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**ENERGY EXPENDITURE PLAN**

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***Will Rogers Learning Community***

2401 14<sup>th</sup> Street

Santa Monica, CA 90405

P: (310) 452-2364

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**PREPARED FOR:**

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California Energy Commission

Energy Division

Local Assistance and Financing Office, MS-23

1516 Ninth Street

Sacramento, Ca 95814



PREPARED ON:

5/16/2017

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## Section 1: Facility Background

### Will Rogers Learning Community

Will Rogers Learning Community is located at 2401 14<sup>th</sup> Street in Santa Monica, CA 90405. It is an elementary school serving approximately 563 students ranging from grades K-5 and provides instruction using 7 permanent buildings and 10 portable buildings. The total amount of occupied space is 53,157 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 8:25 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 Will Rogers Learning Community 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).

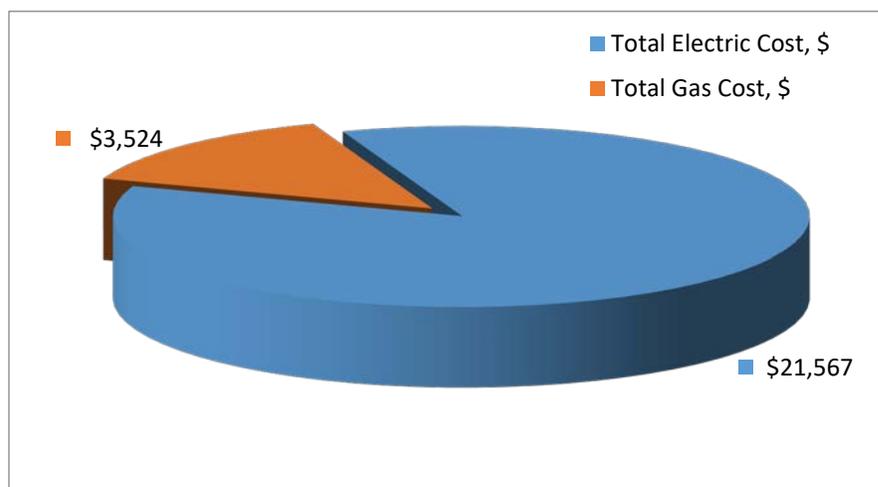
The following is a list of the meters associated with each energy type utilized at Will Rogers Learning Community:

Account Number	Meter Number	Rate Schedule
3-008-4676-09	259000-045581	TOU-GS-2-A
3-001-1511-70	259000-023634	TOU-GS-2-R

Account Number	Meter Number	Rate Schedule
1635048500	12586293	GN-10

Also located on site is a 112.7 kW photovoltaic array, installed in 2013, that produced 177,979 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 Will Rogers Learning Community’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 Will Rogers Learning Community:

Energy Use Intensity Calculator					
Electricity		Natural Gas		Other Fuels	
1.58	<i>W/SF</i>	0.08	<i>Therms/SF</i>	0.00	<i>Gals/SF</i>
6.06	<i>kWh/SF</i>	\$ 0.07	<i>Cost/SF</i>	\$ 0.00	<i>Cost/SF</i>
\$ 0.41	<i>Cost/SF</i>				
Energy Costs/SF/Year		\$ 0.47	Energy Use(Kbtu)/SF/Year		72.97

The main purpose of this report is to assess the current energy usage of Will Rogers Learning Community. 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 6.06 kWh/SF/yr.

