
ENERGY EXPENDITURE PLAN



Franklin Elementary School

Franklin Elementary School

2400 Montana Avenue

Santa Monica, CA 90403

P: (310) 828-2814

PREPARED FOR:

California Energy Commission

Energy Division

Local Assistance and Financing Office, MS-23

1516 Ninth Street

Sacramento, Ca 95814



PREPARED ON:
5/17/2017

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Section 1: Facility Background

Franklin Elementary School

Franklin Elementary School is located at 2400 Montana Avenue in Santa Monica, CA 90403. It is an elementary school serving approximately 831 students ranging from grades K-5 and provides instruction using 7 permanent buildings and 12 portable buildings. The total amount of occupied space is 70,432 SF. For a complete map of the campus, see Appendix A.

The campus operates on an academic calendar that begins in late August and ends in late June. Winter Break is a two week break that begins at the end of December and goes to the first week of January. Spring Break is a one week break that begins in early-April. School is in session beginning at 8:27 a.m. and continuing until 3:00 p.m., Monday through Friday. For a complete academic calendar and bell schedule, refer to Appendix A.



Utility Costs and Rate Schedules

The Franklin Elementary School facilities receive electricity services from Southern California Edison (SCE) and gas services from SoCalGas (SCG). Monthly utility data is considered separately for each utility meter and each energy type (electricity, natural gas, propane, diesel, and water).

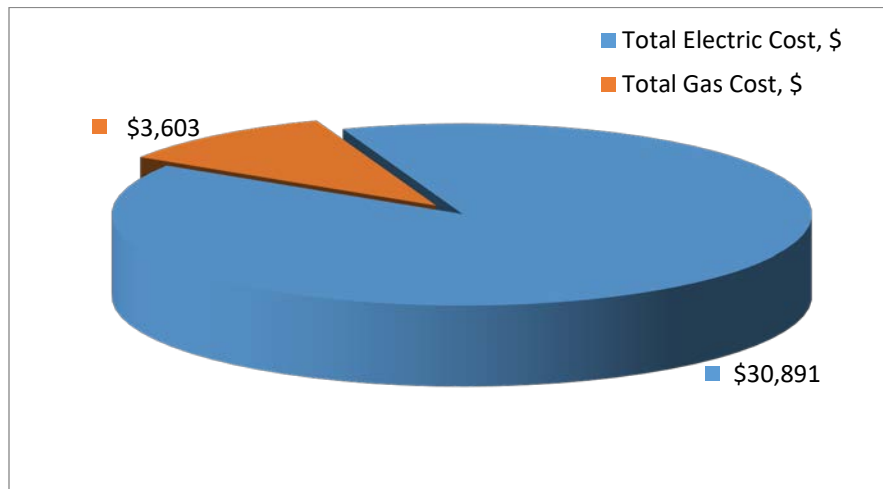
The following is a list of the meters associated with each energy type utilized at Franklin Elementary School:

Account Number	Meter Number	Rate Schedule
3-003-7165-62	222013-753452	TOU-GS-1-B
3-001-1511-93	259000-014793	TOU-GS-2-R

Account Number	Meter Number	Rate Schedule
314038900	14559549	GN-10
335038900	10811469	GN-10

The site also utilizes a 151.3 kW photovoltaic array, installed in 2013, that produced 219,413 kWh from July, 2015 to June, 2016.

The utility data provided uses the data recovered from each of these meters during the period of July, 2015 to June, 2016. The cost comparison of Franklin Elementary School’s gas and electricity costs can be seen in the table below:



Benchmarking

As part of the site evaluation we determined the Energy Utilization Analysis (EUA) to provide important information about the energy usage of the school. Listed in the table below is the Benchmarking Report for Franklin Elementary School:

Energy Use Intensity Calculator					
Electricity		Natural Gas		Other Fuels	
1.55	<i>W/SF</i>	0.06	<i>Therms/SF</i>	0.00	<i>Gals/SF</i>
5.67	<i>kWh/SF</i>	\$ 0.05	<i>Cost/SF</i>	\$ 0.00	<i>Cost/SF</i>
\$ 0.44	<i>Cost/SF</i>				
Energy Costs/SF/Year		\$ 0.49	Energy Use(Kbtu)/SF/Year		66.35

The main purpose of this report is to assess the current energy usage of Franklin Elementary School. Energy consumption is analyzed compared to the site's actual weather data expressed in Cooling Degree Days (CDD) & Heating Degree Days (HDD). Graphs comparing the energy consumption to the CDD and HDD can be found in Appendix B.

The Baseline Energy Utilization Analysis (EUA) report compiles the monthly energy data from all meters on site. The EUA is useful in identifying critical energy consuming benchmarks like kWh/SF, kBtu/SF, and Cost/SF for each fuel type and individual school site. This report is a great resource to have for identifying the lowest energy performing schools. The report ranking will present the schools that consume the most energy when compared to others within the district or other comparable districts. The considered school is rated at 5.67 kWh/SF/yr.

The baseline EUA summary of all the meters for Franklin Elementary School can be found in Appendix B.

