

APPENDIX E
Energy Calculations



Energy Calculations for the
Chino 2045 General Plan Update
Program Environmental Impact Report

Prepared for
City of Chino
Development Services Department
13220 Central Avenue
Chino, CA 91710

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RECON Number 10105
March 2025

Chess GPU - Energy

Phase	Worker Type/Day	Worker Trip Length	Worker VMT/Day	Phase Length (Days)	Work VMT (Total)	Vendor Trip Length	Vendor VMT (Total)	Heating Trips	Heating Trip Length	Heating VMT (Total)
Construction	10	10.0	10.0	10	1,000.00	0	0	0	0	0
Site Preparation	10	0.5	131.00	10	1,310.00	0	0	0	20	0
Grading	20	0.5	170.00	10	1,700.00	0	0	0	20	0
Building Construction	276	0.5	5,500.00	300	1,650,000.00	160	0	0	20	0
Finishing	70	0.5	270.00	10	2,700.00	0	0	0	20	0
Architectural Coatings	15	0.5	1,017.50	20	20,350.00	0	0	0	20	0
					1,571,660.00		4,000			2,000

Source: EMFAC2021 v4.0.0.3, Emissions Inventory

Region: Taz Sub-Area

Region: Taz Sub-Area (SC)

Calendar Year: 2026

Report: Annual

Vehicle Classification: EMFAC2020, Categories

Units: miles/day for CMV and VMT; tons/day for Trips, kWh/day for Energy Consumption, tons/year for Emissions, 1000 gal/day for Fuel Consumption

