

Construction Fuel Consumption

On-Site Diesel ¹ (off-road construction Equipment)	MTCO ₂ e	Gallons of Fuel ⁴	County Fuel in 2023 (Start of Construction)	Percent
Demolition	17	1,677		
Site Preparation/Grading	76	7,530		
Building Construction	110	10,857		
Paving	12	1,172		
Architectural Coating	3	335		
Total	219	21,571	256,823,744	0.0084%

Off-Site Diesel ¹ (on-road construction trips)	MTCO ₂ e	Gallons of Fuel ⁴	County Fuel in 2023 (Start of Construction)	Percent
Demolition	26	2,519		
Site Preparation/Grading	53	5,269		
Building Construction	4	367		
Paving	0	0		
Architectural Coating	0	0		
Total	83	8,154	256,823,744	0.0032%

Off-Site Gasoline ²	MTCO ₂ e	Gallons of Fuel ⁴	County Fuel in 2023 (Start of Construction)	Percent
Demolition	1	135		
Site Preparation/Grading	4	441		
Building Construction	4	451		
Paving	2	227		
Architectural Coating	0	46		
Total	11	1,300	715,317,878	0.0002%

Total Diesel Fuel		29,725	256,823,744	0.0116%
Total Gasoline Fuel		1,300	715,317,878	0.0002%
Total Construction Fuel	313	31,025	972,141,622	0.0000%

Construction Phase ³	Demolition			Site Preparation			Grading/Infrastructure Improvements		
	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)
2024	17	26	1	9	0	0	68	53	4
Total	17	26	1	9	0	0	68	53	4

Construction Phase ³	Building Construction			Paving			Architectural Coating		
	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gasoline (Worker)
2024	110	4	4	12	0	2	3	0	0
Total	110	4	4	12	0	2	3	0	0

Notes:

¹ Fuel used for off-road, hauling, and vendor trips assumed to be diesel.

² Fuel used for worker trips assumed to be gasoline.

³ MTCO₂e rates from CalEEMod (3.0 Construction Emissions Details).

⁴ For CO₂e emissions, see Chapter 13 (page 94); Conversion Ratios: Climate Registry, General Reporting Protocol, 2016.

Construction Water Energy

Daily Soil Disturbance ¹	3.5	acres
Days of Soil Disturbance ²	39	days
Water Concentration ³	3,020	gallons/acre
Water Energy Intensity ⁴	3,218	kWh/MG
Total Construction Water	0.41	million gallons
Construction Water Energy	1,327	kWh
	0.0013	GWh
Riverside County Annual Electricity	16,767	GWh
Percentage Increase	0.00001%	

Notes:

¹ Total daily acres disturbed from offroad equipment per CalEEMod (3.0 Construction Emissions Detail) and maximum SCAQMD LST values for soil-disturbing equipment.

² Number of days of construction with soil-disturbing equipment per CalEEMod (5.1 Construction Schedule).

³ Water application rate per Air and Waste Management Association's Air Pollution Engineering Manual.

⁴ Water energy intensity factor for subarea per CalEEMod User Guide, Appendix G, Tab G-32.

Operational Fuel

Vehicle Type	Percent ¹	Annual VMT ²	MPG ³	Annual Fuel (Gallons)	Fuel Type	Riverside County Gallons ⁴	RS Percent
Passenger Cars (Gasoline)	0.92	13,271,614	21.6	614,427	Gas	715,317,878	0.0859%
Light/Medium Trucks	0.05	758,314	17.2	44,088	Diesel	256,823,744	0.0172%
Heavy Trucks/Other	0.02	356,671	6.1	58,471	Diesel	256,823,744	0.0228%
Total	0.08	14,386,598		102,559			0.0399%

Total

Land Use ⁵	LDA	LDT1	LDT2	MCY	MDV	LHD1	LHD2	MHD	OBUS	UBUS	SBUS	MH	HHD
Fast Food Restaurant with Drive Thru / High Turnover (Sit Down Restaurant)	0.4725	0.0431	0.2267	0.0182	0.1620	0.0269	0.0083	0.0104	0.0006	0.0005	0.0013	0.0048	0.0248

Notes:

¹ Percent of vehicle trip distribution based on fleet mix from CalEEMod (4.4 Fleet Mix).

² Total annual operational VMT based on mitigated annual VMT from CalEEMod (4.2 Trip Summary Information).

³ Average fuel economy derived from Department of Transportation.

⁴ Total annual county fuel per EMFAC 2017 model of projected operational fuel usage.

Operational Water Energy

Indoor	4.1	million gallons
Indoor Energy Intensity Factor ¹	4,737	kWh/MG
Outdoor	1	million gallons
Outdoor Energy Intensity Factor ²	3,218	kWh/MG
Operational Water Energy	24,173	kWh
Operational Water Energy	0.0242	GWh
Riverside County Annual Electricity	16,767	GWh
Percentage Increase	0.0001%	

Land Use ³	Unmitigated (gal/year)		Mitigated (gal/year)	
	Indoor	Outdoor	Indoor	Outdoor
Fast Food Restaurant with Drive Thru	2,898,747	1,457,469	0	0
High Turnover (Sit Down Restaurant)	1,214,135	0	0	0
Parking Lot	0	0		
Total Operational Water (MG/year)	4	1	0	0

Notes:

¹ Indoor water energy intensity factor for subarea per CalEEMod User Guide, Appendix G, Tab G-32. Factor includes supply, treatment, distribution, and wastewater.

² Outdoor water energy intensity factor for subarea per CalEEMod User Guide, Appendix G, Tab G-32. Factor includes supply, treatment, and distribution.

³ Operational water use values per CalEEMod (5.12 Operational Water and Wastewater Consumption).

Electricity/Natural Gas Energy

	Project Annual Energy	Riverside County Annual Energy ³	Percentage Increase
Electricity (kWh/yr)	1,015,829	16,767,235,877	0.0061%
Electricity (GWh/yr)	1.0158	16,767	0.0061%
Natural Gas (kBTU/yr)	1,437,877	43,084,359,800	0.0033%
Natural Gas (therms/yr)	14,379	430,843,598	0.0033%

Land Use	Electricity ¹ (kWh/yr)	Natural Gas ² (kBTU/yr)
Fast Food Restaurant with Drive Thru	645,407	1,013,412
High Turnover (Sit Down Restaurant)	270,328	424,466
Parking Lot	100,094	0
Total Energy	1,015,829	1,437,877

Notes:

¹ Electricity use per CalEEMod (5.11 Operational Energy Consumption).

² Natural Gas use per CalEEMod (5.11 Operational Energy Consumption).

³ County total energy values from California Energy Commission energy reports available through ecdms.energy.ca.gov. (year 2021)