Section 2: Energy Efficiency Measures (EEM) Summary

Energy savings are based on the difference between annual energy use under existing conditions and annual energy use under proposed conditions. These annual energy savings, and the corresponding annual energy cost savings, are used to determine the cost-effectiveness of the projects. Demand savings are calculated as the different between the electricity demand of the existing equipment and electricity demand of proposed equipment. The table below shows the Energy Efficiency Measures proposed and the corresponding savings associated with them.

EEM Number	Energy Efficiency Measure	Demand Savings (kW)	Electricity Savings (kWH/yr)	Natural Gas or Fuel Savings (therms or gal/yr)	Annual Cost Savings (\$)	Rebates and Grants (\$)	Installed Measure Cost (\$)
Lighting	Lighting – Interior Fixture Retrofit	31	57,329		\$9,861.00	\$72,000.00	\$144,655.00
Lighting	Lighting – Exterior Fixture Retrofit	4	14,209		\$2,444.00	\$8,000.00	\$34,605.00
Lighting	Lighting – Retrofit Interior Lamps to LED	0	648		\$112.00	\$0.00	\$1,554.00
Lighting	Lighting – LED Exit Signs	0	666		\$115.00	\$0.00	\$1,739.00
	Totals	35	72,852		\$12,532.00	\$80,000.00	\$182,553.00

Lighting Systems Retrofit

A significant portion of a facilities electrical costs comes from lighting, making lighting retrofits one of the quickest and simplest methods for reducing utility costs. In most cases the retrofits will result in improved light quality and reduced maintenance costs in addition to the estimated energy savings.

The method used for calculating energy savings is outlined below:

$$\text{Annual Saving, } \$ = \frac{(\text{Existing Watts} - \text{New Watts})}{1000} \times \text{Hours/Year} \times \text{Utility Rate} \times N$$

Where,

- Existing Watts* – Wattage rating for the existing (Baseline) light fixture
- New Watts* – New wattage rating for the existing light fixture
- Hours/Year* – Annual number of “burn-hours” (run hours for different areas; see detailed audit in Appendix C)
- Utility Rate* – Actual weighted composite utility rate, \$/kWh
- N* – Number of light fixtures of the particular type (see below & in Appendix C for the actual quantities).

The current interior lighting systems in the Franklin Elementary School buildings consist of a combination of 1st generation T-8, compact fluorescent, and incandescent lamps and fixtures. Following examination of the data collected, a full retrofit of the lighting system with LED lamps and fixtures is recommended.

The current exterior lighting systems in the Franklin Elementary School buildings consist of compact fluorescent, 1st generation T-8, high pressure sodium, and incandescent lamps and fixtures. Following examination of the data collected, a full retrofit of the lighting system with LED lamps and fixtures is recommended.

The current exit signs in Franklin Elementary School buildings consist of old compact fluorescent exit signs. Following examination of the data collected, a full retrofit of the exit signs with new LED is recommended.

This retrofit will generate more saving, electrical demand reduction and better payback than other Energy Conservation Measures such as HVAC replacements. Upon installment of the new system, the campus will conserve 35.66 kW and 72,852 kWh per year. The cost savings per year will be approximately \$12,530.59. A full detailed audit of the current lighting system implemented in the entire campus can be found in Appendix C.

Appendix – A

School Schedules and Maps



Daily Bell Schedule and Academic Calendar

Franklin School: 2016-2017 Bell Schedule

Kindergarten Regular Day (M,T,Th,F)		Kindergarten Minimum Days and Wednesdays	
8:27	Warning Bell	8:27	Warning Bell
8:30	Second Bell-School Begins	8:30	Second Bell-School Begins
8:30-11:25	Instructional Time	8:30-11:30	Instructional Time
11:25-12:10	Lunch	11:30	Dismissal
12:10-1:30	Instructional Time		
1:30	Dismissal		

First Grade Regular Day (M,T,Th,F)		First Grade Minimum Days and Wednesdays	
8:27	Warning Bell	8:27	Warning Bell
8:30	Second Bell-School Begins	8:30	Second Bell-School Begins
8:30-9:45	Instructional Time	8:30-9:45	Instructional Time
9:45-9:57	Recess	9:45-9:55	Recess
9:57-11:50	Instructional Time	9:55-11:50	Instructional Time
11:50-12:28	Lunch	11:50-12:35	Lunch
12:28-1:50	Instructional Time	12:35-1:30	Instructional Time
1:50-2:00	Recess	1:30	Dismissal
2:00-2:45	Instructional Time		
2:45	Dismissal		

Second Grade Regular Day (M,T,Th,F)		Second Grade Minimum Days and Wednesdays	
8:27	Warning Bell	8:27	Warning Bell
8:30	Second Bell-School Begins	8:30	Second Bell-School Begins
8:30-9:45	Instructional Time	8:30-9:45	Instructional Time
9:45-9:57	Recess	9:45-9:55	Recess
9:57-12:00	Instructional Time	9:55-12:00	Instructional Time
12:00-12:38	Lunch	12:00-12:45	Lunch
12:38-1:50	Instructional Time	12:45-1:30	Instructional Time
1:50-2:00	Recess	1:30	Dismissal
2:00-2:45	Instructional Time		
2:45	Dismissal		