Region	City	Vehicle	Fuel	Population	Pop %	Total VMT	Fuel VMT	Bio VMT	Fuel Consumption (200 gal/day)	Fuel Efficiency (mpg)	Bio Efficiency (mpg)	Worker VMT	Total Fuel Consumption	Total kWh Consumption
San Bernardino (SC)	2026 L2A	Gasoline	454254.7841	58.4%	19,874,166.46	19,874,166.46	0.00	6,415.4	30.98			30,851.53	29,753.94	
San Bernardino (SC)	2026 L2A	Gasoline	977,788,275	0.7%	39,924.4	39,924.4	0.00	0.75	1,584.29			42.32		
San Bernardino (SC)	2026 L2A	Electricity	2002,823,415	1.7%	0.00	1,250,839.00	0.00	0.00	2,59			20,545.15	2,597.42	
San Bernardino (SC)	2026 L2A	Plug-in Hybrid	140,878,712	1.9%	727,463.29	544,797.13	182,666.17	15.50	29.88			29,438.81	989.96	8,971.07
San Bernardino (SC)	2026 L2A	Gasoline	1,998,939,999	5.0%	1,960,977.77	1,960,977.77	0.00	93.87	21.48			78,164.42	1,937.07	
San Bernardino (SC)	2026 L2011	Electricity	737,000,004	0.0%	107.46	107.46	0.00	0.00	24.82			19.39	0.02	
San Bernardino (SC)	2026 L2011	Electricity	100,996,014	0.0%	5,462.29	5,462.29	0.00	0.00	2.44			222.44		
San Bernardino (SC)	2026 L2011	Plug-in Hybrid	800,230,808	0.0%	5,014.99	2,138.64	2,876.35	0.07	29.70			202.10	6.81	
San Bernardino (SC)	2026 L2012	Electricity	200,021,931	20.8%	1,843,614.02	1,843,614.02	0.00	371.32	21.49			400,139.79	6,059.41	
San Bernardino (SC)	2026 L2012	Electricity	396,993,934	0.7%	26,308.26	26,308.26	0.00	0.76	34.65			1,206.16	34.81	
San Bernardino (SC)	2026 L2012	Electricity	396,993,934	0.7%	12,789.30	12,789.30	0.00	0.20	23.80			417.91		
San Bernardino (SC)	2026 L2012	Plug-in Hybrid	2256,649,793	0.3%	106,426.67	48,378.14	60,048.53	1.63	29.64			4,039.33	153.82	1,077.05
San Bernardino (SC)	2026 L4001	Gasoline	167,819,667	2.7%	620,801.52	620,801.52	0.00	44.36	14.26			13,000.01	2,379.81	
San Bernardino (SC)	2026 L4001	Gasoline	1,939,657,977	1.5%	433,830.72	433,830.72	0.00	20.81	20.75			23,019.19	1,939.54	
San Bernardino (SC)	2026 L4002	Gasoline	280,209,688	0.0%	16,801.14	16,801.14	0.00	0.00	0.00			169.94		
San Bernardino (SC)	2026 L4002	Gasoline	2763,242,446	0.4%	97,275.03	97,275.03	0.00	7.80	12.46			1,582.78	448.14	
San Bernardino (SC)	2026 L4002	Gasoline	4937,571,675	0.0%	107,365.52	107,365.52	0.00	10.79	17.42					399.53
San Bernardino (SC)	2026 L4002	Gasoline	7,818,930,811	0.0%	4,500.55	0.00	0.00	0.00	1.78					
San Bernardino (SC)	2026 T6 CARP Class 4	Diesel	5.81	0.8%	388.84	388.84	0.00	0.04	9.35			16.65	1.78	
San Bernardino (SC)	2026 T6 CARP Class 4	Electricity	0.10	0.0%	10.01	0.00	0.00	0.00	0.00			0.37	2.35	0.49
San Bernardino (SC)	2026 T6 CARP Class 5	Diesel	7.65	1.0%	514.77	514.77	0.00	0.00	9.34			6.43	8.06	0.51
San Bernardino (SC)	2026 T6 CARP Class 6	Diesel	20.69	2.8%	1,383.80	1,383.80	0.00	0.15	9.49			10.45	8.06	0.51
San Bernardino (SC)	2026 T6 CARP Class 6	Electricity	0.82	0.1%	48.22	0.00	0.00	0.00	0.00			2.36	2.48	2.48
San Bernardino (SC)	2026 T6 CARP Class 7	Electricity	413.17	5.6%	8,822.79	8,822.79	0.00	0.85	10.26			144.22	12.11	2.46
San Bernardino (SC)	2026 T6 CARP Class 7	Electricity	0.75	0.1%	10.60	0.00	0.00	0.00	0.00			0.75	0.02	2.26
San Bernardino (SC)	2026 T6 Instant Delivery Class 4	Diesel	6.40	0.9%	219,717.33	219,717.33	0.00	2.45	8.54			1,860.89	208.05	
San Bernardino (SC)	2026 T6 Instant Delivery Class 4	Electricity	0.24	0.0%	1.97	0.00	0.00	0.00	0.00			0.00	0.00	29.30
San Bernardino (SC)	2026 T6 Instant Delivery Class 5	Natural Gas	2.61	0.3%	93.11	93.11	0.00	0.01	8.57			1.47	0.87	
San Bernardino (SC)	2026 T6 Instant Delivery Class 5	Electricity	305.13	4.1%	26,654.80	26,654.80	0.00	3.02	35.00			2,247.00	224.71	
San Bernardino (SC)	2026 T6 Instant Delivery Class 6	Electricity	3.10	0.4%	44,105.00	44,105.00	0.00	0.00	0.00			51.79	5.84	31.26
San Bernardino (SC)	2026 T6 Instant Delivery Class 6	Natural Gas	23.65	3.2%	92.34	92.34	0.00	0.00	8.68			1.01	0.84	
San Bernardino (SC)	2026 T6 Instant Delivery Class 6	Electricity	1,132.25	14.9%	10,877.27	10,877.27	0.00	1.86	20.00			8,971.53	1,004.44	
San Bernardino (SC)	2026 T6 Instant Delivery Class 7	Electricity	476.76	6.4%	1,802.00	1,802.00	0.00	45.49	6.10			181.33	1.92	
San Bernardino (SC)	2026 T6 Instant Delivery Class 7	Electricity	11.31	1.5%	402.77	402.77	0.00	0.05	8.65			32.38	3.74	186.53
