higher	68.40754523
High school enrollment	5.671756705
Preschool enrollment	30.89952521
Transportation	—
Auto Access	54.54895419
Active commuting	15.8475555
Social	—
2-parent households	79.26344155
Voting	94.30257924
Neighborhood	—
Alcohol availability	92.66007956
Park access	11.4718337
Retail density	3.06685487
Supermarket access	2.399589375
Tree canopy	10.02181445
Housing	—
Homeownership	81.9196715
Housing habitability	62.8127807
Low-inc homeowner severe housing cost burden	58.02643398
Low-inc renter severe housing cost burden	14.53868857

Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	93.45566534
Arthritis	71.8
Asthma ER Admissions	71.5
High Blood Pressure	85.1
Cancer (excluding skin)	40.8
Asthma	65.7
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	91.2
Life Expectancy at Birth	75.3
Cognitively Disabled	96.3
Physically Disabled	86.7
Heart Attack ER Admissions	61.3
Mental Health Not Good	73.6
Chronic Kidney Disease	90.3
Obesity	70.2
Pedestrian Injuries	44.4
Physical Health Not Good	87.1
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	64.6
No Leisure Time for Physical Activity	81.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	0.5
Elderly	55.1
English Speaking	69.8
Foreign-born	37.6
Outdoor Workers	58.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	4.8
Traffic Access	23.0
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	91.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Zeroed out GHG in intensity factors due to CA's carbon neutrality goal by 2045
Land Use	Land Uses were selected based on employment category per 2025 Blueprint data. Size were estimated using building square feet per employee. See Appendix for details.

SACOG_2050_other1_CV Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SACOG_2050_other1_CV
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.6
Location	38.83369493052828, -121.44891327644663
County	Placer-Sacramento
City	Unincorporated
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	469
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Elementary School	0.00	Employee	0.00	0.00	0.00	0.00	1,688,926	—
High School	0.00	Employee	0.00	0.00	0.00	0.00	794,789	—

Junior High School	0.00	Employee	0.00	0.00	0.00	0.00	—	—
University/College (4yr)	0.00	Employee	0.00	0.00	0.00	0.00	—	—
Quality Restaurant	10,523	1000sqft	242	10,523,000	0.00	—	—	—
Supermarket	19,094	1000sqft	438	19,094,000	0.00	—	—	—
General Office Building	32,143	1000sqft	738	32,143,000	0.00	—	—	—
Refrigerated Warehouse-Rail	69,720	1000sqft	1,601	69,720,000	0.00	—	—	—
General Heavy Industry	51,560	1000sqft	1,184	51,560,000	0.00	—	—	—
Industrial Park	39,738	1000sqft	912	39,738,000	0.00	—	—	—
Medical Office Building	73,923	1000sqft	1,697	73,923,000	0.00	—	—	—
General Office Building	94,401	1000sqft	2,167	94,401,000	0.00	—	—	—
General Office Building	1,418	1000sqft	32.6	1,418,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9,358	9,190	3,040	2,554	18.2	231	0.00	231	231	0.00	231	797,293	3,627,417	4,424,710	80,379	356	5,859,026	12,399,318

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9,358	9,190	3,040	2,554	18.2	231	0.00	231	231	0.00	231	797,293	3,627,417	4,424,710	80,379	356	5,859,026	12,399,318
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9,358	9,190	3,040	2,554	18.2	231	0.00	231	231	0.00	231	797,293	3,627,417	4,424,710	80,379	356	5,859,026	12,399,318
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1,708	1,677	555	466	3.33	42.2	0.00	42.2	42.2	0.00	42.2	132,001	600,560	732,561	13,308	58.9	970,029	2,052,849

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	9,023	9,023	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	334	167	3,040	2,554	18.2	231	—	231	231	—	231	—	3,627,417	3,627,417	321	6.83	—	3,637,478
Water	—	—	—	—	—	—	—	—	—	—	—	143,339	0.00	143,339	14,698	349	—	614,848
Waste	—	—	—	—	—	—	—	—	—	—	—	653,955	0.00	653,955	65,360	0.00	—	2,287,965
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,859,026	5,859,026
Total	9,358	9,190	3,040	2,554	18.2	231	0.00	231	231	0.00	231	797,293	3,627,417	4,424,710	80,379	356	5,859,026	12,399,318