Third Grade Regular Day (M,T,Th,F)		Third Grade Minimum Days and Wednesdays	
8:27	Warning Bell	8:27	Warning Bell
8:30	Second Bell-School Begins	8:30	Second Bell-School Begins
8:30-10:00	Instructional Time	8:30-10:00	Instructional Time
10:00-10:15	Recess	10:00-10:15	Recess
10:15-12:15	Instructional Time	10:15-12:15	Instructional Time

12:15-1:05	Lunch	12:15-1:05	Lunch
1:05-3:00	Instructional Time	1:05-1:30	Instructional Time
3:00	Dismissal	1:30	Dismissal

Fourth Grade Regular Day (M,T,Th,F)		Fourth Grade Minimum Days and Wednesdays	
8:27	Warning Bell	8:27	Warning Bell
8:30	Second Bell-School Begins	8:30	Second Bell-School Begins
8:30-10:00	Instructional Time	8:30-10:00	Instructional Time
10:00-10:15	Recess	10:00-10:15	Recess
10:15-12:30	Instructional Time	10:15-12:30	Instructional Time
12:30-1:15	Lunch	12:30-1:10	Lunch
1:15-3:00	Instructional Time	1:10-1:30	Instructional Time
3:00	Dismissal	1:30	Dismissal

Fifth Grade Regular Day (M,T,Th,F)		Fifth Grade Minimum Days and Wednesdays	
8:27	Warning Bell	8:27	Warning Bell
8:30	Second Bell-School Begins	8:30	Second Bell-School Begins
8:30-10:00	Instructional Time	8:30-10:00	Instructional Time
10:00-10:15	Recess	10:00-10:15	Recess
10:15-12:30	Instructional Time	10:15-12:30	Instructional Time
12:30-1:15	Lunch	12:30-1:10	Lunch
1:15-3:00	Instructional Time	1:10-1:30	Instructional Time
3:00	Dismissal	1:30	Dismissal

SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT
2016-2017 District Calendar

Approved by the Board of Education: 3/19/15

July 2016					August 2016					September 2016				
M	T	W	Th	F	M	T	W	Th	F	M	T	W	Th	F
4	5	6	7	8	1	2	3	4	5	5	6	7	8	9
11	12	13	14	15	8	9	10	11	12	12	13	14	15	16
18	19	20	21	22	15	16	17	18	19	19	20	21	22	23
25	26	27	28	29	22	23	24	25	26	26	27	28	29	30
29	30	31												

October 2016					November 2016					December 2016				
M	T	W	Th	F	M	T	W	Th	F	M	T	W	Th	F
4	5	6	7	8	1	2	3	4	5	5	6	7	8	9
10	11	12	13	14	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	14	15	16	17	18	19	20	21	22	23
24	25	26	27	28	21	22	23	24	25	26	27	28	29	30
31					28	29	30							

January 2017					February 2017					March 2017				
M	T	W	Th	F	M	T	W	Th	F	M	T	W	Th	F
2	3	4	5	6	1	2	3	4	5	1	2	3	4	5
10	11	12	13	14	6	7	8	9	10	6	7	8	9	10
15	16	17	18	19	13	14	15	16	17	13	14	15	16	17
23	24	25	26	27	20	21	22	23	24	20	21	22	23	24
30	31				27	28	29	30	31	27	28	29	30	31

April 2017					May 2017					June 2017				
M	T	W	Th	F	M	T	W	Th	F	M	T	W	Th	F
3	4	5	6	7	1	2	3	4	5	5	6	7	8	9
10	11	12	13	14	8	9	10	11	12	12	13	14	15	16
17	18	19	20	21	15	16	17	18	19	19	20	21	22	23
24	25	26	27	28	22	23	24	25	26	26	27	28	29	30
					29	30	31							

- Legend:**
- = First/Last Day of School
 - = Legal Holiday
 - = Local Holiday (schools/offices closed)
 - = School Recess (classes not in session)
 - = Pupil Free Day (no school for students)
 - = Elem. Pupil Free Day (no school -elem students)
 - = Sec. Pupil Free Day (no school -sec students)
 - = Minimum Day for all students
 - = Certificated Staff Development Days



Employee Work Dates:
 Sept. 1, 2016-June 30, 2017: * Classified 11-Month
 *must work 22 days in July/August, 2016
 Aug. 8, 2016-June 21, 2017: Classified 10 +10
 Aug. 15, 2016-June 14, 2017: Classified 10-Month
 Aug. 17, 2016-June 9, 2017: Certificated/184 Days
 Aug. 18, 2016-June 9, 2017: Certif. CDS/183 Days
 Aug. 19, 2016-June 9, 2017: Classified School Year

Teacher Work Days: 184
Student Days: 180
 1st Semester: Aug. 22 - Dec. 23 (184 days)
 2nd Semester: Jan. 10 - June 9 (96 days)

First Day of Instruction:
 - Monday, August 22, 2016

Last Day of Instruction:
 - Friday, June 9, 2017

Certificated Staff Development Days:
 (No Students)
 - Wednesday, August 17, 2016
 - Thursday, August 18, 2016

