

Construction Fuel

| On-Site Diesel¹ | MTCO ₂ e | Gallons of Fuel ⁴ | 2022 County Fuel | Percent Increase Countywide |
|--------------------------------------|---------------------|------------------------------|-----------------------|-----------------------------|
| Demolition | 34 | 3,350 | | |
| Site Preparation/Grading | 100 | 9,852 | | |
| Building Construction | 174 | 17,143 | | |
| Paving | 20 | 1,970 | | |
| Architectural Coating | 12 | 1,182 | | |
| Total | 340 | 33,498 | 102,962,955.83 | 0.0325% |
| Off-Site Diesel¹ | | | | |
| Demolition | 94 | 9,261 | | |
| Site Preparation/Grading | 16 | 1,576 | | |
| Building Construction | 173 | 17,044 | | |
| Paving | 0 | 0 | | |
| Architectural Coating | 0 | 0 | | |
| Total | 283 | 27,882 | 102,962,955.83 | 0.0271% |
| Off-Site Gasoline² | | | | |
| Demolition | 1 | 114 | | |
| Site Preparation/Grading | 3 | 341 | | |
| Building Construction | 130 | 14,756 | | |
| Paving | 1 | 114 | | |
| Architectural Coating | 17 | 1,930 | | |
| Total | 152 | 17,253 | 604,762,380 | 0.0029% |
| Total Diesel Fuel | | 61,379 | 102,962,956 | 0.0596% |
| Total Gasoline Fuel | | 17,253 | 604,762,380 | 0.0029% |
| Total Construction Fuel | 775 | 78,632 | | |

| Construction Phase ³ | Demolition | | | Site Preparation | | | Grading | | |
|---------------------------------|---------------------------|----------------------------------|-----------------------|---------------------------|----------------------------------|-----------------------|---------------------------|----------------------------------|-----------------------|
| | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) |
| 2022 | 34 | 94 | 1 | 17 | 0 | 1 | 83 | 16 | 2 |
| 2023 | | | | | | | | | |
| Total | 34 | 94 | 1 | 17 | 0 | 1 | 83 | 16 | 2 |
| Construction Phase ³ | Building Construction | | | Paving | | | Architectural Coating | | |
| | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) |
| 2022 | 174 | 173 | 130 | 20 | 0 | 1 | 8 | 0 | 11 |
| 2023 | | | | | | | 4 | 0 | 6 |
| Total | 174 | 173 | 130 | 20 | 0 | 1 | 12 | 0 | 17 |

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 Details).

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

Operational Fuel

| Vehicle Type | Percent ¹ | Annual VMT ² | MGP ³ | Annual Fuel | Fuel Type | County Gallons ⁴ | County Percent | Statewide | Statewide percent |
|---------------------|----------------------|-------------------------|------------------|----------------|-----------|-----------------------------|----------------|----------------|-------------------|
| Passenger Cars | 0.5920 | 6,922,488 | 21.6 | 320,486 | Gas | 600,613,962 | 0.0534% | 14,773,931,520 | 0.0022% |
| Light/Medium Trucks | 0.15000 | 1,754,009 | 17.2 | 101,977 | Diesel | 103,122,398 | 0.0126% | 3,625,305,260 | 0.0028% |
| Heavy Trucks/Other | 0.26 | 3,016,895 | 6.1 | 494,573 | Diesel | 103,122,398 | 0.0613% | | |
| Total | 1.000 | 11,693,392 | | 596,550 | | 806,858,758 | 0.5785% | | |

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.

Electricity and Natural Gas

| | Mitigated Project Annual Energy | County Annual Energy ³ | Percentage Increase |
|-----------------------|------------------------------------|--------------------------------------|------------------------|
| Electricity (kWh/yr) | 1,182,590 | 16,664,460,569 | 0.0071% |
| Electricity (MWh/yr) | 1,183 | 16,664,461 | 0.0071% |
| Electricity (GWh/yr) | 1.18 | 16,664 | 0.0071% |
| Natural Gas (kBTU/yr) | 1,041,550 | 45,972,076,400 | 0.0023% |
| Natural Gas (therms) | 10,416 | 459,720,764.00 | 0.0023% |

| Land Use | Electricity ¹ (kWh/yr) | | Natural Gas ² (kBTU/yr) | |
|---------------------|-----------------------------------|------------------|------------------------------------|------------------|
| | Unmitigated | Mitigated | Unmitigated | Mitigated |
| City Park | 0 | 0 | 0.00E+00 | 0.00E+00 |
| Parking Lot | 122880 | 122880 | 0 | 0 |
| Warehouse | 1.06E+06 | 1.06E+06 | 1.04E+06 | 1.04E+06 |
| Total Energy | 1,182,590 | 1,182,590 | 1,041,550 | 1,041,550 |

Notes:

¹ Electricity use per CalEEMod (5.3 Energy by Land Use).

² Natural Gas use per CalEEMod (5.2 Natural Gas by Land Use).

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

Construction Water

| | | |
|---------------------------------------|------------------|-----------------|
| Daily Soil Disturbance ¹ | 90 | acres |
| Days of Soil Disturbance ² | 40 | days |
| Water Concentration ³ | 3,020 | gallons/acre |
| Water Energy Intensity ⁴ | 3,500 | kWh/MG |
| Total Construction Water | 10.87 | million gallons |
| Construction Water Energy | 38,052 | kWh |
| | 0.3805 | GWh |
| Percentage Increase Countywide | 0.002283% | |

Notes:

- ¹ Total daily acres disturbed from offroad equipment per CalEEMod (3.0 Construction Detail) and maximum SCAQMD LST values for soil-disturbing equipment.
- ² Number of days of construction with soil-disturbing equipment per CalEEMod (3.0 Construction Detail).
- ³ Water application rate per Air and Waste Management Association's Air Pollution Engineering Manual.
- ⁴ Water energy intensity factor for county subarea per CalEEMod User Guide, Appendix D, page D-343.

Operational Water

| | | |
|--|---------|-----------------|
| Mitigated Indoor | 70 | million gallons |
| Indoor Energy Intensity Factor ¹ | 5,411 | kWh/MG |
| Mitigated Outdoor | 3 | million gallons |
| Outdoor Energy Intensity Factor ² | 3,500 | kWh/MG |
| Operational Water Energy | 389270 | kWh |
| Operational Water Energy | 389.27 | MWh |
| Operational Water Energy | 0.38927 | GWh |
| Percentage Countywide | 0.0023% | |
| Total water use | 73 | million gallons |

| Land Use ³ | Unmitigated (MG) | | Mitigated (MG) | |
|--------------------------------|------------------|----------|----------------|----------|
| | Indoor | Outdoor | Indoor | Outdoor |
| City Park | 0 | 3 | 0 | 3 |
| Parking Lot | 0 | 0 | 0 | 0 |
| Warehouse | 70 | 0 | 70 | 0 |
| Total Operational Water | 70 | 3 | 70 | 3 |

Notes:

- ¹ Indoor water energy intensity factor for county subarea per CalEEMod User Guide, Appendix D, page D-343. Factor includes supply, treatment, distribution, and wastewater.
- ² Outdoor water energy intensity factor for county subarea per CalEEMod User Guide, Appendix D, page D-343. Factor includes supply, treatment, and distribution.
- ³ Operational water use values per CalEEMod (7.2 Water by Land Use).