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	9,023	9,023	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	334	167	3,040	2,554	18.2	231	—	231	231	—	231	—	3,627,417	3,627,417	321	6.83	—	3,637,478
Water	—	—	—	—	—	—	—	—	—	—	—	143,339	0.00	143,339	14,698	349	—	614,848
Waste	—	—	—	—	—	—	—	—	—	—	—	653,955	0.00	653,955	65,360	0.00	—	2,287,965
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,859,026	5,859,026
Total	9,358	9,190	3,040	2,554	18.2	231	0.00	231	231	0.00	231	797,293	3,627,417	4,424,710	80,379	356	5,859,026	12,399,318
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	9,023	9,023	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	334	167	3,040	2,554	18.2	231	—	231	231	—	231	—	3,627,417	3,627,417	321	6.83	—	3,637,478
Water	—	—	—	—	—	—	—	—	—	—	—	143,339	0.00	143,339	14,698	349	—	614,848
Waste	—	—	—	—	—	—	—	—	—	—	—	653,955	0.00	653,955	65,360	0.00	—	2,287,965
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,859,026	5,859,026
Total	9,358	9,190	3,040	2,554	18.2	231	0.00	231	231	0.00	231	797,293	3,627,417	4,424,710	80,379	356	5,859,026	12,399,318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1,647	1,647	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	61.0	30.5	555	466	3.33	42.2	—	42.2	42.2	—	42.2	—	600,560	600,560	53.1	1.13	—	602,226
Water	—	—	—	—	—	—	—	—	—	—	—	23,731	0.00	23,731	2,433	57.8	—	101,795

Waste	—	—	—	—	—	—	—	—	—	—	—	108,270	0.00	108,270	10,821	0.00	—	378,799
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	970,029	970,029
Total	1,708	1,677	555	466	3.33	42.2	0.00	42.2	42.2	0.00	42.2	132,001	600,560	732,561	13,308	58.9	970,029	2,052,849

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

University/College	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	37.9	18.9	344	289	2.07	26.2	—	26.2	26.2	—	26.2	—	410,938	410,938	36.4	0.77	—	412,078
Supermarket	17.1	8.53	155	130	0.93	11.8	—	11.8	11.8	—	11.8	—	185,035	185,035	16.4	0.35	—	185,548
General Office Building	109	54.6	992	833	5.95	75.4	—	75.4	75.4	—	75.4	—	1,183,917	1,183,917	105	2.23	—	1,187,201
Refrigerated Warehouse-Rail	10.2	5.11	92.9	78.0	0.56	7.06	—	7.06	7.06	—	7.06	—	110,854	110,854	9.81	0.21	—	111,161
General Heavy Industry	63.2	31.6	574	482	3.44	43.6	—	43.6	43.6	—	43.6	—	685,071	685,071	60.6	1.29	—	686,971
Industrial Park	33.9	16.9	308	259	1.85	23.4	—	23.4	23.4	—	23.4	—	367,660	367,660	32.5	0.69	—	368,680
Medical Office Building	63.1	31.5	573	482	3.44	43.6	—	43.6	43.6	—	43.6	—	683,943	683,943	60.5	1.29	—	685,840
Total	334	167	3,040	2,554	18.2	231	—	231	231	—	231	—	3,627,417	3,627,417	321	6.83	—	3,637,478
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Universit y/Colleg e	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	37.9	18.9	344	289	2.07	26.2	—	26.2	26.2	—	26.2	—	410,938	410,938	36.4	0.77	—	412,078
Superm arket	17.1	8.53	155	130	0.93	11.8	—	11.8	11.8	—	11.8	—	185,035	185,035	16.4	0.35	—	185,548
General Office Building	109	54.6	992	833	5.95	75.4	—	75.4	75.4	—	75.4	—	1,183,917	1,183,917	105	2.23	—	1,187,201
Refriger ated Wareho use-Rail	10.2	5.11	92.9	78.0	0.56	7.06	—	7.06	7.06	—	7.06	—	110,854	110,854	9.81	0.21	—	111,161
General Heavy Industry	63.2	31.6	574	482	3.44	43.6	—	43.6	43.6	—	43.6	—	685,071	685,071	60.6	1.29	—	686,971
Industria l Park	33.9	16.9	308	259	1.85	23.4	—	23.4	23.4	—	23.4	—	367,660	367,660	32.5	0.69	—	368,680
Medical Office Building	63.1	31.5	573	482	3.44	43.6	—	43.6	43.6	—	43.6	—	683,943	683,943	60.5	1.29	—	685,840
Total	334	167	3,040	2,554	18.2	231	—	231	231	—	231	—	3,627,417	3,627,417	321	6.83	—	3,637,478
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Element ary School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Junior High School	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