HOLIDAYS:
 July 4: 4th of July Holiday
 Sept. 5: Labor Day Holiday
 Oct. 3: Local Holiday
 Oct. 12: Local Holiday
 Nov. 11: Veteran's Day Holiday
 Nov. 24: Thanksgiving Holiday
 Nov. 25: Legal Holiday (Admission Day observ)
 Dec. 26, 27: Winter Holidays
 Dec. 30, Jan. 2: New Years Holidays
 Jan. 16: Martin Luther King, Jr. Holiday
 Feb. 20: Presidents' Day Holiday
 Apr. 7: Local Holiday
 Apr. 14: Legal Holiday (Lincoln's 184th observ)

SCHOOL RECESSES:
 Dec. 26 - Jan. 6: Winter Recess
 Apr. 3 - Apr. 14: Spring Recess

PUPIL-FREE DAYS:
 Aug. 17: All Students
 Aug. 18: All Students
 Aug. 19: All Students
 Nov. 4: **Elementary Students Only**
 Jan. 9: **Secondary Students Only**

MINIMUM DAYS:
 TK/Kindergarten: Aug. 22, Aug. 23, 30, Nov. 7, 8, 9, 10, 23, Dec. 23, May 25, June 9
 Elementary: Aug. 22, 30, Sept. 6, Nov. 7, 8, 9, 10, 23, Dec. 23, May 25, June 9

Santa Monica Middle Schools: Sept. 8, Nov. 23, Dec. 23, Mar. 31, Apr. 27, June 8, June 9, + 1 discretionary
 Malibu MS/HS: Sept. 8, 15, Nov. 23, Dec. 21, 22, 23, March 9, June 6, 7, 8 + 1 discretionary

Samohi: Sept. 15, Dec. 20, 21, 22, 23, Mar. 9, June 5, 6, 7, 8
 Olympic HS: Sept. 20, Nov. 23, Dec. 23, May 2, June 1, 2, 5, 6, 7, 8, 9

Back to School Nights:

Tues. Aug. 30 - Elem TK-2
 Tues. Sept. 6 - Elem 3-5
 Thurs. Sept. 8 - Middle School
 Thurs. Sept. 15 - High School
 Tues. Sept. 20 - Olympic HS

Open House Nights:

Thurs. May 25 - Elementary
 Thurs. April 27 - SM Middle Schools
 Thurs. March 9 - Malibu MS/HS and Samohi
 Tues. May 2 - Olympic HS

Promotions/Graduations:

Wed. June 7 - Elementary
 Fri. June 9 - Middle School
 Thurs. June 8 - MHS 2:00 pm
 - Samohi 5:30 pm
 Wed. May 31 - Olympic HS 5:30 pm

Parent Conference Days (TK-5):

Nov. 4 - Nov. 10, 2016

Testing Dates: *expected, not confirmed
 AP Testing: May 1 - May 12, 2017
 STAR: April 20 - May 18, 2017
 SBAC: April 20 - May 29, 2017

TK/Kindergarten Roundup:

Jan. 30 - Feb. 10, 2017

Final Exams:

Malibu MS/HS: Dec. 21-23, 2016
 June 6-8, 2017
 Samohi: Dec. 20-23, 2016
 June 5-8, 2017

Summer School:

HS: June 19-July 14, 2017
 Credit Recovery: June 19-Jul 21, 2017
 ES: June 19-July 14, 2017

TK-5 Grading Periods:

