# Comparative Energy Analysis Report

Prepared for

Metrolink

Prepared by

The Energy Coalition

On Behalf of

The Southern California Regional Energy Network Public Agency Project Delivery Programs

Date

8/14/19



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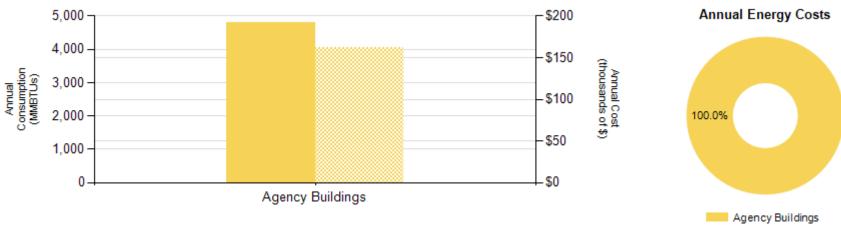
#### 1. Overview

This report is intended to provide a framework for Metrolink, referred to as "Agency" herein, to identify inefficient facilities and infrastructure and prioritize further investigation and energy efficiency retrofit work. This analysis uses only 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). Any questions about this report can be directed to your assigned Project Manager, Ken Gonzales at kgonzales@energycoalition.org.

## 2. Total Energy Portfolio

## Your Total Annual Energy Cost is \$161,590



Key: Solid color represents consumption, hashed color represents cost

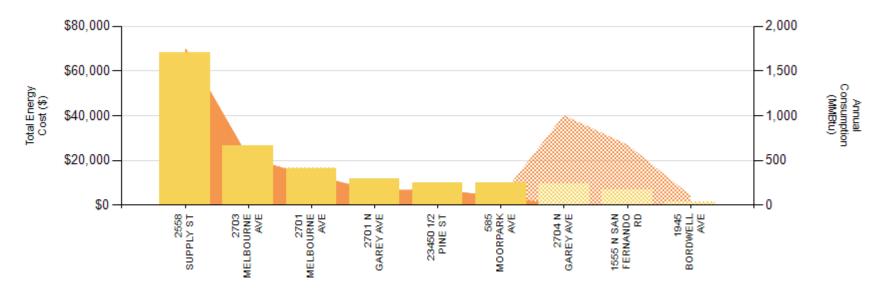
Table 1: Total Energy Portfolio (Annual)

Agency Energy Use	Electric Consumption (kWh)	Electric Cost (\$)	Gas Consumption (therms)	Gas Cost (\$)	Total Energy Consumption (MBTUs)	Total Energy Cost (\$)	GHG Emissions (lbs CO2)
Agency Buildings	883,136	\$143,090	17,881	\$18,499	4,799,644	\$161,590	456,581

## 5. Building Summary



Your Annual Energy Cost for Buildings is \$161,590 and 100.0% of the Total Cost.



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

Table 4: Building Summary (Annual)

	Address	Electric Consumption (kWh)			Consumption		Gas Rate (\$/therm)	Disadvantaged Community (Y/N)
SOCAL REGIONAL RAIL AUTHORITY	2558 SUPPLY ST	511,373	\$68,166	\$0.13	0	\$0	\$0.00	Y
SOCAL REGIONAL RAIL AUTHORITY	2703 MELBOURNE AVE	152,121	\$26,621	\$0.18	0	\$0	\$0.00	Υ

SOCAL REGIONAL RAIL AUTHORITY	2701 MELBOURNE AVE	95,356	\$16,430	\$0.17	129	\$357	\$2.76	Υ
SOCAL REGIONAL RAIL AUTHORITY	2701 N GAREY AVE	47,464	\$11,899	\$0.25	0	\$0	\$0.00	Υ
SOCAL REGIONAL RAIL AUTHORITY	23450 1/2 PINE ST	50,239	\$10,093	\$0.20	0	\$0	\$0.00	N
SOCAL REGIONAL RAIL AUTHORITY	585 MOORPARK AVE	26,584	\$9,881	\$0.37	0	\$0	\$0.00	N
SOCAL REGIONAL RAIL AUTHORITY	2704 N GAREY AVE	0	\$0	\$0.00	10,020	\$9,746	\$0.97	Υ
BOMBARDIER TRANSPORTATION	1555 N SAN FERNANDO RD	0	\$0	\$0.00	6,710	\$7,067	\$1.05	Y
SOCAL REGIONAL RAIL AUTHORITY	1945 BORDWELL AVE	0	\$0	\$0.00	1,022	\$1,329	\$1.30	Y

### 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
  - 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 and gas results were based on usage during period June 1, 2018 May 31, 2019.
- 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 CO2/MWh + 11.91 lbs CO2/therm [1,2].

#### 2. Total Energy Portfolio

- Total Energy Portfolio data represents an analysis of each agency facility type annual energy costs, 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 Water Pumping
  - Street & Traffic Lights
  - o Buildings
  - Outdoor & Parks Lights

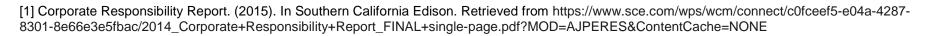


#### 3. Building Summary

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



#### **Endnotes**



- [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
- [3] Based on SoCalREN previous project estimates.