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Technical Appendix: Energy Consumption Estimates

Tennessee Village Mixed-Use Project

Energy Calculations

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Note: Sheet 3 is available electronically on request only.

Sheet 1: Summary of Energy Consumption

Table 1-1: Operational Vehicle Fuel Consumption

Operational Estimates	Diesel Fuel Consumed (Gal)	Gasoline Fuel Consumed (Gal)	Electricity Consumed (kW)
Mobile Sources	19,752	257,711	119,905

Based on Annual VMT of: 7,131,868

Table 1-2: Operational Energy Consumption (Building)

Land Use	Electricity (kWh/yr)	Natural Gas (kBTU/yr)
Apartments Low Rise	632,576	2,248,635
Apartments Mid Rise	1,402,753	3,587,083
Regional Shopping Center	172,814	104,727
Parking Lot	113,713	0
Total	2,321,856	5,940,445

Table 1-3: Total Operational Energy Consumption

Source	Diesel Fuel Consumed (Gal)	Gasoline Fuel Consumed (Gal)	Electricity Consumed (kW)	Natural Gas (kBTU/yr)
Mobile Source	19,752	257,711	119,905	0
Building	0	0	2,321,856	5,940,445
Total	19,752	257,711	2,441,761	5,940,445

Sheet 2: Average Fuel Efficiency - San Bernardino County

EMFAC2021 San Bernardino County Fuel Efficiency Estimates for 2025 with Project-Adjusted Fleet Mix

Table 1: 2025 San Bernardino County Average Vehicle Fuel Efficiency (Gasoline)

Vehicle Class	Population	Vehicle Miles Travelled Per Day	Gallons Per Day	Miles Per Gallon
HHDT	0.73	11.04	2.79	3.96
LDA	804,539.66	33,917,884.49	1,125,150.28	30.15
LDT1	70,269.53	2,412,766.98	97,190.17	24.83
LDT2	340,851.80	14,001,965.95	566,572.88	24.71
LHDT1	29,713.02	1,108,490.99	80,885.44	13.70
LHDT2	4,518.55	161,855.80	13,341.50	12.13
MCY	38,855.32	226,907.56	5,449.13	41.64
MDV	253,257.94	9,969,714.42	500,283.50	19.93
MH	6,121.22	53,536.53	11,082.61	4.83
MHDT	2,309.45	140,687.60	26,865.25	5.24
OBUS	0.00	30,637.71	5,983.24	5.12
SBUS	0.00	20,420.72	2,250.48	9.07
UBUS	0.00	10,540.08	1,799.71	5.86
TOTAL	1,550,437.22	62,055,419.85	2,436,856.97	25.47

Table 2: 2025 San Bernardino County Average Vehicle Fuel Efficiency (Diesel)

Vehicle Class	Population	Vehicle Miles Travelled Per Day	Gallons Per Day	Miles Per Gallon
HHDT	3,369.00	141,781.05	22,855.10	6.20
LDA	1,991.78	67,127.86	1,577.75	42.55
LDT1	23.99	327.75	13.75	23.83
LDT2	1,014.18	44,885.53	1,344.00	33.40
LHDT1	22,260.03	835,207.04	40,595.20	20.57
LHDT2	9,589.89	365,990.37	21,292.69	17.19
MCY	0.00	0.00	0.00	0.00
MDV	3,599.10	143,983.94	6,032.42	23.87
MH	2,582.96	22,618.03	2,187.61	10.34
MHDT	18,129.38	820,207.06	90,874.86	9.03
OBUS	0.00	0.00	0.00	0.00
SBUS	0.00	0.00	0.00	0.00
UBUS	0.00	0.00	0.00	0.00
TOTAL	62560.32	2,442,128.63	186773.39	13.08

Table 3: 2025 San Bernardino County Average Vehicle Fuel Efficiency (Electricity)

Vehicle Class	Population	Vehicle Miles Travelled Per Day	Energy Consumption (kWh/day)	Miles Per kWh
HHDT	22.01	760.21	1,368.89	0.56
LDA	62,759.19	2,550,571.09	984,730.95	2.59
LDT1	270.25	10,771.73	3,850.97	2.80
LDT2	5,914.92	184,710.57	64,009.27	2.89
LHDT1	246.32	17,258.91	9,738.84	1.77
LHDT2	62.92	4,191.42	2,366.46	1.77
MCY	0.00	0.00	0.00	0.00
MDV	5,065.25	162,389.56	58,066.56	2.80
MH	0.00	0.00	0.00	0.00
MHDT	161.88	9,182.49	9,660.06	0.95
OBUS	0.00	0.00	0.00	0.00
SBUS	0.00	0.00	0.00	0.00
UBUS	0.00	0.00	0.00	0.00
TOTAL	74,502.74	2,939,835.97	1,133,792.01	2.59