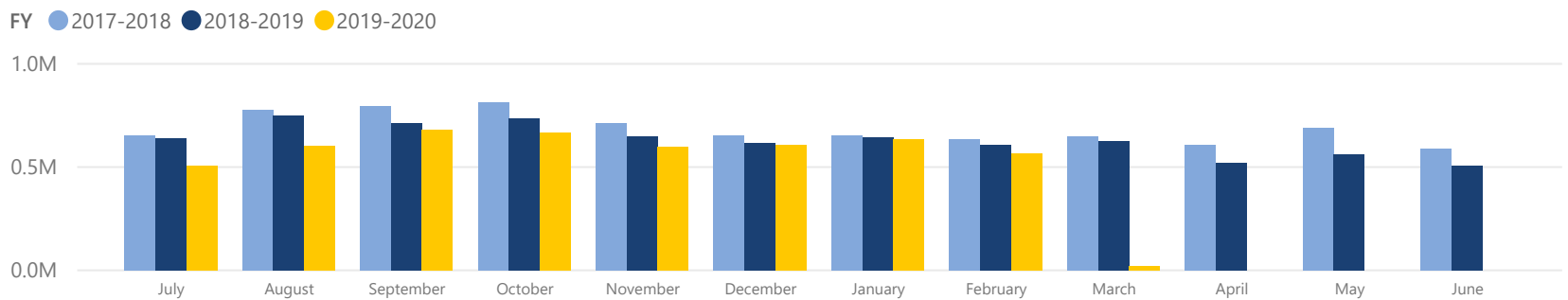


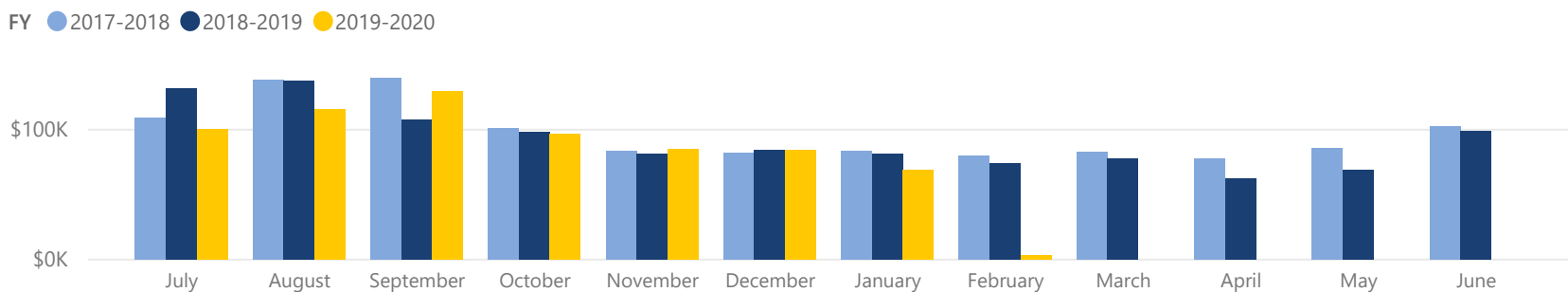
## District Energy Overview

There are several projects currently scoped over the next few years which will affect the District's total electric usage. SitelogIQ will coordinate closely with the District to ensure awareness as to the progress of Facilities Improvement Projects and any others as they pertain to energy management. Thus far, all LED lighting projects were completed as of March 2019. Additionally, several of the sites were retrofitted with HVAC units, and are consequently operating at a higher consumption rate. Lastly, SAMOHI and Malibu HS are currently undergoing major construction. The following report breaks down energy usage by site considering all these factors.

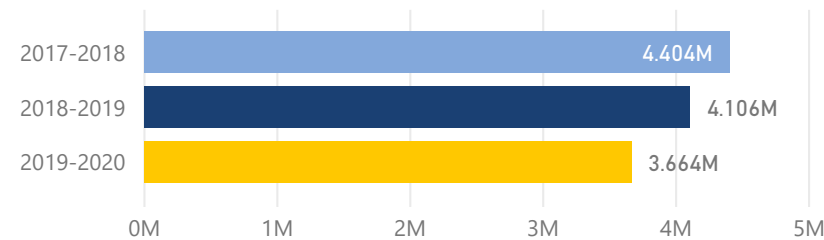
### Total Electric (kWh) by Month and Fiscal Year



