



# Comparative Energy Analysis Report

Prepared for  
Conejo Valley Unified

Prepared by  
The Energy Coalition

On Behalf of  
The Southern California Regional Energy Network Public Agency Project Delivery Programs

Date  
4/15/2020

## Table of Contents

1. Overview	1
2. Total Energy Portfolio	2
3. Building Summary	3
Appendix A - Methodology	5

---

---

## 1. Overview

This report is intended to provide a framework for the Conejo Valley Unified, referred to as “Agency” herein, to identify inefficient facilities and infrastructure and prioritize further investigation and energy efficiency retrofit work. This analysis uses only Southern California Edison and Southern California Gas energy billing data provided by the Agency to analyze energy use across Agency assets, and to help identify opportunities for energy efficiency improvements. Many factors affect the energy use in different assets, including age, type of heating, ventilation, air conditioning (HVAC), and lighting equipment, facility occupancy and hours, plug loads, and climate. Once individual opportunities with the greatest potential for energy savings are identified, a more detailed screening of those facilities can be performed to identify the specific sources of the inefficiencies.

This report was created by The Energy Coalition on behalf of the Southern California Regional Network ([www.socalren.org](http://www.socalren.org)). Any questions about this report can be directed to your assigned Project Manager, Nataliia Hamidi at [nhamidi@energycoalition.org](mailto:nhamidi@energycoalition.org).

---

## 2. Total Energy Portfolio

Your Total Annual Energy Cost is **\$2,018,331**

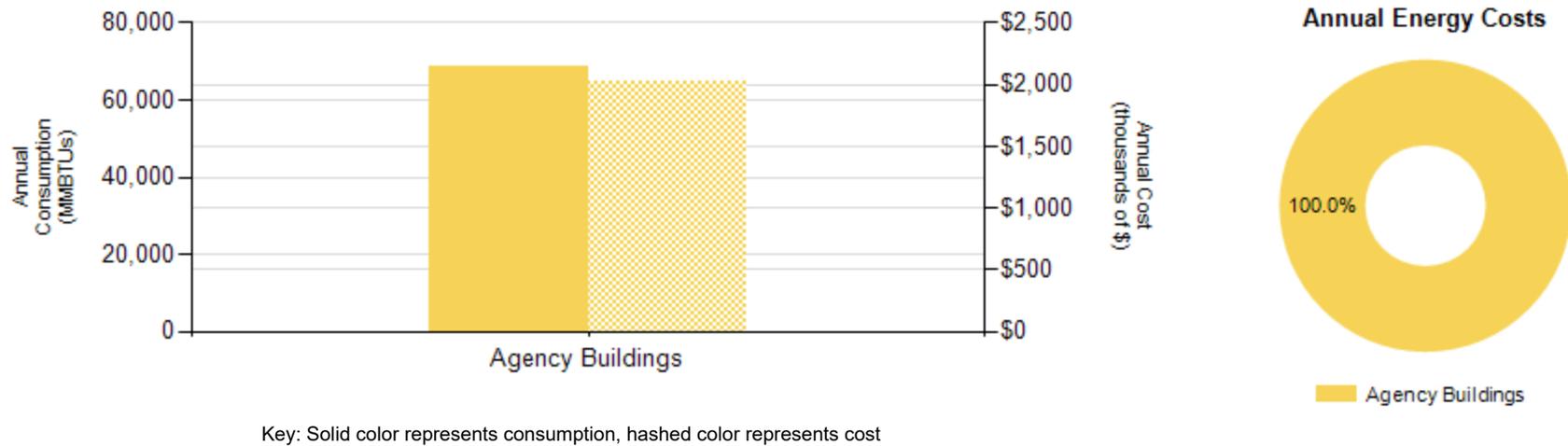


Table 1: Total Energy Portfolio (Annual)