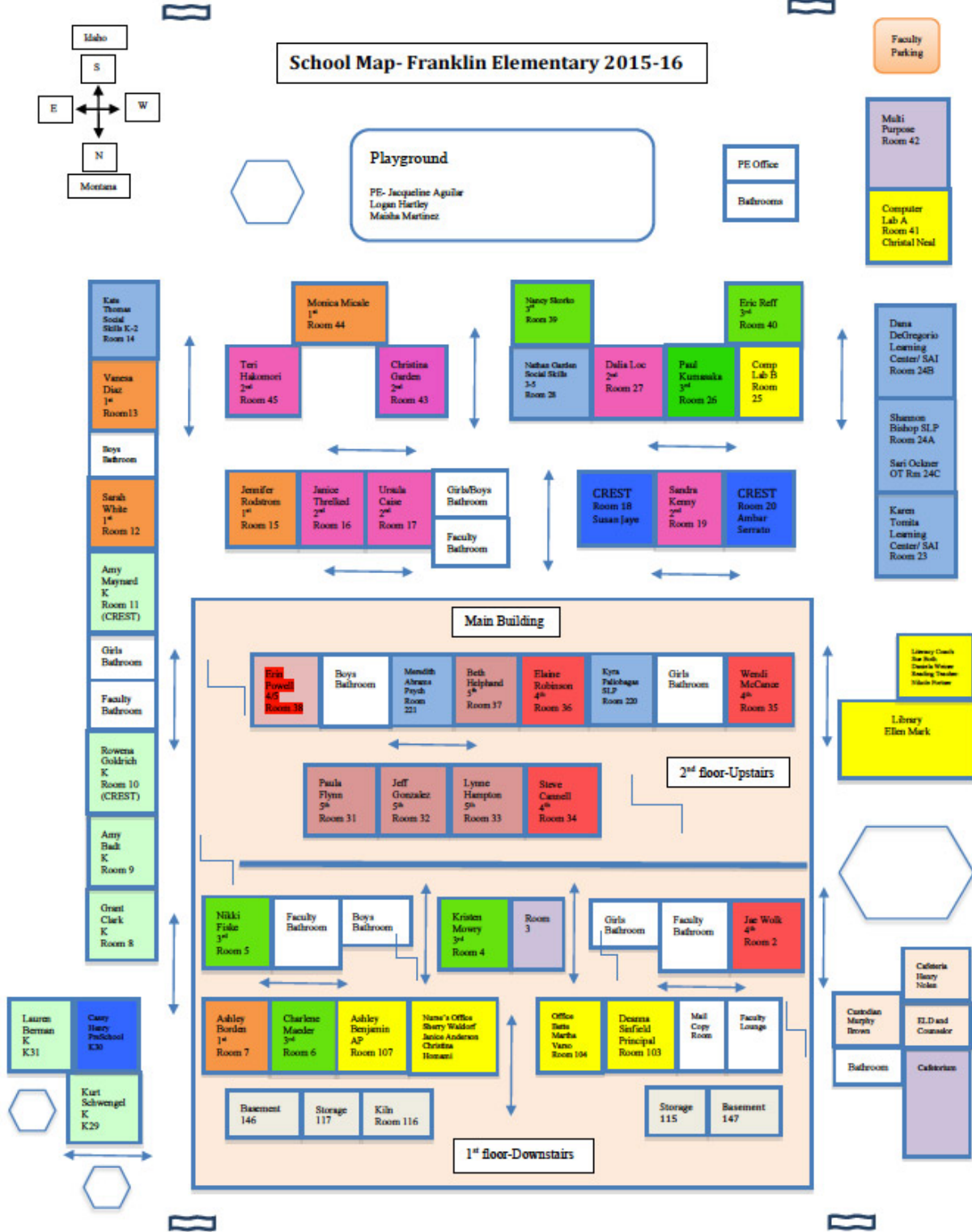
Conference: Nov. 4, 2016
 Winter Grading: Feb. 10, 2017
 Spring Grading: Feb. 9, 2017

6-12 Grading Periods:

Aug. 22 - Sept. 30, 2016
 Oct. 4 - Nov. 10, 2016
 Nov. 14 - Dec. 23, 2016
 Jan. 9 - Feb. 24, 2017
 Feb. 27 - April 28, 2017
 May 1 - June 9, 2017

Revised
 3/5/15

Franklin Elementary School Map



Appendix – B

Energy Utilization Analysis

Customer Name: **Santa Monica-Malibu USD**

Facility Name: **Franklin Elementary**

Elec Utility Name: **SCE**

Natural Gas Utility Name: **SCG**

Facility Location: 2400 Montana Avenue, Santa Monica, CA

Sq. Ft. (conditioned space): 70,432

Billing Period

FROM: Jul-15

TO: Jun-16

Elec Utility Name: SCE			Natural Gas Utility Name: SCG		
Account #	Meter #	Rate Schedule	Account #	Meter #	Rate Schedule
2-07-030-4431	222013-753452	TOU-GS-1-B	6307342052	14559549	GN-10-NON-RESIDENTIAL
2-35-579-8604	259000-014793	TOU-GS-2-R	6307342052	10811469	GN-10-NON-RESIDENTIAL
0	0	0	0	0	0
0	0	0	0	0	0