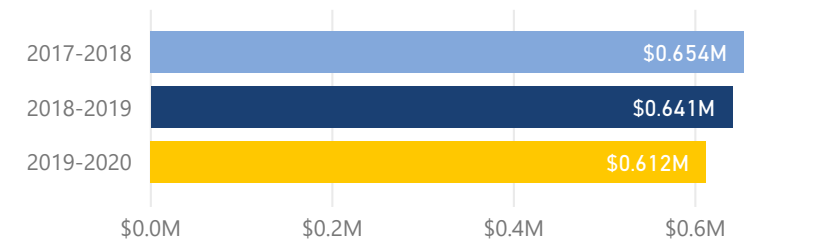
### Total Electric Cost (\$) by Month



### Total Electric (kWh) by Fiscal Year

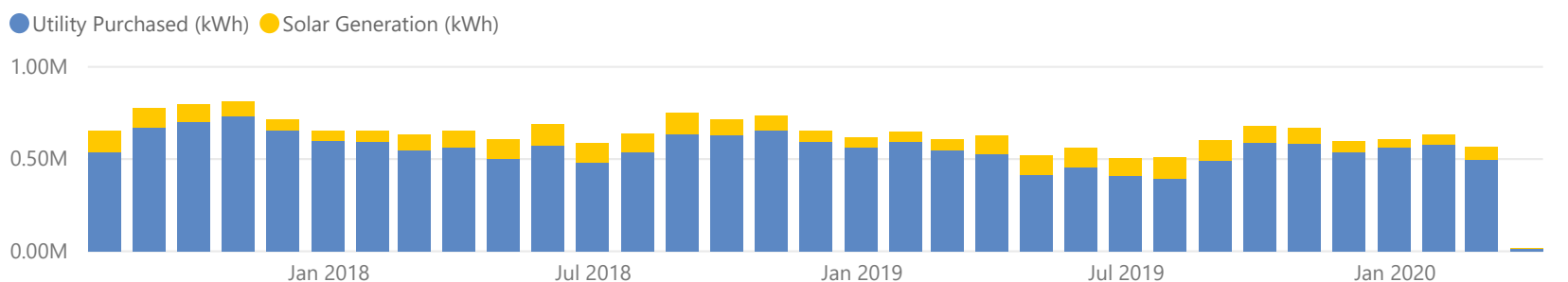


### Total Electric Cost (\$) by Fiscal Year



**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

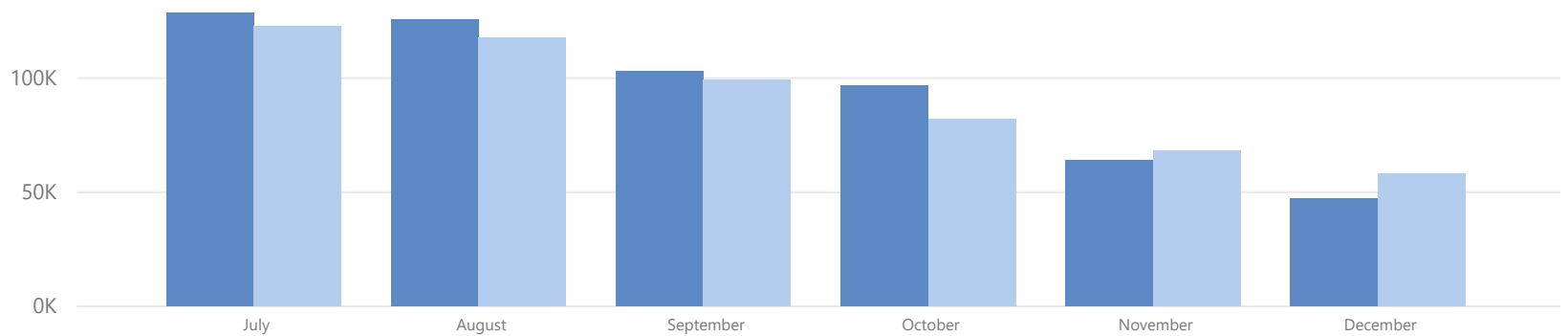
### Total Energy Use (kWh) by Month



## Solar Performance

### Solar Generation vs. Expectations

● Solar Generation (kWh) ● Solar Generation Expected (kWh)



Site Name	Solar Generation (kWh)	SCE Electric (kWh)	Total Electric (kWh)	Estimated Solar Performance (%)
Franklin Elementary	100,862	42,202	143,063	99.4%
Grant Elementary	79,053	20,413	99,466	97.8%
John Muir Elementary/SMASH	5,674	92,832	98,506	95.0%
Juan Cabrillo ES	57,602	-285	57,317	114.0%
Malibu Elementary School	57,925	57,363	115,288	106.7%
McKinley Elementary	14,683	111,288	125,971	67.8%
Roosevelt Elementary	109,609	-110	109,498	108.0%
Webster Elementary	60,915	-6,874	54,041	108.4%
Will Rogers Elementary	79,179	21,975	101,155	104.9%
<b>Total</b>	<b>565,502</b>	<b>338,803</b>	<b>904,305</b>	<b>103.2%</b>

Solar Generation (kWh): Electricity generated by solar panels at each site.