The baseline EUA summary of all the meters for Will Rogers Learning Community 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	28	51,175		\$7,625.00	\$65,000.00	\$133,325.00
Lighting	Lighting – Exterior Fixture Retrofit	3	11,629		\$1,733.00	\$18,000.00	\$35,229.00
Lighting	Lighting – Retrofit Interior Lamps to LED	0	173		\$26.00	\$0.00	\$565.00
	<b>Totals</b>	31	62,977		\$9,384.00	\$83,000.00	\$169,119.00

## 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 Will Rogers Learning Community buildings consist of a combination of 1<sup>st</sup> generation T-8, T-12, 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 Will Rogers Learning Community buildings consist of compact fluorescent, 1<sup>st</sup> generation T-8, metal halide, and high pressure sodium lamps and fixtures. Following examination of the data collected, a full retrofit of the lighting system with LED lamps and fixtures 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 31.617 kW and 62,976 kWh per year. The cost savings per year will be approximately \$9,383.49. 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

7:55 .....Breakfast is served in the Cafeteria  
8:00 .....Library opens for students (Monday-Thursday)  
8:05 .....Scheduled teachers report to yard duty  
8:10 .....Yard opens  
8:22 .....First Bell Rings. Students line up for class.  
8:25 .....School begins Grades K-5 (**9:45 on Friday late starts**)

### **Recess Pre-school, TK, & Kindergarten**

9:00-9:30 .....Preschool Morning Recess  
9:30-10:00.....Preschool Morning Recess  
10:00-10:15 .....Kindergarten Recess  
10:20-10:35 .....TK Recess

### **Recess (Snack) Grades 1-3 Yards 1, 2, and 3**

9:45-10:00 .....Grades 1st, 2nd, & 3rd

### **Lunch**

11:25-12:10 .....4th & 5th  
eat 11:25-11:45 / play 11:45-12:10  
11:45-12:30 .....TK/K Lunch eat/play K benches & yard  
11:55-12:40 .....Grade 3 eat 11:55-12:15 / play 12:15-12:40  
12:15-1:00 .....Grade 1 eat 12:15-12:35 / play 12:35-1:00  
12:15-1:00 .....Grade 2 eat 12:20-12:40 / play 12:40-1:00

### **Recess Grades 4/5 Yards 2/3**

1:15-1:30 .....Grades 4th & 5th  
1:45 .....Kindergarten Dismissal  
CDS School Age Staff meets students on K yard  
2:55 .....Grades 1-2-3 Dismissal -- CDS School Age students walk to their classrooms  
3:00 .....Grades 4-5 Dismissal -- CREST students walk to their classrooms

## SPECIAL SCHEDULES

Pupil-Free Days mean that the children do not come to school. Minimum Days are school days that end early for the students. One Pupil-Free and five Minimum Days are scheduled for Parent-Teacher Conferences in November. Minimum Days for Back-to-School Nights, Open House and the last two days of school are also scheduled.

**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

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 (84 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's Day observed)  
 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 B'cay observed)  
 May 29: Memorial Day Holiday

**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 - MMS 2:00 pm  
 Thurs. June 8 - 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:**  
 ISS: June 19-July 14, 2017  
 Credit Recovery: June 19-Jul 21, 2017  
 ESY: June 19-July 14, 2017