San Bernardino (SC)	2026 T6 Instant Delivery Class 7	Electricity	158,811	16.3%	30,842.11	30,842.11	0.00	3.8	43.00			1,544.44	178.30	
San Bernardino (SC)	2026 T6 Instant Delivery Class 7	Natural Gas	1.95	0.3%	242.24	242.24	0.00	0.00	8.00			34.17	4.86	14.83
San Bernardino (SC)	2026 T6 Instant Delivery Class 7	Electricity	226.16	3.0%	852.80	852.80	0.00	20.87	25.00			4.86	8.81	
San Bernardino (SC)	2026 T6 Instant Other Class 4	Diesel	1,201.85	160.8%	48,845.84	48,845.84	0.00	5.58	8.84			1,442.40	385.19	
San Bernardino (SC)	2026 T6 Instant Other Class 4	Electricity	2.76	0.4%	96.20	96.20	0.00	0.00	0.00			0.00	0.00	61.25
San Bernardino (SC)	2026 T6 Instant Other Class 4	Natural Gas	47.11	0.6%	205.95	205.95	0.00	0.02	8.62			18.49	1.56	
San Bernardino (SC)	2026 T6 Instant Other Class 5	Diesel	408,408.00	53.8%	15,122.79	15,122.79	0.00	16.02	19.89			6,939.77	819.00	
San Bernardino (SC)	2026 T6 Instant Other Class 5	Electricity	46.23	0.6%	2,196.20	2,196.20	0.00	0.00	0.00			112.42	1,003.55	138.58
San Bernardino (SC)	2026 T6 Instant Other Class 5	Natural Gas	2,698.83	35.1%	10,463.00	10,463.00	0.00	12.76	8.95			102.00	861.36	
San Bernardino (SC)	2026 T6 Instant Other Class 6	Electricity	43.17	0.6%	2,066.37	2,066.37	0.00	0.00	0.00			123.66	1.97	174.47
San Bernardino (SC)	2026 T6 Instant Other Class 6	Electricity	9.20	1.2%	386.89	386.89	0.00	0.00	0.00			25.04		
San Bernardino (SC)	2026 T6 Instant Other Class 6	Electricity	1,930.88	25.2%	71,935.69	71,935.69	0.00	8.08	9.76			456.68	497.63	60.36
San Bernardino (SC)	2026 T6 Instant Other Class 7	Electricity	22.14	2.9%	1,378.80	1,378.80	0.00	0.24	2.62			15.67	1.67	
San Bernardino (SC)	2026 T6 Instant Tractor Class 6	Natural Gas	45.96	0.7%	2,133.53	2,133.53	0.00	0.25	8.64			102.64	11.23	
San Bernardino (SC)	2026 T6 Instant Tractor Class 6	Electricity	21.55	0.4%	1,295.38	1,295.38	0.00	0.00	0.00			21.54	7.8	
San Bernardino (SC)	2026 T6 Instant Tractor Class 6	Electricity	0.44	0.1%	2.60	2.60	0.00	0.00	0.00			0.00	1.53	
San Bernardino (SC)	2026 T6 Instant Tractor Class 7	Natural Gas	0.10	0.0%	5.42	5.42	0.00	0.00	0.00			0.27	0.00	
San Bernardino (SC)	2026 T6 Instant Tractor Class 7	Electricity	897.77	118.8%	51,794.42	51,794.42	0.00	5.37	9.64			2,546.80	263.66	
San Bernardino (SC)	2026 T6 Instant Tractor Class 7	Electricity	1.76	0.0%	486.61	486.61	0.00	0.00	0.00			0.00	0.00	17.27
San Bernardino (SC)	2026 T6 OODS Class 4	Diesel	21.09	3.1%	1,195.65	1,195.65	0.00	0.75	8.91			86.14	7.62	
San Bernardino (SC)	2026 T6 OODS Class 4	Electricity	1.54	0.2%	69.00	69.00	0.00	0.02	0.53			21.31	1.07	
San Bernardino (SC)	2026 T6 OODS Class 5	Diesel	4.64	0.6%	323.38	323.38	0.00	0.00	0.00			31.28	1.40	
San Bernardino (SC)	2026 T6 OODS Class 5	Electricity	16.35	2.2%	884.47	884.47	0.00	0.00	0.00			48.83	4.82	
San Bernardino (SC)	2026 T6 OODS Class 7	Diesel	24.03	3.2%	6,140.37	6,140.37	0.00	0.59	10.37			68.83	6.64	
San Bernardino (SC)	2026 T6 Public Class 4	Electricity	90.11	12.1%	5,124.81	5,124.81	0.00	0.86	10.60			299.09	29.85	
San Bernardino (SC)	2026 T6 Public Class 4	Electricity	1.16	0.2%	67.30	67.30	0.00	0.00	0.00			4.47	2.83	4.69
San Bernardino (SC)	2026 T6 Public Class 4	Electricity	170.79	22.8%	6,217.17	6,217.17	0.00	0.72	8.66			489.37	56.48	
San Bernardino (SC)	2026 T6 Public Class 5	Electricity	2.66	0.4%	164.13	164.13	0.00	0.04	0.44			23.87	1.01	
San Bernardino (SC)	2026 T6 Public Class 5	Natural Gas	32.71	4.4%	1,293.33	1,293.33	0.00	0.15	3.84			93.89	11.23	
San Bernardino (SC)	2026 T6 Public Class 5	Electricity	108.58	14.3%	6,842.91	6,842.91	0.00	0.56	6.70			391.27	46.86	
San Bernardino (SC)	2026 T6 Public Class 6	Electricity	2.14	0.3%	103.82	103.82	0.00	0.00	0.00			6.78	6.11	7.65
San Bernardino (SC)	2026 T6 Public Class 6	Natural Gas	17.81	2.4%	717.31	717.31	0.00	0.00	0.00			5.01	6.11	
San Bernardino (SC)	2026 T6 Public Class 7	Diesel	202.49	26.7%	15,493.88	15,493.88	0.00	1.52	8.87			837.76	94.40	
San Bernardino (SC)	2026 T6 Public Class 7	Electricity	5.67	0.8%	307.46	307.46	0.00	0.00	0.00			36.21	3.66	17.05
San Bernardino (SC)	2026 T6 Utility Class 5	Natural Gas	34.7											

