

North Ventura Coordinated Area Plan - Existing Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North Ventura Coordinated Area Plan - Existing
Construction Start Date	12/1/2022
Operational Year	2023
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	4.20
Precipitation (days)	18.8
Location	37.42387599323172, -122.13901481453252
County	Santa Clara
City	Palo Alto
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1718
EDFZ	1
Electric Utility	City of Palo Alto
Gas Utility	City of Palo Alto Utilities
App Version	2022.1.1.7

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
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Apartments Mid Rise	106	Dwelling Unit	60.0	101,760	0.00	—	317	—
Single Family Housing	33.0	Dwelling Unit	0.00	64,350	0.00	—	99.0	—
Automobile Care Center	52.7	1000sqft	0.00	52,676	0.00	—	—	—
Electronic Superstore	3.90	1000sqft	0.00	3,900	0.00	—	—	—
General Light Industry	8.38	1000sqft	0.00	8,379	0.00	—	—	—
General Office Building	628	1000sqft	0.00	627,565	0.00	—	—	—
Regional Shopping Center	63.7	1000sqft	0.00	63,698	0.00	—	—	—
Medical Office Building	25.1	1000sqft	0.00	25,097	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	4.41	1000sqft	0.00	4,407	0.00	—	—	—
Motel	3.00	Room	0.00	5,881	0.00	—	—	—
Health Club	31.8	1000sqft	0.00	31,765	0.00	—	—	—
High Turnover (Sit Down Restaurant)	3.13	1000sqft	0.00	3,130	0.00	—	—	—
Condo/Townhouse	3.00	Dwelling Unit	0.00	3,180	0.00	0.00	9.00	—
Unrefrigerated Warehouse-No Rail	26.3	1000sqft	0.00	26,320	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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
Apartments Mid Rise	481	435	361	166,975	3,560	3,215	2,674	1,235,049
Single Family Housing	311	314	282	112,122	2,299	2,324	2,085	829,321
Automobile Care Center	1,466	1,466	734	496,929	9,970	17,991	9,012	4,007,309
Electronic Superstore	160	215	167	61,609	642	2,637	2,045	411,551
General Light Industry	41.0	16.4	41.3	13,693	503	202	507	168,045
General Office Building	4,889	1,111	351	1,350,807	59,998	13,632	4,313	16,578,016
Regional Shopping Center	2,357	2,880	1,317	833,305	12,372	16,913	7,736	4,510,805
Medical Office Building	903	222	36.9	248,941	11,082	2,729	453	3,055,167
Unrefrigerated Warehouse-No Rail	5.99	5.99	5.99	2,188	73.6	73.6	73.6	26,848
Motel	9.99	9.99	9.99	3,646	123	123	123	44,750
Health Club	915	580	743	307,562	11,231	7,119	9,114	3,774,605
High Turnover (Sit Down Restaurant)	336	367	427	128,996	1,549	4,499	5,243	911,768
Condo/Townhouse	22.0	24.5	18.9	7,992	163	181	140	59,113
Unrefrigerated Warehouse-No Rail	45.0	45.0	45.0	16,428	552	552	552	201,611

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)
Apartments Mid Rise	361,614	0.00	0.0000	0.0000	933,232
Single Family Housing	204,100	0.00	0.0000	0.0000	1,525,323
Automobile Care Center	574,703	0.00	0.0000	0.0000	2,306,635
Electronic Superstore	33,325	0.00	0.0000	0.0000	22,224
General Light Industry	91,416	0.00	0.0000	0.0000	366,909
General Office Building	13,284,693	0.00	0.0000	0.0000	14,904,851
Regional Shopping Center	544,298	0.00	0.0000	0.0000	362,988
Medical Office Building	531,269	0.00	0.0000	0.0000	596,061
Unrefrigerated Warehouse-No Rail	44,149	0.00	0.0000	0.0000	23,156
Motel	38,872	0.00	0.0000	0.0000	177,001
Health Club	346,561	0.00	0.0000	0.0000	1,390,961
High Turnover (Sit Down Restaurant)	142,036	0.00	0.0000	0.0000	422,302
Condo/Townhouse	12,823	0.00	0.0000	0.0000	87,674
Unrefrigerated Warehouse-No Rail	263,669	0.00	0.0000	0.0000	138,292

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	3,844,238	0.00
Single Family Housing	1,196,791	0.00
Automobile Care Center	4,955,816	0.00
Electronic Superstore	288,883	0.00
General Light Industry	1,937,644	0.00

General Office Building	111,539,480	0.00
Regional Shopping Center	4,718,271	0.00
Medical Office Building	3,149,185	0.00
Unrefrigerated Warehouse-No Rail	1,019,119	0.00
Motel	76,100	0.00
Health Club	1,878,682	0.00
High Turnover (Sit Down Restaurant)	950,061	0.00
Condo/Townhouse	108,799	0.00
Unrefrigerated Warehouse-No Rail	6,086,500	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	78.40	0.00
Single Family Housing	25.85	0.00
Automobile Care Center	201.22	0.00
Electronic Superstore	11.73	0.00
General Light Industry	10.39	0.00
General Office Building	583.64	0.00
Regional Shopping Center	66.88	0.00
Medical Office Building	271.05	0.00
Unrefrigerated Warehouse-No Rail	4.14	0.00
Motel	1.64	0.00
Health Club	181.06	0.00
High Turnover (Sit Down Restaurant)	37.25	0.00
Condo/Townhouse	2.23	0.00