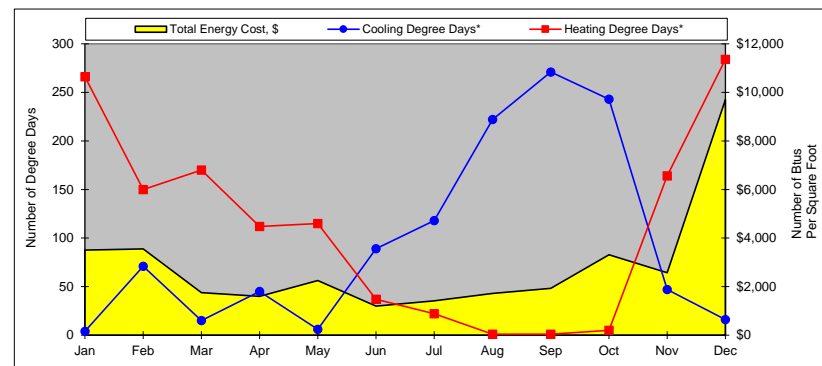
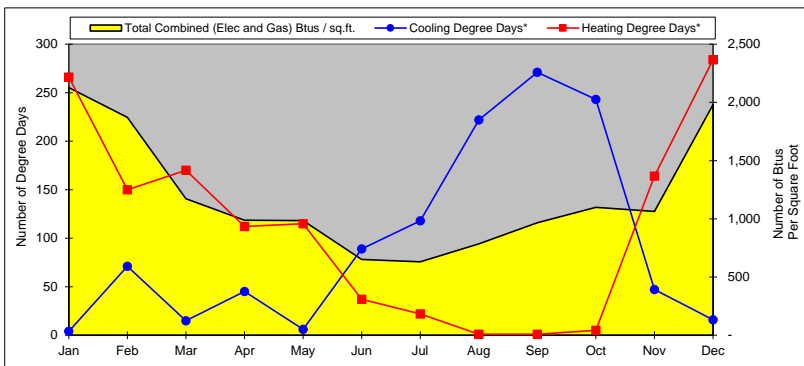
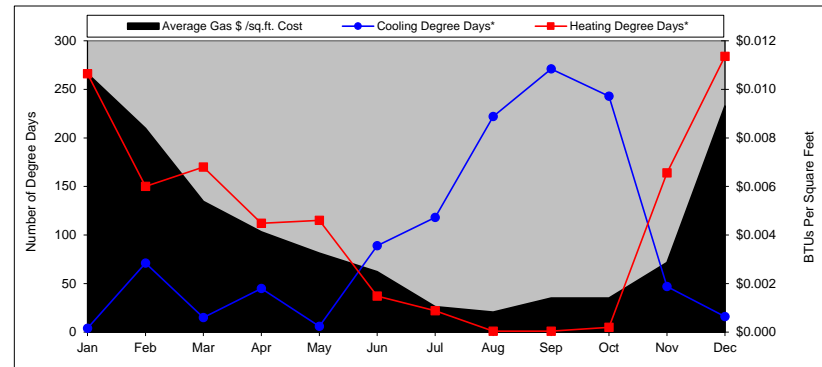
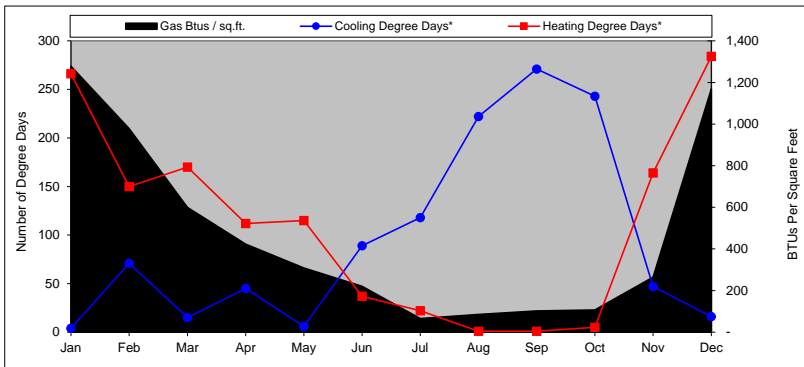
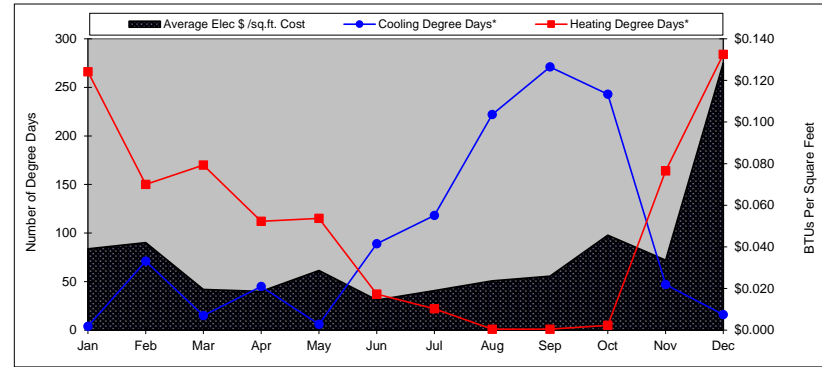
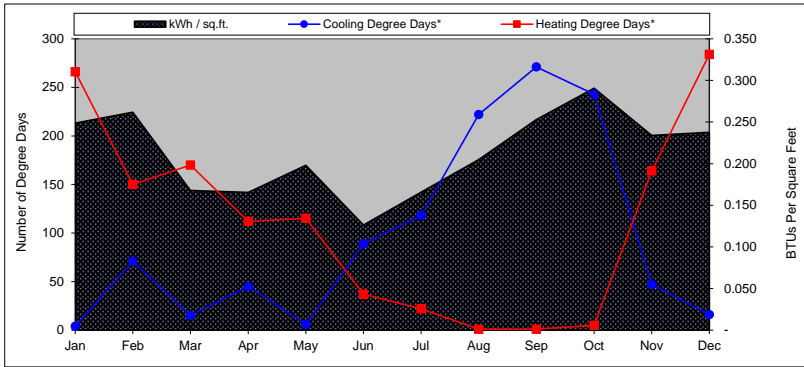
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL ANNUAL (Purchased from SCE)	TOTAL ANNUAL (Purchased from SCE and Solar Production)
Cooling Degree Days*	4	71	15	45	6	89	118	222	271	243	47	16	1,147	
Heating Degree Days*	266	150	170	112	115	37	22	1	1	5	164	284	1,327	
Days in Billing Period														
electric	32	32	30	29	32	30	29	29	32	30	33	30	368	
natural gas	35	30	29	31	30	30	30	31	30	28	30	32	366	
Electric Usage														
kWh per Billing Cycle	17,518	18,434	11,813	11,655	13,951	8,888	11,667	14,434	17,821	20,474	16,475	16,743	179,873	399,286
\$ for kWh Billed	\$2,752	\$2,818	\$1,255	\$1,310	\$2,017	\$1,020	\$1,109	\$1,446	\$1,581	\$3,095	\$2,224	\$8,885	\$29,512	
Max kW Billed	117	129	94	89	120	69	93	118	127	138	97	120	109	
\$ for kW Billed	\$0	\$146	\$120	\$0	\$0	\$0	\$229	\$219	\$247	\$116	\$145	\$157	\$1,379	
Total Electric Cost, \$	\$2,752	\$2,964	\$1,375	\$1,310	\$2,017	\$1,020	\$1,338	\$1,665	\$1,828	\$3,211	\$2,369	\$9,042	\$30,891	
Ave. Daily Electric Cost, \$	\$86	\$93	\$46	\$45	\$63	\$34	\$46	\$57	\$57	\$107	\$72	\$301	\$84	