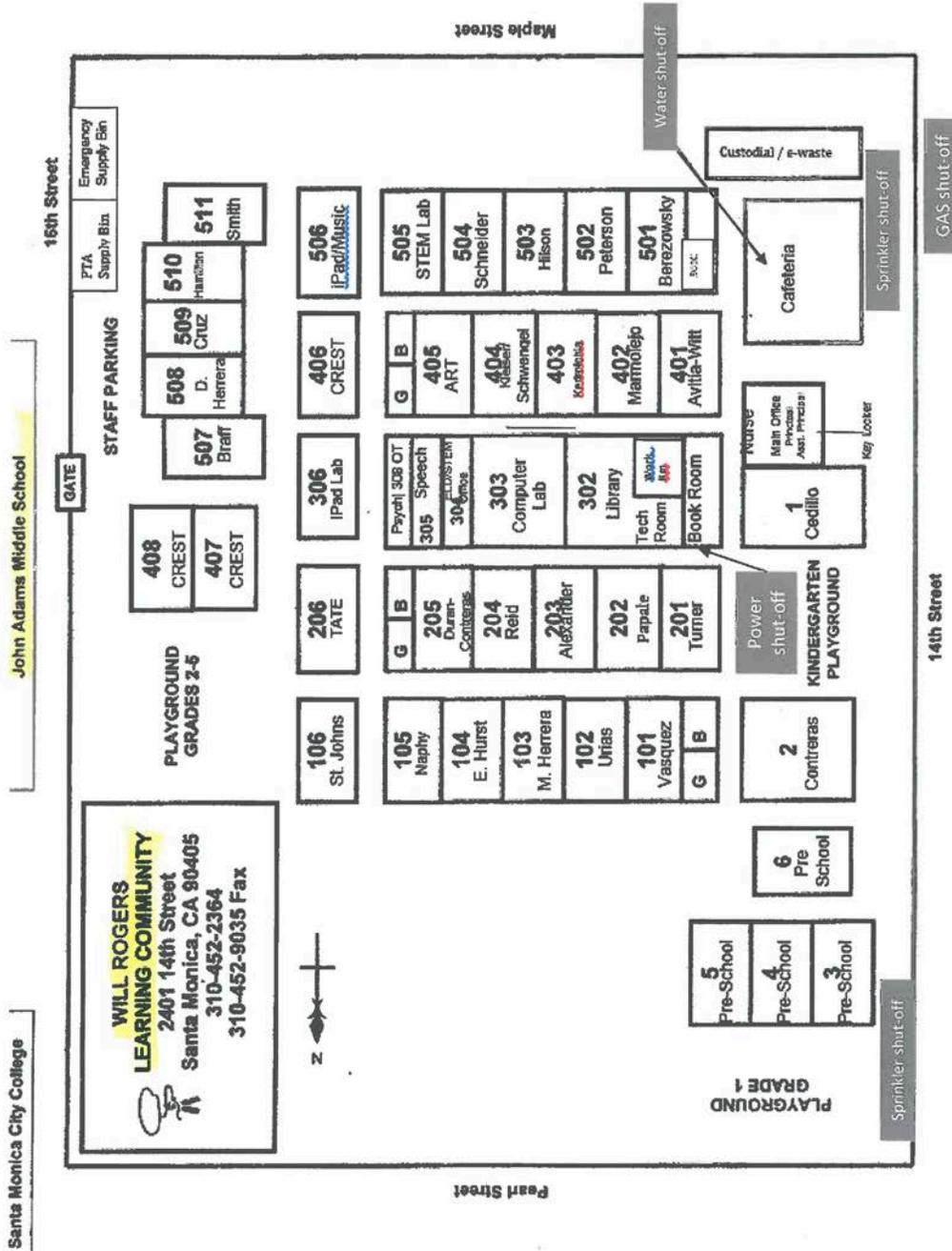
**TK-5 Grading Periods:**  
 Conference: Nov. 4, 2016  
 Winter Grading: Feb. 10, 2017  
 Spring Grading: June 9, 2017