University/College (4yr)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	6.91	3.46	62.9	52.8	0.38	4.78	—	4.78	4.78	—	4.78	—	68,035	68,035	6.02	0.13	—	68,224
Supermarket	3.11	1.56	28.3	23.8	0.17	2.15	—	2.15	2.15	—	2.15	—	30,635	30,635	2.71	0.06	—	30,720
General Office Building	19.9	9.96	181	152	1.09	13.8	—	13.8	13.8	—	13.8	—	196,011	196,011	17.3	0.37	—	196,555
Refrigerated Warehouse-Rail	1.87	0.93	17.0	14.2	0.10	1.29	—	1.29	1.29	—	1.29	—	18,353	18,353	1.62	0.03	—	18,404
General Heavy Industry	11.5	5.76	105	88.0	0.63	7.96	—	7.96	7.96	—	7.96	—	113,421	113,421	10.0	0.21	—	113,736
Industrial Park	6.19	3.09	56.2	47.2	0.34	4.27	—	4.27	4.27	—	4.27	—	60,870	60,870	5.39	0.11	—	61,039
Medical Office Building	11.5	5.75	105	87.9	0.63	7.95	—	7.95	7.95	—	7.95	—	113,235	113,235	10.0	0.21	—	113,549
Total	61.0	30.5	555	466	3.33	42.2	—	42.2	42.2	—	42.2	—	600,560	600,560	53.1	1.13	—	602,226

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	8,400	8,400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	623	623	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9,023	9,023	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consum er Product s	8,400	8,400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	623	623	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9,023	9,023	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consum er Product s	1,533	1,533	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	114	114	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1,647	1,647	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	6,121	0.00	6,121	628	14.9	—	26,254
Supermarket	—	—	—	—	—	—	—	—	—	—	—	4,510	0.00	4,510	462	11.0	—	19,346
General Office Building	—	—	—	—	—	—	—	—	—	—	—	43,581	0.00	43,581	4,469	106	—	186,941
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	30,895	0.00	30,895	3,168	75.3	—	132,523
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	22,848	0.00	22,848	2,343	55.7	—	98,005
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	17,609	0.00	17,609	1,806	42.9	—	75,534

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	17,775	0.00	17,775	1,823	43.3	—	76,245
Total	—	—	—	—	—	—	—	—	—	—	—	143,339	0.00	143,339	14,698	349	—	614,848
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	6,121	0.00	6,121	628	14.9	—	26,254
Supermarket	—	—	—	—	—	—	—	—	—	—	—	4,510	0.00	4,510	462	11.0	—	19,346
General Office Building	—	—	—	—	—	—	—	—	—	—	—	43,581	0.00	43,581	4,469	106	—	186,941
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	30,895	0.00	30,895	3,168	75.3	—	132,523
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	22,848	0.00	22,848	2,343	55.7	—	98,005
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	17,609	0.00	17,609	1,806	42.9	—	75,534

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	17,775	0.00	17,775	1,823	43.3	—	76,245
Total	—	—	—	—	—	—	—	—	—	—	—	143,339	0.00	143,339	14,698	349	—	614,848
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	1,013	0.00	1,013	104	2.47	—	4,347
Supermarket	—	—	—	—	—	—	—	—	—	—	—	747	0.00	747	76.6	1.82	—	3,203
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7,215	0.00	7,215	740	17.6	—	30,950
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	5,115	0.00	5,115	524	12.5	—	21,941
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	3,783	0.00	3,783	388	9.22	—	16,226
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,915	0.00	2,915	299	7.10	—	12,505
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	2,943	0.00	2,943	302	7.17	—	12,623

Total	—	—	—	—	—	—	—	—	—	—	—	23,731	0.00	23,731	2,433	57.8	—	101,795

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	5,175	0.00	5,175	517	0.00	—	18,106
Supermarket	—	—	—	—	—	—	—	—	—	—	—	58,038	0.00	58,038	5,801	0.00	—	203,057
General Office Building	—	—	—	—	—	—	—	—	—	—	—	64,136	0.00	64,136	6,410	0.00	—	224,391
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	35,320	0.00	35,320	3,530	0.00	—	123,574