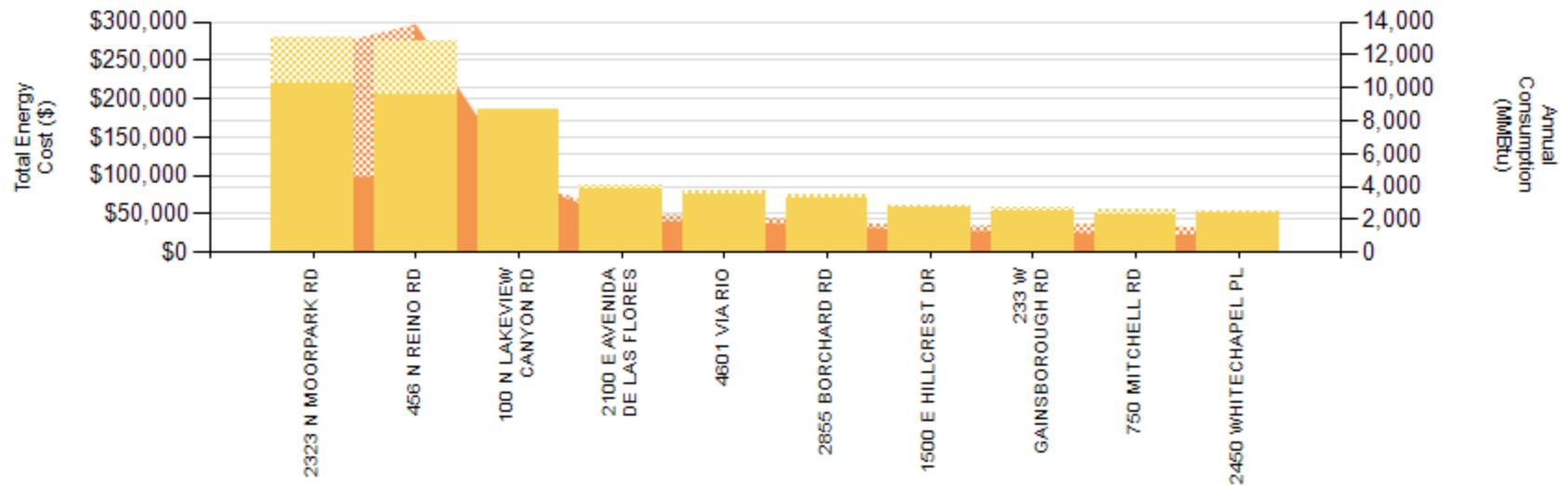
Agency Energy Use	Electric Consumption (kWh)	Electric Cost (\$)	Gas Consumption (therms)	Gas Cost (\$)	Total Energy Consumption (MMBtus <sup>1</sup> )	Total Energy Cost (\$)	GHG Emissions (lbs CO <sub>2</sub> )
Agency Buildings	11,114,322	\$1,760,821	306,769	\$257,510	68,599	\$2,018,331	5,746,105

<sup>1</sup> million British Thermal Units

### 3. Building Summary



Your Annual Energy Cost for Buildings is **\$2,018,331** and **100.0%** of the Total Cost.



Key: Displays the top 10 consuming Buildings. Yellow columns represent Cost, Orange area represents Consumption. Electricity is the solid shade, Natural Gas is the hashed shade.

Table 2: Building Summary (Annual)

Site Name	Address	Electric Consumption (kWh)	Electric Cost (\$)	Electric Rate (\$/kWh)	Gas Consumption (therms)	Gas Cost (\$)	Gas Rate (\$/therm)
Thousand Oaks High School	2323 N MOORPARK RD	1,323,685	\$219,056	\$0.17	78,153	\$59,670	\$0.76
Newbury Park High School	456 N REINO RD	1,329,761	\$205,049	\$0.15	92,885	\$69,654	\$0.75
Westlake High School	100 N LAKEVIEW CANYON RD	1,292,380	\$185,973	\$0.14	50,701	\$39,801	\$0.78
Los Cerritos Middle School	2100 E AVENIDA DE LAS FLORES	549,320	\$82,385	\$0.15	4,590	\$4,559	\$0.99
Sycamore Canyon School	4601 VIA RIO	526,998	\$75,361	\$0.14	3,661	\$3,754	\$1.03
Sequoia Middle School	2855 BORCHARD RD	472,367	\$71,327	\$0.15	3,293	\$3,469	\$1.05
Colina Middle School	1500 E HILLCREST DR	360,227	\$59,008	\$0.16	2,461	\$2,662	\$1.08
Redwood Middle School	233 W GAINSBOROUGH RD	375,101	\$53,639	\$0.14	4,397	\$4,460	\$1.01
Conejo Valley Unified School District Office	750 MITCHELL RD	281,060	\$49,791	\$0.18	7,301	\$6,892	\$0.94
Lang Ranch Elementary School	2450 WHITECHAPEL PL	337,881	\$50,513	\$0.15	1,809	\$2,120	\$1.17