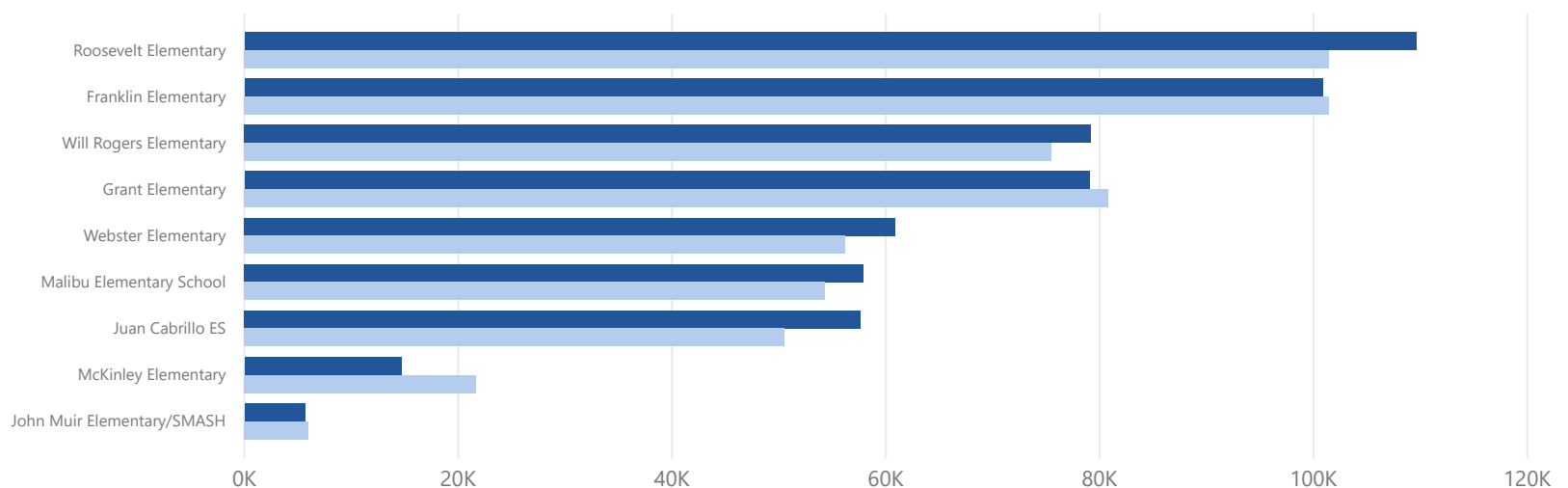
SCE Electric (kWh): Electricity purchased from Southern California Edison.

Total Electric (kWh): Sum total electricity usage of solar production and utility purchased electricity.

Estimated Solar Performance (%): Solar generation compared to expected performance based on weather models.

### Solar Generation By Campus

● Solar Generation (kWh) ● Solar Generation Expected (kWh)



## Site Energy and Cost Metrics

Site Name	Total Electric (kWh)	SCE Electric Cost (\$)	Average Monthly Electric per SF (kWh/SF)	Utility Rate (\$/kWh)
Bus Barn	18,442	\$3,167	0.445	\$0.172
District Office	182,850	\$56,898	0.982	\$0.311
Edison Elementary	173,685	\$35,692	0.657	\$0.205
Franklin Elementary	143,063	\$8,884	0.339	\$0.062
Grant Elementary	99,466	\$4,394	0.275	\$0.044
John Adams MS (JAMS)	257,752	\$50,777	0.348	\$0.197
John Muir Elementary/SMASH	98,506	\$17,852	0.322	\$0.181
Juan Cabrillo ES	57,317	\$2,236	0.235	\$0.039
Lincoln MS	381,076	\$66,875	0.380	\$0.175
Malibu Elementary School	115,288	\$7,576	0.450	\$0.066
McKinley Elementary	125,971	\$6,706	0.332	\$0.053
Obama Center for Inquiry and Exploration	96,227	\$18,366	0.361	\$0.191
Roosevelt Elementary	109,498	\$4,020	0.310	\$0.037
Santa Monica HS (SAMOHI)	1,650,732	\$307,594	0.659	\$0.186
Washington Pre/FIP	56,610	\$13,162	0.304	\$0.233
Webster Elementary	54,041	\$2,213	0.262	\$0.041
Will Rogers Elementary	101,155	\$7,499	0.312	\$0.074
<b>Total</b>	<b>3,721,680</b>	<b>\$613,910</b>	<b>0.410</b>	<b>\$0.165</b>

Total Electric (kWh): Sum total electricity usage of solar production and utility (SCE) purchased electricity.