Chino GPU - Energy

Phase	Phase Length (Days)	Equipment	Amount	Daily Usage Hours	Total Usage Hours	Gallons per Hour	Fuel Used (Gallons)
Demolition	20	Rubber Tired Dozers	2	8	320	5.32	1,703
	20	Excavators	3	8	480	2.96	1,422
Site Preparation	20	Concrete/Industrial Saws	1	8	160	1.38	220
	10	Rubber Tired Dozers	3	8	240	5.32	1,278
	10	Tractors/Loaders/Backhoes	4	8	320	2.21	706
Grading	30	Excavator	2	8	480	2.96	1,422
	30	Grader	1	8	240	4.48	1,076
	30	Rubber Tired Dozer	1	8	240	5.32	1,278
	30	Tractors/Loaders/Backhoes	2	8	480	2.21	1,059
	30	Scrapers	2	8	480	8.73	4,188
Building Construction	300	Crane	1	7	2,100	4.58	9,628
	300	Forklifts	3	8	7,200	2.21	15,927
	300	Generator Set	1	8	2,400	2.66	6,376
	300	Tractors/Loaders/Backhoes	3	7	6,300	2.21	13,902
	300	Welder	1	8	2,400	1.48	3,546
Paving	20	Paver	2	8	320	3.25	1,041
	20	Paving Equipment	2	8	320	3.19	1,022
	20	Rollers	2	8	320	1.92	613
Architectural Coatings	20	Air Compressor	1	6	120	1.12	134
							66,542

Chess GPU - Energy

Phase	Worker Type/Day	Worker Trip Length	Worker VMT/Day	Phase Length (Days)	Work VMT (Total)	Vendor Trip Length	Vendor VMT (Total)	Heating Trips	Heating Trip Length	Heating VMT (Total)
Construction	18	0.5	131.00	18	2,358.00	0	0.0	0	20	0
Site Preparation	39	0.5	175.00	39	5,175.00	0	0.0	0	20	0
Grading	20	0.5	1,332.00	20	26,640.00	28	0.0	0	20	0
Building Construction	72	0.5	277.00	72	5,556.00	0	0.0	0	20	0
Finishing	70	0.5	1,800.00	20	36,000.00	0	0.0	0	20	0
Architectural Coatings	14	0.5	219.00	20	4,380.00	0	0.0	0	20	0
					483,762.00		483.00			1,820.00

Source: EMPAC2021 v4.0.0.3, Emissions Inventory
 Region: Type: Sub-Area
 Region: Year: Scenario: (SC)
 Calendar Year: 2026
 Emission: Annual

Vehicle Classification: EMPAC2020, Categories
 Units: indexed by CMV and EMT, weighted by Trips, kWh/Whip for Energy Consumption, tonmiles for Emissions, 1000 gal/mile for Fuel Consumption

Region	City	VehClass	Fuel	Population	Pop %	Total VMT	Fuel VMT	Btc VMT	Fuel Consumption (2026 gal/wh)	Fuel Efficiency (mpg)	Btc Efficiency (mpg/kWh)	Worker VMT	Total Fuel Consumption	Total kWh Consumption
San Bernardino (SC)	2026 L2A	Gasoline	454254.7841	58.4%	19,874,166.46	19,874,166.46	0.00	6,415.4	35.98			251,422.80	8,135.89	
San Bernardino (SC)	2026 L2A	Gasoline	977,788,275	0.7%	39,934.04	0.00	0.78	0.00	4,837			206.71	11.54	
San Bernardino (SC)	2026 L2A	Electricity	20022,82343	1.5%	0.00	1,250,893.60	0.00	0.00	2.59			14,373.15	5,461.1	
San Bernardino (SC)	2026 L2A	Plug-in Hybrid	146,70,87102	1.9%	727,463.29	544,797.33	182,665.97	15.50	29.88			8,202.93	287.83	2,421.15
San Bernardino (SC)	2026 L2011	Gasoline	3,986,3,9899	5.0%	1,960,977.27	0.00	0.00	0.00	0.00			21,263.53	844.12	
San Bernardino (SC)	2026 L2011	Electricity	7377000204	0.0%	107.46	0.00	0.00	0.00	24.52			4.34	0.17	23.4
San Bernardino (SC)	2026 L2011	Gasoline	1000966214	0.0%	5,442.29	0.00	0.00	0.00	0.00			6.85	0.26	16.04
San Bernardino (SC)	2026 L2011	Plug-in Hybrid	800,2308808	0.0%	5,014.59	2,138.54	2,876.05	0.07	29.70			53.24	1.96	
San Bernardino (SC)	2026 L2012	Electricity	28252,2917	21.8%	1,843,614.62	0.00	371.32	0.00	2.49			16,651.68	4,386.19	
San Bernardino (SC)	2026 L2012	Gasoline	396,993,9814	0.7%	26,308.26	0.00	0.76	0.00	34.65			338.88	9.49	
San Bernardino (SC)	2026 L2012	Electricity	396,993,9814	0.3%	12,789.30	0.00	0.00	0.00	2.59			1,133.89	498.32	
San Bernardino (SC)	2026 L2012	Plug-in Hybrid	2256,648,9193	0.3%	106,426.67	48,378.14	60,048.57	1.63	29.64			3,243.54	41.90	375.39
San Bernardino (SC)	2026 L4001	Gasoline	16759,61667	2.2%	626,901.52	0.00	0.00	0.00	14.26			9,232.37	646.69	
San Bernardino (SC)	2026 L4001	Electricity	1839,658,977	1.5%	439,889.72	0.00	20.81	0.00	20.75			6,278.56	302.63	
San Bernardino (SC)	2026 L4002	Gasoline	2763,224,446	0.4%	97,275.93	0.00	0.00	0.00	12.46			78.49		
San Bernardino (SC)	2026 L4002	Electricity	4897,57715	0.0%	103,983.52	0.00	10.79	0.00	17.42			1,522.70	122.23	
San Bernardino (SC)	2026 L4002	Gasoline	71,819,0881	0.0%	4,500.55	0.00	0.00	0.00	1.78			0.00		
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Plug-in Hybrid	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Gasoline	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6	Electricity	1,818,181,818	0.0%	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00
San Bernardino (SC)	2026 T6</													