Unrefrigerated Warehouse-No Rail	24.74	0.00
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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
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
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
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Electronic Superstore	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Electronic Superstore	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	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

Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
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
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Motel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Motel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Motel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Condo/Townhouse	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	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

North Ventura Coordinated Area Plan - Proposed 2040 Custom Report

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5.14.1. Unmitigated

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	North Ventura Coordinated Area Plan - Proposed 2040
Construction Start Date	12/1/2022
Operational Year	2040
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	4.20
Precipitation (days)	18.8
Location	37.42387599323172, -122.13901481453252
County	Santa Clara
City	Palo Alto
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1718
EDFZ	1
Electric Utility	City of Palo Alto
Gas Utility	City of Palo Alto Utilities
App Version	2022.1.1.7

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
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Apartments Mid Rise	636	Dwelling Unit	60.0	610,560	0.00	—	1,902	—
Single Family Housing	33.0	Dwelling Unit	0.00	64,350	0.00	—	99.0	—
Automobile Care Center	39.1	1000sqft	0.00	39,076	0.00	—	—	—
Electronic Superstore	3.90	1000sqft	0.00	3,900	0.00	—	—	—
Research & Development	70.1	1000sqft	0.00	70,100	—	—	—	—
General Office Building	316	1000sqft	0.00	315,734	0.00	—	—	—
Regional Shopping Center	82.8	1000sqft	0.00	82,777	0.00	—	—	—
Medical Office Building	31.5	1000sqft	0.00	31,515	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	4.41	1000sqft	0.00	4,407	0.00	—	—	—
Motel	3.00	Room	0.00	5,881	0.00	—	—	—
Health Club	21.9	1000sqft	0.00	21,916	0.00	—	—	—
Condo/Townhouse	3.00	Dwelling Unit	0.00	3,180	0.00	0.00	9.00	—
City Park	2.00	Acre	2.00	0.00	87,120	87,120	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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
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Apartments Mid Rise	2,887	2,608	2,169	1,001,850	21,357	19,287	16,041	7,410,291
Single Family Housing	311	314	282	112,122	2,299	2,324	2,085	829,321
Automobile Care Center	1,088	1,088	545	368,773	7,398	13,351	6,690	2,973,887
Electronic Superstore	160	215	167	61,609	642	2,637	2,045	411,551
Research & Development	777	131	76.4	213,318	9,532	1,609	938	2,617,987
General Office Building	3,309	751	237	914,206	40,609	9,222	2,906	11,219,750
Regional Shopping Center	3,064	3,743	1,713	1,083,417	16,086	21,983	10,058	5,864,666
Medical Office Building	1,135	280	46.3	312,864	13,928	3,431	569	3,839,685
Unrefrigerated Warehouse-No Rail	5.99	5.99	5.99	2,188	73.6	73.6	73.6	26,848
Motel	9.99	9.99	9.99	3,646	123	123	123	44,750
Health Club	632	401	513	212,428	7,757	4,917	6,297	2,607,063
—	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Condo/Townhouse	22.0	24.5	18.9	7,992	163	181	140	59,113
—	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
City Park	2.00	5.62	4.38	1,043	24.5	69.0	53.8	12,799

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)
Apartments Mid Rise	2,169,683	0.00	0.0000	0.0000	5,599,389

Single Family Housing	204,100	0.00	0.0000	0.0000	1,525,323
Automobile Care Center	426,325	0.00	0.0000	0.0000	1,711,103
Electronic Superstore	33,325	0.00	0.0000	0.0000	22,224
Research & Development	1,483,921	0.00	0.0000	0.0000	1,664,895
General Office Building	6,683,657	0.00	0.0000	0.0000	7,498,774
Regional Shopping Center	707,327	0.00	0.0000	0.0000	471,711
Medical Office Building	667,129	0.00	0.0000	0.0000	748,490
Unrefrigerated Warehouse-No Rail	44,149	0.00	0.0000	0.0000	23,156
Motel	38,872	0.00	0.0000	0.0000	177,001
Health Club	239,107	0.00	0.0000	0.0000	959,682
Condo/Townhouse	12,823	0.00	0.0000	0.0000	87,674
City Park	0.00	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	23,065,430	0.00
Single Family Housing	1,196,791	0.00
Automobile Care Center	3,676,313	0.00
Electronic Superstore	288,883	0.00
Research & Development	34,467,746	0.00
General Office Building	56,116,587	0.00
Regional Shopping Center	6,131,501	0.00
Medical Office Building	3,954,519	0.00
Unrefrigerated Warehouse-No Rail	1,019,119	0.00
Motel	76,100	0.00

Health Club	1,296,181	0.00
Condo/Townhouse	108,799	0.00
City Park	0.00	2,069,667

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	470.39	0.00
Single Family Housing	25.85	0.00
Automobile Care Center	149.27	0.00
Electronic Superstore	11.73	0.00
Research & Development	5.33	0.00
General Office Building	293.63	0.00
Regional Shopping Center	86.92	0.00
Medical Office Building	340.36	0.00
Unrefrigerated Warehouse-No Rail	4.14	0.00
Motel	1.64	0.00
Health Club	124.92	0.00
Condo/Townhouse	2.23	0.00
City Park	0.17	0.00

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
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Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
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
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Electronic Superstore	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Electronic Superstore	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Research & Development	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
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
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

Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Motel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Motel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Motel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Condo/Townhouse	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	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Research & Development	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00