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	34,457	0.00	34,457	3,444	0.00	—	120,552
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	26,556	0.00	26,556	2,654	0.00	—	92,911
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	430,272	0.00	430,272	43,004	0.00	—	1,505,375
Total	—	—	—	—	—	—	—	—	—	—	—	653,955	0.00	653,955	65,360	0.00	—	2,287,965
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	5,175	0.00	5,175	517	0.00	—	18,106
Supermarket	—	—	—	—	—	—	—	—	—	—	—	58,038	0.00	58,038	5,801	0.00	—	203,057
General Office Building	—	—	—	—	—	—	—	—	—	—	—	64,136	0.00	64,136	6,410	0.00	—	224,391
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	35,320	0.00	35,320	3,530	0.00	—	123,574

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	34,457	0.00	34,457	3,444	0.00	—	120,552
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	26,556	0.00	26,556	2,654	0.00	—	92,911
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	430,272	0.00	430,272	43,004	0.00	—	1,505,375
Total	—	—	—	—	—	—	—	—	—	—	—	653,955	0.00	653,955	65,360	0.00	—	2,287,965
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	857	0.00	857	85.6	0.00	—	2,998
Supermarket	—	—	—	—	—	—	—	—	—	—	—	9,609	0.00	9,609	960	0.00	—	33,618
General Office Building	—	—	—	—	—	—	—	—	—	—	—	10,618	0.00	10,618	1,061	0.00	—	37,150
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	5,848	0.00	5,848	584	0.00	—	20,459

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5,705	0.00	5,705	570	0.00	—	19,959
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	4,397	0.00	4,397	439	0.00	—	15,383
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	71,236	0.00	71,236	7,120	0.00	—	249,232
Total	—	—	—	—	—	—	—	—	—	—	—	108,270	0.00	108,270	10,821	0.00	—	378,799

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16,450	16,450

Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,958,555	3,958,555
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	311	311
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,858,056	1,858,056
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,421	13,421
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,344	10,344
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,889	1,889
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,859,026	5,859,026
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16,450	16,450

Superm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,958,55	3,958,55
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	311	311
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,858,056	1,858,056
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,421	13,421
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,344	10,344
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,889	1,889
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,859,026	5,859,026
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Junior High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,724	2,724
Supermarket	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	655,384	655,384

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51.5	51.5
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	307,622	307,622
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,222	2,222
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,713	1,713
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	313	313
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	970,029	970,029

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Elementary School	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0

No Fireplaces	647098
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
High School	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	304517
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	588,780,000	196,260,000	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO₂ and CH₄ and N₂O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Elementary School	0.00	0.00	0.0000	0.0000	0.00
High School	0.00	0.00	0.0000	0.0000	0.00
Junior High School	0.00	0.00	0.0000	0.0000	0.00
University/College (4yr)	0.00	0.00	0.0000	0.0000	0.00
Quality Restaurant	422,536,577	0.00	0.0000	0.0000	1,282,236,679
Supermarket	977,931,997	0.00	0.0000	0.0000	577,358,006
General Office Building	672,731,665	0.00	0.0000	0.0000	927,936,921
Refrigerated Warehouse-Rail	1,705,859,004	0.00	0.0000	0.0000	345,892,622
General Heavy Industry	532,612,613	0.00	0.0000	0.0000	2,137,605,816
Industrial Park	831,689,976	0.00	0.0000	0.0000	1,147,197,131
Medical Office Building	1,547,159,347	0.00	0.0000	0.0000	2,134,084,591
General Office Building	1,975,750,301	0.00	0.0000	0.0000	2,725,264,390
General Office Building	29,677,799	0.00	0.0000	0.0000	40,936,271

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	0.00	0.00
High School	0.00	0.00
Junior High School	0.00	0.00
University/College (4yr)	0.00	0.00
Quality Restaurant	3,194,085,256	0.00
Supermarket	2,353,683,295	0.00
General Office Building	5,712,895,862	0.00
Refrigerated Warehouse-Rail	16,122,750,000	0.00
General Heavy Industry	11,923,250,000	0.00