Chino GPU - Energy

Phase	Phase Length (Days)	Equipment	Amount	Daily Usage Hours	Total Usage Hours	Gallons per Hour	Fuel Used (Gallons)
Demolition	20	Rubber Tired Dozers	2	8	320	5.32	1,703
	20	Excavators	3	8	480	2.96	1,422
Site Preparation	20	Concrete/Industrial Saws	1	8	160	1.38	220
	10	Rubber Tired Dozers	3	8	240	5.32	1,278
	10	Tractors/Loaders/Backhoes	4	8	320	2.21	706
Grading	30	Excavator	2	8	480	2.96	1,422
	30	Grader	1	8	240	4.48	1,076
	30	Rubber Tired Dozer	1	8	240	5.32	1,278
	30	Tractors/Loaders/Backhoes	2	8	480	2.21	1,059
	30	Scrapers	2	8	480	8.73	4,188
Building Construction	300	Crane	1	7	2,100	4.58	9,628
	300	Forklifts	3	8	7,200	2.21	15,927
	300	Generator Set	1	8	2,400	2.66	6,376
	300	Tractors/Loaders/Backhoes	3	7	6,300	2.21	13,902
	300	Welder	1	8	2,400	1.48	3,546
Paving	20	Paver	2	8	320	3.25	1,041
	20	Paving Equipment	2	8	320	3.19	1,022
	20	Rollers	2	8	320	1.92	613
Architectural Coatings	20	Air Compressor	1	6	120	1.12	134
							66,542