Average \$/kWh Cost	\$0.157	\$0.161	\$0.116	\$0.112	\$0.145	\$0.115	\$0.115	\$0.103	\$0.157	\$0.157	\$0.144	\$0.540	\$0.172	
Average Elec \$ /sq.ft. Cost	\$0.039	\$0.042	\$0.020	\$0.019	\$0.029	\$0.014	\$0.019	\$0.024	\$0.026	\$0.046	\$0.034	\$0.128	\$0.439	
kWh / sq.ft.	0.249	0.262	0.168	0.165	0.198	0.126	0.166	0.205	0.253	0.291	0.234	0.238	2.55	5.67
Natural Gas Usage														
Therms per Billing Cycle	900	689	422	298	217	155	46	60	72	75	186	823	3,943	
Total Gas Cost, \$	\$750	\$591	\$379	\$291	\$229	\$175	\$74	\$58	\$99	\$99	\$202	\$656	\$3,603	
Ave. Daily Gas Cost, \$	\$21	\$20	\$13	\$9	\$8	\$6	\$2	\$2	\$3	\$4	\$7	\$21	\$10	
Average \$/therm Cost	\$0.833	\$0.858	\$0.898	\$0.977	\$1.055	\$1.129	\$1.609	\$0.967	\$1.375	\$1.320	\$1.086	\$0.797	\$0.914	
Average Gas \$ /sq.ft. Cost	\$0.011	\$0.008	\$0.005	\$0.004	\$0.003	\$0.002	\$0.001	\$0.001	\$0.001	\$0.001	\$0.003	\$0.009	\$0.051	
Gas Btus / sq.ft.	1,278	978	599	423	308	220	65	85	102	106	264	1,169	5,598	
Total Energy Usage														
ombined (Elec and Gas) Btus / sq.ft.	2,127	1,872	1,172	988	984	651	631	785	966	1,099	1,062	1,980	14,315	
Total Energy Cost, \$	\$3,502	\$3,555	\$1,754	\$1,601	\$2,246	\$1,195	\$1,412	\$1,723	\$1,927	\$3,310	\$2,571	\$9,698	\$34,494	
Ave. Energy \$/sq.ft./period	\$0.05	\$0.05	\$0.02	\$0.02	\$0.03	\$0.02	\$0.02	\$0.02	\$0.03	\$0.05	\$0.04	\$0.14	\$0.49	