**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

Will Rogers Learning Community Map



## Appendix – B

### Energy Utilization Analysis

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

Facility Name: **Will Rogers Elementary**

Facility Location: **2401 14th Street, Santa Monica, CA**

Sq. Ft. (conditioned space): **53,157**

Billing Period  
 FROM: **Jul-15**  
 TO: **Jun-16**

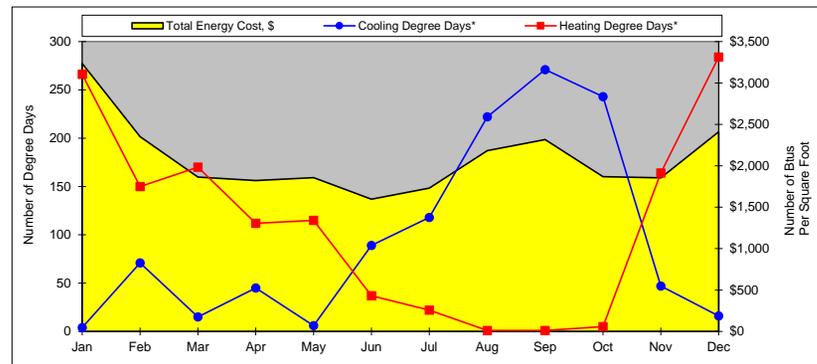
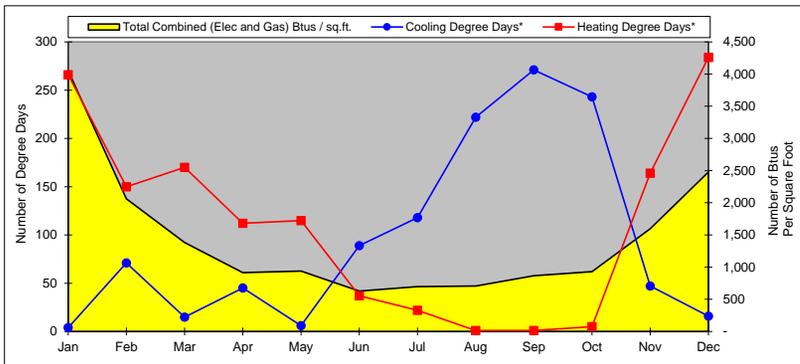