Source: EMFAC201 (v10.2) Emissions Inventory
 Region: Tier 3, All Area
 Region: San Bernardino (SC)
 Calendar Year: 2025
 Season: Annual
 Vehicle Classification: EMFAC201 Categories
 Units: mls/day for CMMV and EMMV, mls/day for Energy Consumption, ton/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CMMV	EMMV	Trips	Energy Consumption	Fuel Consumption	PMG	Miles per kWh	
San Bernardino (SC)	2025	All Other Buses	Aggregates	Aggregates	Aggregates	12,443	9,307.05	0.00	1,544.42	0.00	1,544.42	0.00	0.00	0.00	
San Bernardino (SC)	2025	All Other Buses	Aggregates	Aggregates	Natural Gas	97.79	2,989.38	0.00	2,977.61	0.00	2,977.61	0.00	0.00	0.00	
San Bernardino (SC)	2025	All Other Buses	Aggregates	Aggregates	Diesel	445,624.98	18,814.46	18,814.46	0.00	0.00	18,814.46	0.00	0.00	0.00	
San Bernardino (SC)	2025	LD4	Aggregates	Aggregates	Diesel	97.79	3,194.04	3,194.04	0.00	3,013.69	0.00	3,013.69	0.00	0.73	43.82
San Bernardino (SC)	2025	LD4	Aggregates	Aggregates	Electricity	1,025,069.00	0.00	0.00	1,250,693.00	0.00	0.00	1,250,693.00	0.00	482.05	23.9
San Bernardino (SC)	2025	LD4	Aggregates	Aggregates	Plug-in Hybrid	143,587.00	127,465.25	144,197.33	382,467.93	382,467.93	0.00	16,573.22	11.50	29.98	3.8
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Diesel	39,946.00	1,360,607.77	1,360,607.77	0.00	999,640.77	0.00	51.37	21.48	2.0	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Electricity	1.12	107.46	0.00	0.00	20.95	0.00	0.00	0.00	24.32	2.0
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Gasoline	11.01	5,426.25	5,426.25	0.00	5,228.94	0.00	5,228.94	0.00	0.00	0.00
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Electricity	900.24	5,074.19	2,875.55	2,875.55	414.47	0.00	864.10	0.00	29.73	3.1
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Plug-in Hybrid	20,621.07	8,343,114.42	8,343,114.42	0.00	948,146.52	0.00	327.21	29.48	2.0	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Diesel	97.00	25,588.26	25,588.26	0.00	2,883.17	0.00	0.76	34.65	1.1	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Electricity	2,064.62	72,968.30	0.00	72,968.30	0.00	10,461.88	27,881.11	0.00	2.0	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Plug-in Hybrid	2,256.65	386,426.48	413,778.74	66,647.47	4,331.25	0.00	18,188.11	6.8	29.64	2.0
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Gasoline	16,791.83	429,632.52	429,632.52	0.00	25,073.31	0.00	44.16	34.26	1.1	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Gasoline	11,393.65	419,837.72	419,837.72	0.00	41,973.61	0.00	20.01	29.75	1.1	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Electricity	262.09	18,561.74	0.00	18,561.74	0.00	3,948.13	10,477.99	0.00	0.72	0.0
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Gasoline	2,763.22	92,216.03	92,216.03	0.00	41,973.61	0.00	1.80	12.46	1.1	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Diesel	4,937.58	97,863.32	97,863.32	0.00	62,938.51	0.00	10.79	17.42	0.0	
San Bernardino (SC)	2025	LD7	Aggregates	Aggregates	Electricity	2.81	4,505.55	0.00	0.00	252.95	0.00	0.00	0.00	0.00	
San Bernardino (SC)	2025	MEV	Aggregates	Aggregates	Gasoline	20,884.26	122,975.69	122,975.69	0.00	41,568.59	0.00	27.9	42.30	0.0	
San Bernardino (SC)	2025	MEV	Aggregates	Aggregates	Gasoline	47,983.60	1,811,234.24	1,811,234.24	0.00	173,126.90	0.00	282.94	26.62	0.0	
San Bernardino (SC)	2025	MEV	Aggregates	Aggregates	Diesel	1,900.73	75,276.19	75,276.19	0.00	8,735.22	0.00	3.05	24.69	2.0	
San Bernardino (SC)	2025	MEV	Aggregates	Aggregates	Electricity	2,264.67	73,834.40	73,834.40	0.00	73,834.40	0.00	38,473.20	0.00	4.83	2.0
San Bernardino (SC)	2025	MEV	Aggregates	Aggregates	Plug-in Hybrid	1,469.97	72,523.38	32,747.29	39,776.09	6,078.54	0.00	11,653.10	1.11	29.38	3.31
San Bernardino (SC)	2025	MEV	Aggregates	Aggregates	Gasoline	3,064.47	27,839.89	27,839.89	0.00	3,065.17	0.00	5.53	4.69	0.0	
San Bernardino (SC)	2025	MP	Aggregates	Aggregates	Diesel	1,320.03	16,716.96	16,716.96	0.00	1,520.00	0.00	1.14	10.22	0.0	
San Bernardino (SC)	2025	MP	Aggregates	Aggregates	Electricity	41.59	6,875.70	6,875.70	0.00	1,091.50	0.00	1.08	1.69	0.0	
San Bernardino (SC)	2025	MP	Aggregates	Aggregates	Gasoline	345.52	14,345.29	14,345.29	0.00	6,073.09	0.00	2.75	5.21	0.0	
San Bernardino (SC)	2025	MP	Aggregates	Aggregates	Electricity	1.14	239.94	239.94	0.00	0.00	0.00	0.00	0.00	0.00	
San Bernardino (SC)	2025	PFD	Aggregates	Aggregates	Diesel	6.00	42,452.29	42,452.29	0.00	6.00	0.00	8.32	5.10	0.0	
San Bernardino (SC)	2025	PFD	Aggregates	Aggregates	Electricity	6.00	693.53	693.53	0.00	6.00	0.00	1,964.61	0.00	0.00	
San Bernardino (SC)	2025	SRUS	Aggregates	Aggregates	Gasoline	303.90	14,222.26	14,222.26	0.00	1,211.59	0.00	1.58	9.01	0.48	
San Bernardino (SC)	2025	SRUS	Aggregates	Aggregates	Diesel	353.83	7,228.28	7,228.28	0.00	5,102.50	0.00	0.86	7.40	0.46	
San Bernardino (SC)	2025	SRUS	Aggregates	Aggregates	Electricity	1.07	228.24	0.00	228.24	0.00	90.19	26.91	0.00	0.00	
San Bernardino (SC)	2025	SRUS	Aggregates	Aggregates	Natural Gas	423.88	10,476.86	10,476.86	0.00	6,117.76	0.00	0.84	6.32	0.0	
