# Comparative Energy Analysis Report

Prepared for

Moorpark Unified School District

Prepared by

The Energy Coalition

On Behalf of

The SoCalREN Public Agency Program

Date

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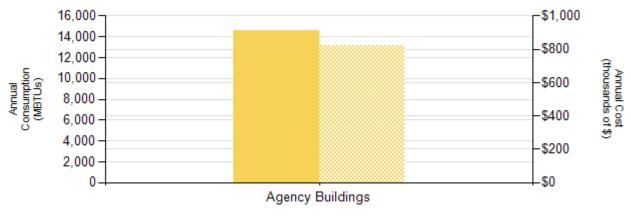


#### 1. Overview

This report is intended to provide a framework for Moorpark Unified School District, referred to as "Agency" herein, to identify inefficient facilities and prioritize further investigation and energy efficiency retrofit work. This analysis uses only energy billing data provided by the Agency to provide an overview of energy use in Agency facilities and to help identify individual locations with the potential for energy efficiency improvements. Many factors affect the energy use in different facilities, including age, type of heating, ventilation, air conditioning (HVAC), and lighting equipment, facility occupancy and hours, plug loads, and climate. Once individual facilities 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. Further analysis can identify inefficient equipment, malfunctioning equipment, equipment not operating as designed, or suboptimal operational procedures.

## 2. Total Energy Portfolio

## Your Total Annual Energy Cost is \$825,134



Annual Energy Costs

100.0%

Agency Buildings

Key: Solid color represents consumption, hashed color represents cost

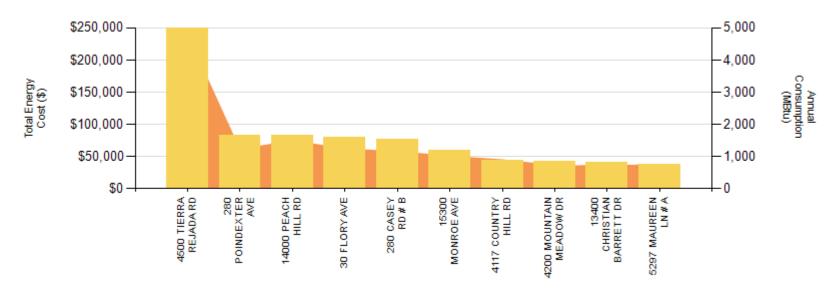
Agency Energy Use	Annual Electric Cost (\$)	Annual Electric Consumption (kWh)	Annual Electric Rate (\$/kWh)	Annual GHG Emissions (lbs CO2)
Agency Buildings	\$825,134.00	4,288,657	\$0.19	2,217,236

Table 1: Total Energy Portfolio

## 3. Building Summary



Your Annual Energy Cost for Buildings is \$825,134 and 100.0% of the Total Cost.



Key: Displays the top 10 consuming Buildings. Columns represent Cost, Area represents Consumption.

Name	Address	Annual Electric Consumption (kWh)	Annual Electric Cost (\$)	Annual Electric Rate (\$/kWh)
4500 TIERRA REJADA RD	4500 TIERRA REJADA RD	1,398,419	\$249,058	\$0.18
280 POINDEXTER AVE	280 POINDEXTER AVE	359,382	\$82,694	\$0.23
14000 PEACH HILL RD	14000 PEACH HILL RD	437,113	\$82,614	\$0.19
30 FLORY AVE	30 FLORY AVE	363,849	\$79,210	\$0.22
280 CASEY RD # B	280 CASEY RD # B	339,372	\$77,241	\$0.23
15300 MONROE AVE	15300 MONROE AVE	296,509	\$59,984	\$0.20
4117 COUNTRY HILL RD	4117 COUNTRY HILL RD	263,799	\$43,580	\$0.17
4200 MOUNTAIN MEADOW DR	4200 MOUNTAIN MEADOW DR	210,511	\$42,565	\$0.20
13400 CHRISTIAN BARRETT DR	13400 CHRISTIAN BARRETT DR	211,216	\$41,060	\$0.19
5297 MAUREEN LN # A	5297 MAUREEN LN # A	219,034	\$37,214	\$0.17

Table 2: Building Summary



## 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 SCE electric tariffs
- For more information about the utility tariffs included in this analysis refer to:
  - SCE Electric Tariff: <u>For more information about Southern California Edison tariffs</u>; https://www.sce.com/wps/portal/home/regulatory/tariff-books/rates-pricing-choices
- All electricity results were based on usage during period April 30, 2017 April 30, 2018.
- 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 and energy intensity, energy usage and cost values were aggregated by summing the average daily 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 CO2/MWh + 11.91 lbs CO2/therm <sup>1,2</sup>.



## 2. Total Energy Portfolio

- Total Energy Portfolio data represents an analysis of each agency facility type annual energy costs, annual energy cost, annual energy consumption (kWh), GHG Emissions and total annual energy costs for agency facility types based on MBtus.
- The following agency assets are included in the Total Energy Portfolio:
  - o Buildings



### 3. Building Summary

 Building summary data represents an analysis of the top ten highest energy consuming agency buildings annual energy costs, annual energy cost, annual energy consumption (kWh), GHG Emissions, and total annual energy costs based on MBtus.





#### **Endnotes**

<sup>1</sup> 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

<sup>2</sup> 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

<sup>3</sup> Based on SoCalREN previous project estimates.