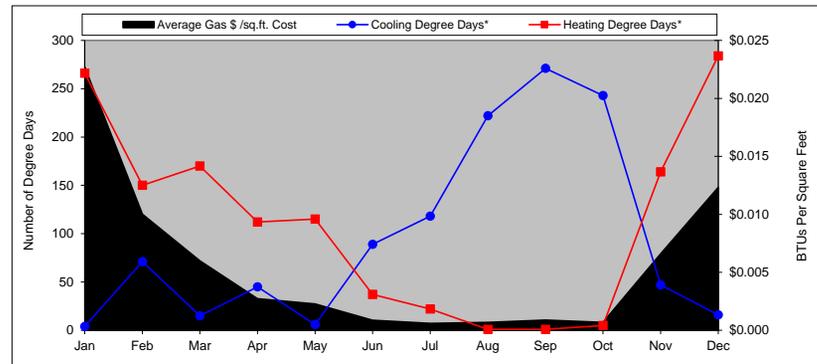
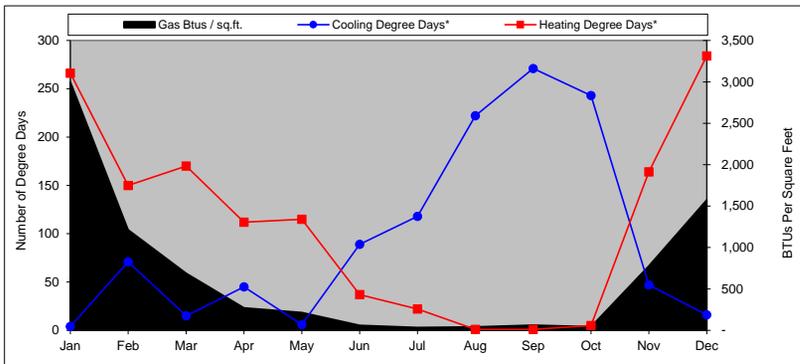
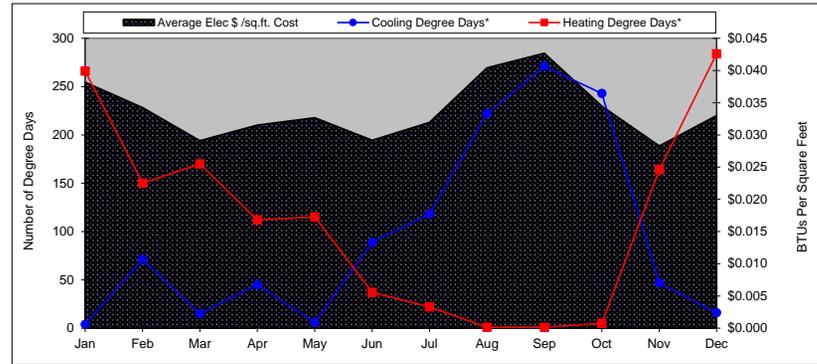
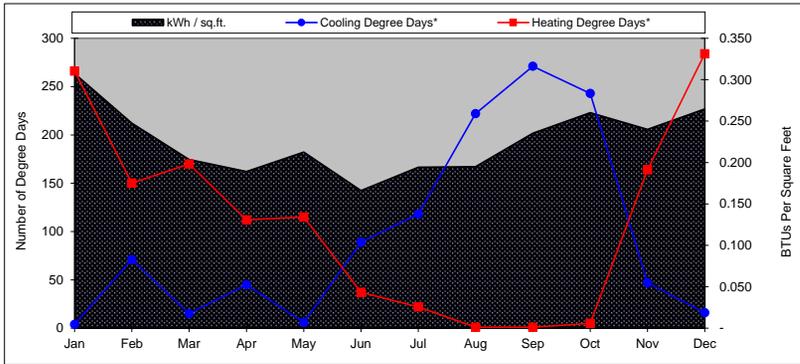
Elec Utility Name: SCE			Natural Gas Utility Name: SCG		
Account #	Meter #	Rate Schedule	Account #	Meter #	Rate Schedule
2-07-030-4431	259000-045581	TOU-GS-2-A	6307342052	12586293	GN-10-NON-RESIDENTIAL
2-35-574-9888	259000-023634	TOU-GS-2-R	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