Industrial Park	9,189,412,500	0.00
Medical Office Building	9,275,897,781	0.00
General Office Building	16,778,243,545	0.00
General Office Building	252,026,455	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	0.00	—
High School	0.00	—
Junior High School	0.00	—
University/College (4yr)	0.00	—
Quality Restaurant	9,602	—
Supermarket	107,690	—
General Office Building	29,893	—
Refrigerated Warehouse-Rail	65,537	—
General Heavy Industry	63,934	—
Industrial Park	49,275	—
Medical Office Building	798,368	—
General Office Building	87,793	—
General Office Building	1,319	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Junior High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Junior High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Junior High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Junior High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Quality Restaurant	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Supermarket	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Supermarket	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat
Extreme Precipitation	5.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.7
AQ-PM	15.1
AQ-DPM	14.1
Drinking Water	39.7
Lead Risk Housing	5.49
Pesticides	84.3
Toxic Releases	16.8
Traffic	5.90
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	76.6
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	87.0
Solid Waste	97.9
Sensitive Population	—
Asthma	26.1

Cardio-vascular	64.3
Low Birth Weights	9.64
Socioeconomic Factor Indicators	—
Education	26.9
Housing	10.8
Linguistic	27.3
Poverty	30.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.68150905
Employed	52.68831002
Median HI	80.45682022
Education	—
Bachelor's or higher	68.40754523
High school enrollment	5.671756705
Preschool enrollment	30.89952521
Transportation	—
Auto Access	54.54895419
Active commuting	15.8475555
Social	—
2-parent households	79.26344155
Voting	94.30257924
Neighborhood	—
Alcohol availability	92.66007956

Park access	11.4718337
Retail density	3.06685487
Supermarket access	2.399589375
Tree canopy	10.02181445
Housing	—
Homeownership	81.9196715
Housing habitability	62.8127807
Low-inc homeowner severe housing cost burden	58.02643398
Low-inc renter severe housing cost burden	14.53868857
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	93.45566534
Arthritis	71.8
Asthma ER Admissions	71.5
High Blood Pressure	85.1
Cancer (excluding skin)	40.8
Asthma	65.7
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	91.2
Life Expectancy at Birth	75.3
Cognitively Disabled	96.3
Physically Disabled	86.7
Heart Attack ER Admissions	61.3
Mental Health Not Good	73.6
Chronic Kidney Disease	90.3
Obesity	70.2
Pedestrian Injuries	44.4

Physical Health Not Good	87.1
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	64.6
No Leisure Time for Physical Activity	81.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	0.5
Elderly	55.1
English Speaking	69.8
Foreign-born	37.6
Outdoor Workers	58.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	4.8
Traffic Access	23.0
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	91.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Zeroed out GHG in intensity factors due to CA's carbon neutrality goal by 2045
Land Use	Manually set hotel acreage to remain in acreage limit of CalEEMod.

SACOG_2050_other2_CV Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SACOG_2050_other2_CV
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	39.6
Location	38.83369493052828, -121.44891327644663
County	Placer-Sacramento
City	Unincorporated
Air District	Placer County APCD
Air Basin	Sacramento Valley
TAZ	469
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Strip Mall	120,295	1000sqft	1,000	120,295,000	0.00	—	—	—
Hotel	566,776	Room	1,000	822,958,752	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22,491	22,087	7,343	6,168	44.1	558	0.00	558	558	0.00	558	279,936	8,761,075	9,041,011	28,870	125	1,287,243	11,087,310
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22,491	22,087	7,343	6,168	44.1	558	0.00	558	558	0.00	558	279,936	8,761,075	9,041,011	28,870	125	1,287,243	11,087,310
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22,491	22,087	7,343	6,168	44.1	558	0.00	558	558	0.00	558	279,936	8,761,075	9,041,011	28,870	125	1,287,243	11,087,310
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4,105	4,031	1,340	1,126	8.04	102	0.00	102	102	0.00	102	46,347	1,450,496	1,496,843	4,780	20.7	213,118	1,835,631