San Bernardino (SC)	2025	16 CARRIER Class 4	Aggregates	Aggregates	Diesel	1.16	88.84	88.84	0.00	0.00	0.00	0.04	0.16	0.0	
San Bernardino (SC)	2025	16 CARRIER Class 4	Aggregates	Aggregates	Electricity	0.15	0.61	0.00	0.00	0.23	0.00	0.10	0.34	0.0	
San Bernardino (SC)	2025	16 CARRIER Class 4	Aggregates	Aggregates	Diesel	7.65	534.77	534.77	0.00	75.74	0.00	0.76	5.34	0.0	
San Bernardino (SC)	2025	16 CARRIER Class 5	Aggregates	Aggregates	Electricity	0.15	0.21	0.00	0.00	0.47	0.00	1.88	0.00	0.00	
San Bernardino (SC)	2025	16 CARRIER Class 5	Aggregates	Aggregates	Diesel	24.69	1,831.63	1,831.63	0.00	48.22	0.00	0.15	14.90	0.0	
San Bernardino (SC)	2025	16 CARRIER Class 6	Aggregates	Aggregates	Electricity	0.02	0.32	0.00	0.00	0.89	0.00	0.08	0.36	0.0	
San Bernardino (SC)	2025	16 CARRIER Class 6	Aggregates	Aggregates	Diesel	43.37	881.79	881.79	0.00	90.00	0.00	0.86	10.26	0.0	
San Bernardino (SC)	2025	16 CARRIER Class 7	Aggregates	Aggregates	Electricity	0.75	16.60	0.00	16.60	0.00	17.25	90.84	0.00	0.00	
San Bernardino (SC)	2025	16 CARRIER Class 7	Aggregates	Aggregates	Natural Gas	0.04	7.07	0.00	7.07	0.00	0.04	0.00	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Delivery Class 4	Aggregates	Aggregates	Diesel	647.70	21,973.53	21,973.53	0.00	9,371.07	0.00	2.45	8.94	0.0	
San Bernardino (SC)	2025	16 Inmate Delivery Class 4	Aggregates	Aggregates	Electricity	0.00	393.82	393.82	0.00	0.00	0.00	42.08	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Delivery Class 4	Aggregates	Aggregates	Natural Gas	2.81	91.11	91.11	0.00	37.22	0.00	0.00	0.57	0.00	
San Bernardino (SC)	2025	16 Inmate Delivery Class 4	Aggregates	Aggregates	Diesel	782.23	26,648.88	26,648.88	0.00	11,262.29	0.00	3.00	10.00	0.0	
San Bernardino (SC)	2025	16 Inmate Delivery Class 5	Aggregates	Aggregates	Electricity	1.10	445.05	0.00	445.05	0.00	58.37	462.70	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Delivery Class 5	Aggregates	Aggregates	Diesel	0.54	10.54	10.54	0.00	0.00	0.00	0.01	0.58	0.00	
San Bernardino (SC)	2025	16 Inmate Delivery Class 6	Aggregates	Aggregates	Diesel	3,132.25	15,877.27	15,877.27	0.00	44,697.78	0.00	11.86	8.93	0.0	
San Bernardino (SC)	2025	16 Inmate Delivery Class 6	Aggregates	Aggregates	Electricity	43.49	1,853.65	1,853.65	0.00	161.32	0.00	1.88	14.65	0.0	
San Bernardino (SC)	2025	16 Inmate Delivery Class 6	Aggregates	Aggregates	Natural Gas	18.31	407.77	407.77	0.00	161.32	0.00	0.00	6.65	0.00	
San Bernardino (SC)	2025	16 Inmate Delivery Class 7	Aggregates	Aggregates	Electricity	1,833.67	30,841.17	30,841.17	0.00	1,833.67	0.00	1.71	13.0	0.0	
San Bernardino (SC)	2025	16 Inmate Delivery Class 7	Aggregates	Aggregates	Electricity	1,495	24,224.00	0.00	24,224.00	70.61	0.00	25.48	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Delivery Class 7	Aggregates	Aggregates	Diesel	20.43	1,497.00	1,497.00	0.00	1,893.43	0.00	1.58	14.94	0.0	
San Bernardino (SC)	2025	16 Inmate Delivery Class 7	Aggregates	Aggregates	Natural Gas	1,495	48,841.94	48,841.94	0.00	1,893.43	0.00	0.00	14.94	0.0	
San Bernardino (SC)	2025	16 Inmate Other Class 4	Aggregates	Aggregates	Electricity	20.43	962.12	0.00	962.12	0.00	1,007.73	0.00	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Other Class 4	Aggregates	Aggregates	Diesel	1,711	205.95	205.95	0.00	1,443	0.00	0.00	0.82	0.0	
San Bernardino (SC)	2025	16 Inmate Other Class 4	Aggregates	Aggregates	Natural Gas	1,711	133,222.00	133,222.00	0.00	1,443	0.00	10.0	8.89	0.0	
San Bernardino (SC)	2025	16 Inmate Other Class 5	Aggregates	Aggregates	Electricity	46.23	2,102.20	0.00	2,102.20	0.00	1,544.4	2,202.12	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Other Class 5	Aggregates	Aggregates	Natural Gas	2,102.20	466.53	466.53	0.00	1,544.4	0.00	0.05	6.78	0.0	
San Bernardino (SC)	2025	16 Inmate Other Class 6	Aggregates	Aggregates	Electricity	2,698.85	154,189.89	154,189.89	0.00	3,178.60	0.00	1.76	8.76	0.0	
San Bernardino (SC)	2025	16 Inmate Other Class 6	Aggregates	Aggregates	Electricity	43.17	2,006.37	0.00	2,006.37	499.08	2,006.74	0.00	6.78	0.0	
San Bernardino (SC)	2025	16 Inmate Other Class 6	Aggregates	Aggregates	Natural Gas	4.09	398.89	398.89	0.00	4.09	0.00	0.00	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Other Class 7	Aggregates	Aggregates	Diesel	159.88	7,193.69	7,193.69	0.00	18,039.59	0.00	6.08	19.5	0.0	
San Bernardino (SC)	2025	16 Inmate Other Class 7	Aggregates	Aggregates	Electricity	20.14	1,179.88	1,179.88	0.00	1,179.88	0.00	1,444.40	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Other Class 7	Aggregates	Aggregates	Natural Gas	43.96	2,153.33	2,153.33	0.00	537.28	0.00	0.25	6.64	0.0	
San Bernardino (SC)	2025	16 Inmate Tractor Class 6	Aggregates	Aggregates	Diesel	2,205.00	1,209.58	1,209.58	0.00	1,209.58	0.00	0.14	1.46	0.0	
San Bernardino (SC)	2025	16 Inmate Tractor Class 6	Aggregates	Aggregates	Electricity	0.44	2,935.00	0.00	2,935.00	5.14	0.00	3.10	0.00	0.00	
San Bernardino (SC)	2025	16 Inmate Tractor Class 6													