	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	29	32	30	29	32	30	29	29	32	30	33	30	365	
natural gas	31	32	29	29	31	30	30	29	32	28	30	34	365	
<b>Electric Usage</b>														
kWh per Billing Cycle	16,341	13,161	10,829	10,048	11,299	8,829	10,334	10,361	12,513	13,825	12,754	14,072	144,366	322,345
\$ for kWh Billed	\$1,592	\$1,488	\$1,305	\$1,283	\$1,403	\$1,211	\$1,236	\$1,765	\$1,807	\$1,410	\$1,214	\$1,401	\$17,115	
Max kW Billed	111	94	78	82	80	73	60	75	81	93	76	101	84	
\$ for kW Billed	\$438	\$332	\$242	\$393	\$334	\$340	\$462	\$383	\$462	\$422	\$290	\$354	\$4,452	\$46,977
Total Electric Cost, \$	\$2,030	\$1,820	\$1,547	\$1,676	\$1,737	\$1,551	\$1,698	\$2,148	\$2,269	\$1,832	\$1,504	\$1,755	\$21,567	
Ave. Daily Electric Cost, \$	\$70	\$57	\$52	\$58	\$54	\$52	\$59	\$74	\$71	\$61	\$46	\$59	\$	59
Average \$/kWh Cost	\$0.124	\$0.138	\$0.143	\$0.167	\$0.154	\$0.176	\$0.164	\$0.207	\$0.181	\$0.133	\$0.118	\$0.125	\$	0.149
Average Elec \$/sq.ft. Cost	\$0.038	\$0.034	\$0.029	\$0.032	\$0.033	\$0.029	\$0.032	\$0.040	\$0.043	\$0.034	\$0.028	\$0.033	\$	0.406
kWh / sq.ft.	0.307	0.248	0.204	0.189	0.213	0.166	0.194	0.195	0.235	0.260	0.240	0.265		6.06
<b>Natural Gas Usage</b>														
Therms per Billing Cycle	1,595	646	366	144	114	32	18	22	33	23	414	837	4,244	
Total Gas Cost, \$	\$1,206	\$532	\$318	\$145	\$121	\$46	\$32	\$36	\$47	\$36	\$350	\$655	\$	3,524
Ave. Daily Gas Cost, \$	\$39	\$17	\$11	\$5	\$4	\$2	\$1	\$1	\$1	\$1	\$12	\$19	\$	9
Average \$/therm Cost	\$0.756	\$0.824	\$0.869	\$1.007	\$1.061	\$1.438	\$1.778	\$1.636	\$1.424	\$1.565	\$0.845	\$0.783	\$	0.830
Average Gas \$/sq.ft. Cost	\$0.023	\$0.010	\$0.006	\$0.003	\$0.002	\$0.001	\$0.001	\$0.001	\$0.001	\$0.001	\$0.007	\$0.012	\$	0.066
Gas Btus / sq.ft.	3,001	1,215	689	271	214	60	34	41	62	43	779	1,575		7,984
<b>Total Energy Usage</b>														
Combined (Elec and Gas) Btus / sq.ft.	4,050	2,060	1,384	916	940	627	697	707	865	931	1,598	2,478	17,253	
Total Energy Cost, \$	\$3,236	\$2,352	\$1,865	\$1,821	\$1,858	\$1,597	\$1,730	\$2,184	\$2,316	\$1,868	\$1,854	\$2,410	\$25,091	\$50,501
Ave. Energy \$/sq.ft./period	\$0.06	\$0.04	\$0.04	\$0.03	\$0.03	\$0.03	\$0.03	\$0.04	\$0.04	\$0.04	\$0.03	\$0.05	\$0.47	\$0.95