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	21,683	21,683	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	808	404	7,343	6,168	44.1	558	—	558	558	—	558	—	8,761,075	8,761,075	775	16.5	—	8,785,375
Water	—	—	—	—	—	—	—	—	—	—	—	44,625	0.00	44,625	4,576	109	—	191,418
Waste	—	—	—	—	—	—	—	—	—	—	—	235,311	0.00	235,311	23,519	0.00	—	823,274
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,287,243	1,287,243
Total	22,491	22,087	7,343	6,168	44.1	558	0.00	558	558	0.00	558	279,936	8,761,075	9,041,011	28,870	125	1,287,243	11,087,310
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	21,683	21,683	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	808	404	7,343	6,168	44.1	558	—	558	558	—	558	—	8,761,075	8,761,075	775	16.5	—	8,785,375
Water	—	—	—	—	—	—	—	—	—	—	—	44,625	0.00	44,625	4,576	109	—	191,418
Waste	—	—	—	—	—	—	—	—	—	—	—	235,311	0.00	235,311	23,519	0.00	—	823,274
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,287,243	1,287,243
Total	22,491	22,087	7,343	6,168	44.1	558	0.00	558	558	0.00	558	279,936	8,761,075	9,041,011	28,870	125	1,287,243	11,087,310
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	21,683	21,683	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	808	404	7,343	6,168	44.1	558	—	558	558	—	558	—	8,761,075	8,761,075	775	16.5	—	8,785,375
Water	—	—	—	—	—	—	—	—	—	—	—	44,625	0.00	44,625	4,576	109	—	191,418

Waste	—	—	—	—	—	—	—	—	—	—	—	235,311	0.00	235,311	23,519	0.00	—	823,274
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,287,243	1,287,243
Total	22,491	22,087	7,343	6,168	44.1	558	0.00	558	558	0.00	558	279,936	8,761,075	9,041,011	28,870	125	1,287,243	11,087,310
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	3,957	3,957	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	147	73.7	1,340	1,126	8.04	102	—	102	102	—	102	—	1,450,496	1,450,496	128	2.73	—	1,454,519
Water	—	—	—	—	—	—	—	—	—	—	—	7,388	0.00	7,388	758	18.0	—	31,691
Waste	—	—	—	—	—	—	—	—	—	—	—	38,958	0.00	38,958	3,894	0.00	—	136,302
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	213,118	213,118
Total	4,105	4,031	1,340	1,126	8.04	102	0.00	102	102	0.00	102	46,347	1,450,496	1,496,843	4,780	20.7	213,118	1,835,631

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	30.7	15.3	279	234	1.67	21.2	—	21.2	21.2	—	21.2	—	332,541	332,541	29.4	0.63	—	333,463
Hotel	777	389	7,064	5,934	42.4	537	—	537	537	—	537	—	8,428,534	8,428,534	746	15.9	—	8,451,912
Total	808	404	7,343	6,168	44.1	558	—	558	558	—	558	—	8,761,075	8,761,075	775	16.5	—	8,785,375
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Strip Mall	30.7	15.3	279	234	1.67	21.2	—	21.2	21.2	—	21.2	—	332,541	332,541	29.4	0.63	—	333,463
Hotel	777	389	7,064	5,934	42.4	537	—	537	537	—	537	—	8,428,534	8,428,534	746	15.9	—	8,451,912
Total	808	404	7,343	6,168	44.1	558	—	558	558	—	558	—	8,761,075	8,761,075	775	16.5	—	8,785,375
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	5.59	2.80	50.9	42.7	0.31	3.87	—	3.87	3.87	—	3.87	—	55,056	55,056	4.87	0.10	—	55,209
Hotel	142	70.9	1,289	1,083	7.74	98.0	—	98.0	98.0	—	98.0	—	1,395,440	1,395,440	123	2.63	—	1,399,310
Total	147	73.7	1,340	1,126	8.04	102	—	102	102	—	102	—	1,450,496	1,450,496	128	2.73	—	1,454,519

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	20,186	20,186	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1,498	1,498	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	21,683	21,683	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	20,186	20,186	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	1,498	1,498	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	21,683	21,683	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	3,684	3,684	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	273	273	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3,957	3,957	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	17,075	0.00	17,075	1,751	41.6	—	73,242
Hotel	—	—	—	—	—	—	—	—	—	—	—	27,550	0.00	27,550	2,825	67.1	—	118,176
Total	—	—	—	—	—	—	—	—	—	—	—	44,625	0.00	44,625	4,576	109	—	191,418
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	17,075	0.00	17,075	1,751	41.6	—	73,242
Hotel	—	—	—	—	—	—	—	—	—	—	—	27,550	0.00	27,550	2,825	67.1	—	118,176
Total	—	—	—	—	—	—	—	—	—	—	—	44,625	0.00	44,625	4,576	109	—	191,418
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2,827	0.00	2,827	290	6.89	—	12,126
Hotel	—	—	—	—	—	—	—	—	—	—	—	4,561	0.00	4,561	468	11.1	—	19,565
Total	—	—	—	—	—	—	—	—	—	—	—	7,388	0.00	7,388	758	18.0	—	31,691