Chino GPU - Energy

Model Output: Off-Road Web Query (v1.1.0) Emissions Inventory

Region Type: Sub-Area

Region: San Bernardino (SC)

Calendar Year: 2026

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: Off-Road Web Query Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Yr	Vehicle Category	Model Year	Horsepower Bin	Fuel	Fuel Consumption	Total_Activity_hpy	Total_Population	Horsepower_Hours_hhpy	Gallons per Hour
San Bernardino (SC)	2026	Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	299,133.70	65,247.53	256.80	5,511,560.92	4.58
San Bernardino (SC)	2026	Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	2,591,582.53	874,581.21	1,516.64	50,714,159.53	2.96
San Bernardino (SC)	2026	Construction and Mining - Graders	Aggregate	Aggregate	Diesel	385,497.12	85,956.86	235.49	7,405,589.13	4.48
San Bernardino (SC)	2026	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	1,819.28	1,321.30	3.35	43,602.90	1.38
San Bernardino (SC)	2026	Construction and Mining - Pavers	Aggregate	Aggregate	Diesel	167,866.73	51,610.85	106.63	3,250,801.70	3.25
San Bernardino (SC)	2026	Construction and Mining - Paving Equipment	Aggregate	Aggregate	Diesel	185,972.48	58,233.23	111.09	3,625,699.92	3.19
San Bernardino (SC)	2026	Construction and Mining - Rollers	Aggregate	Aggregate	Diesel	451,711.50	235,718.39	538.31	8,426,771.71	1.92
San Bernardino (SC)	2026	Construction and Mining - Rough Terrain Forklifts	Aggregate	Aggregate	Diesel	552,620.68	249,812.28	614.04	10,526,592.07	2.21
San Bernardino (SC)	2026	Construction and Mining - Rubber Tired Dozers	Aggregate	Aggregate	Diesel	94,866.44	17,820.83	33.46	2,020,252.43	5.32
San Bernardino (SC)	2026	Construction and Mining - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	1,890,869.87	482,792.09	705.60	37,623,871.20	3.92
San Bernardino (SC)	2026	Construction and Mining - Scrapers	Aggregate	Aggregate	Diesel	987,109.85	113,132.70	353.74	20,652,849.43	8.73
San Bernardino (SC)	2026	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	Aggregate	Diesel	2,562,375.59	1,161,186.60	2,265.03	47,900,820.93	2.21
San Bernardino (SC)	2026	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Diesel	33,041.63	29,601.50	42.86	1,095,255.50	1.12
San Bernardino (SC)	2026	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Diesel	158,306.93	59,589.90	547.87	1,966,466.70	2.66
San Bernardino (SC)	2026	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Diesel	87,335.11	31,098.00	286.48	1,150,626.00	2.81
San Bernardino (SC)	2026	Light Commercial - Misc - Welders	Aggregate	Aggregate	Diesel	172,450.79	116,734.30	318.69	5,369,777.80	1.48