\* 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:** Will Rogers Elementary

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



## Appendix – C

### Lighting Systems Audit



School District Santa Monica-Malibu USD - LED Option  
 Address: 0  
 0  
 School: WILL ROGERS ELEMENTARY  
 School Address: 2401 6TH ST.  
 0

cost per kwh 0.149

LED Option

68.55 36.94 135,501.94 72,525.50 62,976.44 \$ 9,383.49

ORIGINAL AUDIT ID#	INTERIOR/E XTERIOR	SCHOOL DISTRICT	SCHOOL	ROOM	LIGHTING CODE (EXISTING)	ECM	PROPOSED FIXT QTY	EXIST WATT	PROP WATT	EXIST OPER HRS	PROP OPER HRS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	SAVED KWH	ANN SAVINGS
2073	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	ADMINISTRATION	T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AN	13	90	48	2185	2185	1.17	0.624	2556.45	1363.44	1193.01	\$ 177.76
2074	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	ADMINISTRATION	T8-U1/4'-31W-2L-EB/ISN-X-X	(LED)3L 8T8/2F/840/DIR, 97743 (1) QHE4X32UNV/ISN W/P	6	56	32	2185	2185	0.336	0.189	734.16	412.965	321.195	\$ 47.86
2075	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	ADMINISTRATION	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	6	87	48	2185	2185	0.522	0.288	1140.57	629.28	511.29	\$ 76.18
2076	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	ADMINISTRATION	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	2185	2185	0.177	0.096	386.745	209.76	176.985	\$ 26.37
2077	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	LOUNGE	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	9	59	32	2185	2185	0.531	0.288	1160.235	629.28	530.955	\$ 79.11
2078	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	COPY	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	2185	2185	0.112	0.064	244.72	139.84	104.88	\$ 15.63
2079	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	708 MECHANICAL	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2080	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	709 MECHANICAL	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2081	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	RESTROOMS	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	2	112	64	1816	1816	0.224	0.128	406.784	232.448	174.336	\$ 25.98
2082	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	MULTI PURPOSE	CF/4P-TRIP-42W-6L-EB-X-X	(LED)6L 18.5W 4 PIN LED19GX24q-H/840 HORIZONTAL (R	16	276	111	1696	1696	4.416	1.776	7489.536	3012.096	4477.44	\$ 667.14
2083	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	MULTI PURPOSE	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	9	59	32	1696	1696	0.531	0.288	900.576	488.448	412.128	\$ 61.41
2084	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	KITCHEN	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	8	112	64	1696	1696	0.896	0.512	1519.616	868.352	651.264	\$ 97.04
2085	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	KITCHEN	/S-A19-60W-1L-NONE-X-X	(LED) 1L GREEN CREATIVE A19 9W E26 4000K 80 LM DIM	2	60	9	1696	1696	0.12	0.018	203.52	30.528	172.992	\$ 25.78
2086	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	KITCHEN	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1696	1696	0.177	0.096	300.192	162.816	137.376	\$ 20.47
2087	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	KITCHEN	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	1	59	32	1696	1696	0.059	0.032	100.064	54.722	45.792	\$ 6.82
2088	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	MULTI PURPOSE EX	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	\$ 11.42
2089	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	MULTI PURPOSE EX	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	1	59	32	3650	3650	0.059	0.032	215.35	116.8	98.55	\$ 14.68
2090	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	501C	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	4	59	32	1816	1816	0.236	0.128	428.576	232.448	196.128	\$ 29.22
2091	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	501B	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	4	59	32	1816	1816	0.236	0.128	428.576	232.448	196.128	\$ 29.22
2092	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	501A	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	1	59	32	1816	1816	0.059	0.032	107.144	58.112	49.032	\$ 7.31
2093	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	500	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	\$ 155.86
2094	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	FURNACE CLOSET	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2095	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	502	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	\$ 155.86
2096	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	FURNACE CLOSET	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2097	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	504	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	\$ 155.86
2098	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	FURNACE CLOSET	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2099	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	505	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	\$ 155.86
2100	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	FURNACE CLOSET	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2101	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	506	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	\$ 155.86
2102	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	FURNACE CLOSET	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2103	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	CLASSROOM EXTER	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	48	59	32	3650	3650	2.832	1.536	10336.8	5606.4	4730.4	\$ 704.83
2104	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	CUSTODIAN	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	2	59	32	400	400	0.118	0.064	47.2	25.6	21.6	\$ 3.22
2105	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	RESTROOMS	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	\$ 43.83
2106	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	406	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$ 126.63
2107	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	405	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	\$ 155.86
2108	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	FURNACE CLOSET	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2109	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	405	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	\$ 155.86
2110	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	404	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	\$ 155.86
2111	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	403	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	\$ 155.86
2112	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	402	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	\$ 155.86
2113	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	401	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	\$ 155.86
2114	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	302	T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AN	45	90	48	1816	1816	4.05	2.16	7354.8	3922.56	3432.24	\$ 511.40
2115	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	303	T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AN	19	90	48	1816	1816	1.71	0.912	3105.36	1656.192	1449.168	\$ 215.93
2116	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	302	T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AN	3	90	48	1816	1816	0.27	0.144	490.32	261.504	228.816	\$ 34.09
2117	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	302	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	1	59	32	1816	1816	0.059	0.032	107.144	58.112	49.032	\$ 7.31
2118	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	304	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	4	112	64	1816	1816	0.448	0.256	813.568	464.896	348.672	\$ 51.95
2119	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	304	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	1	59	32	1816	1816	0.059	0.032	107.144	58.112	49.032	\$ 7.31
2120	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	WORKROOM	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	4	87	48	1816	1816	0.348	0.192	631.968	348.672	283.296	\$ 42.21
2121	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	FURNACE CLOSET	CF/2P-DOUB-13W-1L-MB-X-X	(LED)1L (GREEN CREATIVE 2PIN LED DIRect or BYPass) 5	1	15	6	400	400	0.015	0.0055	6	2.2	3.8	\$ 0.57
2122	INTERIOR	NTA MONICA															