* Notes:

- 1) Heating degree days and cooling degree days are based on 65 F.
- 2) Heating degree days and cooling degree days are based on Santa Monica weather data.

Customer: Santa Monica-Malibu USD
Building: Franklin Elementary

Energy Used from: Jul-15
to: Jun-16



Appendix – C

Lighting Systems Audit



1604	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		39	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	12		118	64	1816	1816	1.416	0.768	2571.456	1394.688	1176.768	\$	202.40
1605	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		28	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	10		112	64	1816	1816	1.12	0.64	2033.92	1162.24	871.68	\$	149.93
1606	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		27	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	10		112	64	1816	1816	1.12	0.64	2033.92	1162.24	871.68	\$	149.93
1607	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		26	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	10		112	64	1816	1816	1.12	0.64	2033.92	1162.24	871.68	\$	149.93
1608	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		25	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	10		112	64	1816	1816	1.12	0.64	2033.92	1162.24	871.68	\$	149.93
1609	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		40	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	12		112	64	1816	1816	1.344	0.768	2440.704	1394.688	1046.016	\$	179.91
1610	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		41	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	12		59	32	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$	101.20
1611	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		42	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	12		59	32	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$	101.20
1612	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		43	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	12		59	32	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$	101.20
1613	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	PE OFFICE		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	5		59	32	1816	1816	0.295	0.16	535.72	290.56	245.16	\$	42.17
1614	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	PE EXTERIOR		CF/4P-TRIP-42W-1L-EB-X-X	(LED)NEW DECO MEDIUM WALLPACK D414-LED-30-50-U	4		46	25	3650	3650	0.184	0.1	671.6	365	306.6	\$	52.74
1615	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		24	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	12		59	32	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$	101.20
1616	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	24A		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	12		59	32	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$	101.20
1617	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY		23	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	20		59	32	1816	1816	1.18	0.64	2142.88	1162.24	980.64	\$	168.67
1618	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	PORTABLE EXTERIOR		CF/2P-DOUB-26W-1L-MB-X-X	(LED)NEW DECO 20W PORCHLIGHT WALLPACK D411-LE	3		33	20	3650	3650	0.099	0.06	361.35	219	142.35	\$	24.48
1619	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	PORTABLE EXTERIOR		I/S-A19-60W-1L-NONE-X-X	(LED)NEW DECO WALLPACK CUTOFF VINCI-20-50-UNV-E	9		60	20	3650	3650	0.54	0.18	1971	657	1314	\$	226.01
1620	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	SCHOOL EXTERIOR		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	27		59	32	3650	3650	1.593	0.864	5814.45	3153.6	2660.85	\$	457.67
1621	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	PORTABLE EXTERIOR		HPS-MED-150W-1L-CWA-X-X	(LED)NEW DECO MEDIUM WALLPACK D414-LED-40-50-U	1		188	40	3650	3650	0.188	0.04	686.2	146	540.2	\$	92.91
1622	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	PORTABLE EXTERIOR		HPS-MOG-250W-1L-CWA-X-X	(LED)NEW DECO MEDIUM FLOOD D211-LED-60-50-UNV-T	2		295	60	3650	3650	0.59	0.12	2153.5	438	1715.5	\$	295.07
1623	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	REAR PARKING		HPS-MOG-250W-1L-CWA-X-X	(LED)NEW DECO AREA LIGHT D824-LED-60-50-UNV-LP-T	4		295	56	3650	3650	1.18	0.224	4307	817.6	3489.4	\$	600.18
1624	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	SCHOOL EXTERIOR		HPS-MOG-250W-1L-CWA-X-X	(LED)NEW DECO MEDIUM FLOOD D211-LED-60-50-UNV-T	3		295	60	3650	3650	0.885	0.18	3230.25	657	2573.25	\$	442.60
1625	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	SCHOOL EXTERIOR		CF/4P-DOUB-26W-1L-EB-X-X	(LED)NEW DECO 20W PORCHLIGHT WALLPACK D411-LE	3		27	20	3650	3650	0.081	0.06	295.65	219	76.65	\$	13.18
1626	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	SCHOOL EXTERIOR		LED/I-FLOOD-40W-INT-DRIV-X-X	EXCLUDED/NO CHANGE	1		43	43	3650	3650	0.043	0.043	156.95	156.95	0	\$	-
1627	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	LIBRARY		T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	41		112	64	1816	1816	4.592	2.624	8339.072	4765.184	3573.888	\$	614.71
1628	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	LIBRARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	6		59	32	1816	1816	0.354	0.192	642.864	348.672	294.192	\$	50.60
1629	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	SCHOOL EXTERIOR		I/S-R38-75W-1L-NONE-X-X	(LED)1L GREEN CREATIVE 12.5PAR30G4DIM940FL40, 16'	2		75	13	3650	3650	0.15	0.025	547.5	91.25	456.25	\$	78.48
1630	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	CAFETORIUM		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	16		59	32	1816	1816	0.944	0.512	1714.304	929.792	784.512	\$	134.94
1631	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	CAFETORIUM		I/S-A19-60W-1L-NONE-X-X	(LED) 1L GREEN CREATIVE A19 9W E26 4000K 850 LM DI	4		60	9	1816	1816	0.24	0.036	435.84	65.376	370.464	\$	63.72
1632	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	CAFETORIUM		T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	10		112	64	1816	1816	1.12	0.64	2033.92	1162.24	871.68	\$	149.93
1633	INTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	CAFETORIUM		T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	40		87	48	1816	1816	3.48	1.92	6319.68	3486.72	2832.96	\$	487.27
1634	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	SCHOOL EXTERIOR		HPS-MED-150W-1L-CWA-X-X	(LED)NEW DECO MEDIUM FLOOD D211-LED-80-50-UNV-T	1		188	80	3650	3650	0.188	0.08	686.2	292	394.2	\$	67.80
1635	EXTERIOR	NTA MONICA-MALIBU	FRANKLIN ELEMENTARY	SCHOOL EXTERIOR		HPS-MED-150W-1L-CWA-X-X	(LED)NEW DECO MEDIUM WALLPACK D414-LED-40-50-U	1		188	40	3650	3650	0.188	0.04	686.2	146	540.2	\$	92.91
														75.945	40.285	150268.244	77415.992	72852.252	\$	12,530.59

			kWh saved	\$ saved
EXTERIOR	5.87	1.97	3.893	2,444.03
EXIT SIGNS	0.084	0.008	0.076	114,510.72
INTERIOR	69.57	38.24	31.33	9,860.54
INCAND to LED	0.42	0.06	0.36	111.51
			35.66	72,852 \$
				12,530.59