---

## Appendix A - Methodology

### 1. Data Sources

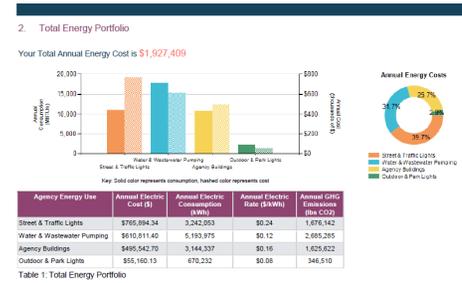
- Building information, energy usage and cost data used in this analysis were derived from utility consumption billing data provided by agency staff.
- Utility consumption billing data used in this analysis were derived from SCG gas tariffs and SCE electric tariffs
- For more information about the utility tariffs included in this analysis refer to:
  - SCG Gas Tariffs: [For more information about Southern California Gas tariffs;](https://www.socalgas.com/regulatory/tariffs/tariffs-rates.shtml)  
<https://www.socalgas.com/regulatory/tariffs/tariffs-rates.shtml>
  - SCE Electric Tariff: [For more information about Southern California Edison tariffs;](https://www.sce.com/wps/portal/home/regulatory/tariff-books/rates-pricing-choices)  
<https://www.sce.com/wps/portal/home/regulatory/tariff-books/rates-pricing-choices>
- Analysis period for electricity and gas results were based on usage during period January 1, 2019 – January 1, 2020.
- In some cases, multiple meters were associated with a single facility or asset type. For such facilities, to generate estimates of facility-wide energy use, energy usage and cost values were aggregated by summing energy usage and cost values for each day in the analysis period.
- GHG emissions data used in this analysis were calculated using the conversion: 517 lb CO<sub>2</sub>/MWh + 11.91 lbs CO<sub>2</sub>/therm [1,2].

Certain properties did not have energy usage data for the range of analysis or could not be matched to gas or electricity usage data and were excluded:

- 1872 NEWBURY RD - Service Account #2771520
-

## 2. Total Energy Portfolio

- Total Energy Portfolio data represents an analysis of each agency facility type annual energy costs, annual energy consumption (kWh and therms), GHG Emissions and total annual energy costs for agency facility types based on MMBtus.
- The following agency assets are included in the Total Energy Portfolio:
  - Water Pumping
  - Street & Traffic Lights
  - Buildings
  - Outdoor & Parks Lights



## 3. Building Summary

- Building summary data is weather normalized and includes the following metrics for the top ten highest energy-consuming agency buildings' (total annual energy costs): annual energy costs and annual energy consumption (kWh and therms).



---

## Endnotes

[1] Corporate Responsibility Report. (2015). In Southern California Edison. Retrieved from [https://www.sce.com/wps/wcm/connect/c0fceef5-e04a-4287-8301-8e66e3e5fbac/2014\\_Corporate+Responsibility+Report\\_FINAL+single-page.pdf?MOD=AJPERES&ContentCache=NONE](https://www.sce.com/wps/wcm/connect/c0fceef5-e04a-4287-8301-8e66e3e5fbac/2014_Corporate+Responsibility+Report_FINAL+single-page.pdf?MOD=AJPERES&ContentCache=NONE)

[2] Adams, L.S., Nicols, M.D., Goldstene, J. N. (2008). Climate Change Scoping Plan. In California Air Resources Board. Retrieved from [https://www.arb.ca.gov/cc/scopingplan/document/appendices\\_volume2.pdf](https://www.arb.ca.gov/cc/scopingplan/document/appendices_volume2.pdf)

[3] Based on SoCalREN previous project estimates.

---