2154	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	3	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	8	118	64	1816	1816	0.944	0.512	1714.304	929.792	784.512	\$	116.89	
2155	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	3	T8-U6/4'-32W-2L-EB/ISN-X-X	(LED)3L 8T8/2F/840/DIR, 97743 (1) QHE4X32UNV/ISN W/P	2	59	32	1816	1816	0.118	0.063	214.288	114.408	99.88	\$	14.88	
2156	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	PORTABLES EXTERIOR	CF/4P-DOUB-26W-1L-EB-X-X	(LED)NEW DECO 20W PORCHLIGHT WALLPACK D411-LE	4	27	20	3650	3650	0.108	0.08	394.2	292	102.2	\$	15.23	
2157	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	PORTABLES EXTERIOR	CF/4P-DOUB-26W-1L-EB-X-X	(LED)NEW DECO 20W PORCHLIGHT WALLPACK D411-LE	2	27	20	3650	3650	0.054	0.04	197.1	146	51.1	\$	7.61	
2158	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	4	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	10	118	64	1816	1816	1.18	0.64	2142.88	1162.24	980.64	\$	146.12	
2159	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	5	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	10	118	64	1816	1816	1.18	0.64	2142.88	1162.24	980.64	\$	146.12	
2160	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	CLASSROOM EXTERIOR	MH-MED-100W-1L-CWA-X-X	(LED)NEW DECO 20W SMALL WALLPACK D400-LED-20-50	2	128	20	3650	3650	0.256	0.04	934.4	146	788.4	\$	117.47	
2161	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	CLASSROOM EXTERIOR	HPS-MED-150W-1L-CWA-X-X	(LED)NEW DECO MEDIUM WALLPACK D414-LED-40-50-UN	5	188	40	3650	3650	0.94	0.2	3431	730	2701	\$	402.45	
2162	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	511	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$	126.63	
2163	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	510	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$	126.63	
2164	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	509	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$	126.63	
2165	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	508	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$	126.63	
2166	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	507	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$	126.63	
2167	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	500 EXTERIOR	CF/4P-DOUB-13W-2L-EB-X-X	(LED)2L GREEN CREATIVE 4 PIN PLUG & PLAY 40820 11P	10	28	22	3650	3650	0.28	0.22	1022	803	219	\$	32.63	
2168	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	500 EXTERIOR	CF/2P-DOUB-13W-1L-MB-X-X	(LED)NEW DECO 20W PORCHLIGHT WALLPACK D411-LE	5	15	20	3650	3650	0.075	0.1	273.75	365	-91.25	\$	(13.60)	
2169	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	408	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	\$	87.67	
2170	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	408	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	\$	87.67	
2171	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	408	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	\$	87.67	
2172	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	PORTABLES EXTERIOR	MH-MED-175W-1L-CWA-X-X	(LED)NEW DECO MEDIUM FLOOD D211-LED-60-50-UNV-T	1	215	60	3650	3650	0.215	0.06	784.75	219	565.75	\$	84.30	
2173	INTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	PE OFFICE	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	5	59	32	2185	2185	0.295	0.16	644.575	349.6	294.975	\$	43.95	
2174	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	PE EXTERIOR	CF/4P-TRIP-32W-1L-EB-X-X	(LED)NEW DECO 20W PORCHLIGHT WALLPACK D411-LE	4	35	20	3650	3650	0.14	0.08	511	292	219	\$	32.63	
2175	EXTERIOR	NTA MONICA-MALIBU	WILL ROGERS ELEMENTARY 240	CLASSROOM EXTERIOR	HPS-MED-150W-1L-CWA-X-X	(LED)NEW DECO 80W SHOEBOX D816-LED-80-50-UNV-T3	3	188	80	3650	3650	0.564	0.24	2058.6	876	1182.6	\$	176.21	
													68.552	36.935	135501.935	72525.497	62976.438	\$	9,383.49

		kW saved		kWh saved		\$ saved	
EXTERIOR	6.17	2.98	3.186	11,628.90	1,732.71		
EXIT SIGNS			0				
INTERIOR	62.26	33.94	28.33	51,175	7,625.01		
INCAND to LED	0.12	0.02	0.10	172.99	25.78		
			31.617	62,976	9,383.49		