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	68,073	0.00	68,073	6,804	0.00	—	238,165
Hotel	—	—	—	—	—	—	—	—	—	—	—	167,238	0.00	167,238	16,715	0.00	—	585,109
Total	—	—	—	—	—	—	—	—	—	—	—	235,311	0.00	235,311	23,519	0.00	—	823,274
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	68,073	0.00	68,073	6,804	0.00	—	238,165
Hotel	—	—	—	—	—	—	—	—	—	—	—	167,238	0.00	167,238	16,715	0.00	—	585,109
Total	—	—	—	—	—	—	—	—	—	—	—	235,311	0.00	235,311	23,519	0.00	—	823,274
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	11,270	0.00	11,270	1,126	0.00	—	39,431
Hotel	—	—	—	—	—	—	—	—	—	—	—	27,688	0.00	27,688	2,767	0.00	—	96,871
Total	—	—	—	—	—	—	—	—	—	—	—	38,958	0.00	38,958	3,894	0.00	—	136,302

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	749	749
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,286,494	1,286,494
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,287,243	1,287,243
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	749	749
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,286,494	1,286,494
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,287,243	1,287,243
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	124	124
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	212,994	212,994

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	213,118	213,118

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetati on	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,414,880,628	471,626,876	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Strip Mall	1,048,019,014	0.00	0.0000	0.0000	1,037,616,636
Hotel	5,043,134,759	0.00	0.0000	0.0000	26,299,285,094

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	8,910,553,971	0.00
Hotel	14,377,276,434	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	126,310	—
Hotel	310,310	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0

Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat
Extreme Precipitation	5.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.7
AQ-PM	15.1
AQ-DPM	14.1
Drinking Water	39.7
Lead Risk Housing	5.49
Pesticides	84.3
Toxic Releases	16.8
Traffic	5.90
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	76.6
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	87.0
Solid Waste	97.9
Sensitive Population	—
Asthma	26.1
Cardio-vascular	64.3
Low Birth Weights	9.64
Socioeconomic Factor Indicators	—

Education	26.9
Housing	10.8
Linguistic	27.3
Poverty	30.9
Unemployment	22.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.68150905
Employed	52.68831002
Median HI	80.45682022
Education	—
Bachelor's or higher	68.40754523
High school enrollment	5.671756705
Preschool enrollment	30.89952521
Transportation	—
Auto Access	54.54895419
Active commuting	15.8475555
Social	—
2-parent households	79.26344155
Voting	94.30257924
Neighborhood	—
Alcohol availability	92.66007956
Park access	11.4718337
Retail density	3.06685487
Supermarket access	2.399589375

Tree canopy	10.02181445
Housing	—
Homeownership	81.9196715
Housing habitability	62.8127807
Low-inc homeowner severe housing cost burden	58.02643398
Low-inc renter severe housing cost burden	14.53868857
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	93.45566534
Arthritis	71.8
Asthma ER Admissions	71.5
High Blood Pressure	85.1
Cancer (excluding skin)	40.8
Asthma	65.7
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	91.2
Life Expectancy at Birth	75.3
Cognitively Disabled	96.3
Physically Disabled	86.7
Heart Attack ER Admissions	61.3
Mental Health Not Good	73.6
Chronic Kidney Disease	90.3
Obesity	70.2
Pedestrian Injuries	44.4
Physical Health Not Good	87.1
Stroke	88.3
Health Risk Behaviors	—

Binge Drinking	11.9
Current Smoker	64.6
No Leisure Time for Physical Activity	81.2
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	0.5
Elderly	55.1
English Speaking	69.8
Foreign-born	37.6
Outdoor Workers	58.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	4.8
Traffic Access	23.0
Other Indices	—
Hardship	39.8
Other Decision Support	—
2016 Voting	91.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	63.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Zeroed out GHG in intensity factors due to CA's carbon neutrality goal by 2045
Land Use	Manually set strip mall and hotel acreage to remain in acreage limit of CalEEMod.