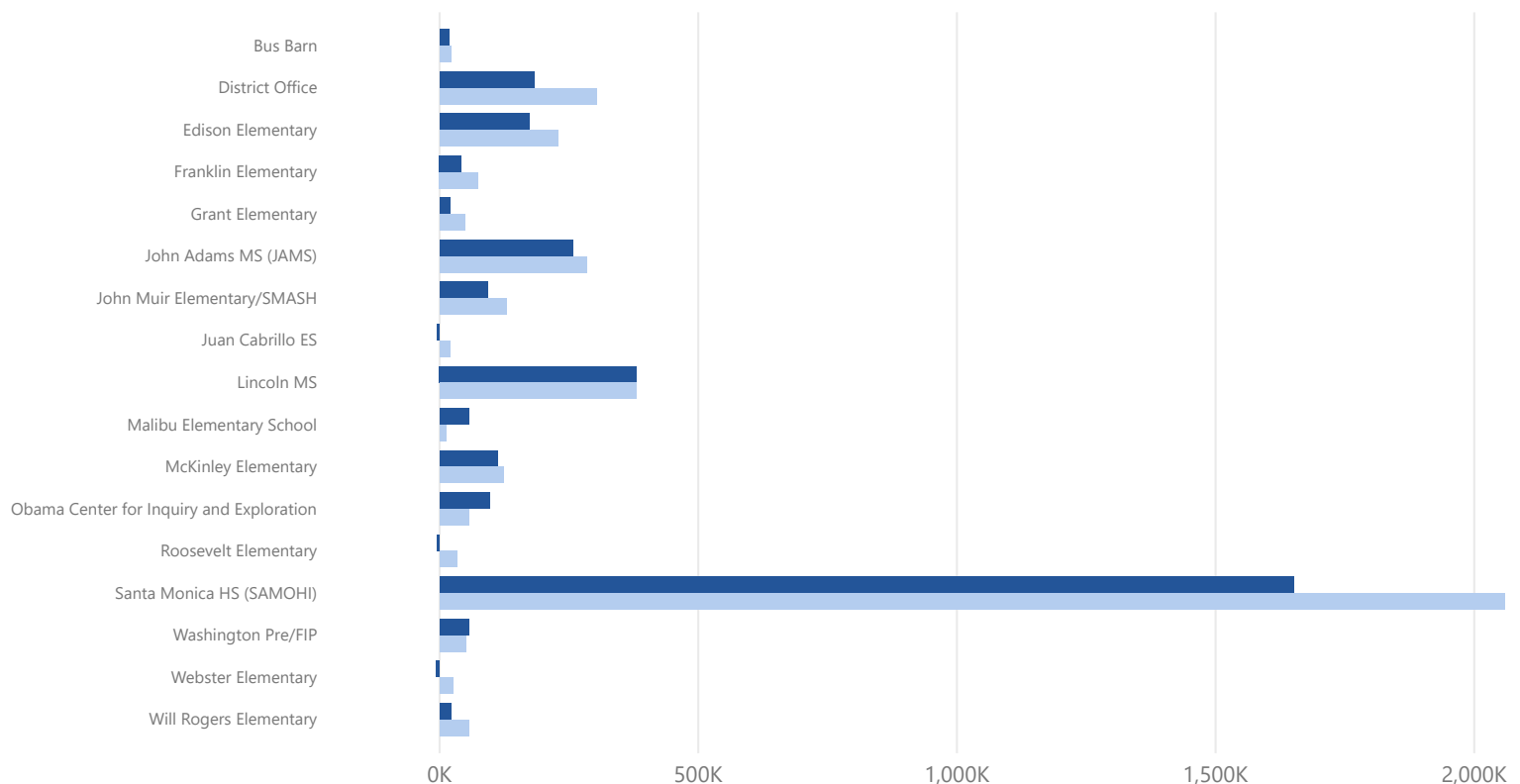
SCE Electric Cost (\$): Cost of electricity purchased from SCE (does not include costs from Power Purchase Agreement)

Average Monthly Electric per SF (kWh/SF): Total site electricity usage divided by the total conditioned square footage of the site.

Utility Rate (\$/kWh): Cost per total energy usage (Utility purchased and Solar kWh)

## SCE Electric By Site Compared to Baseline (FY 17/18)

● FY 2019-20 (Current) ● FY 2017-18 (Baseline)

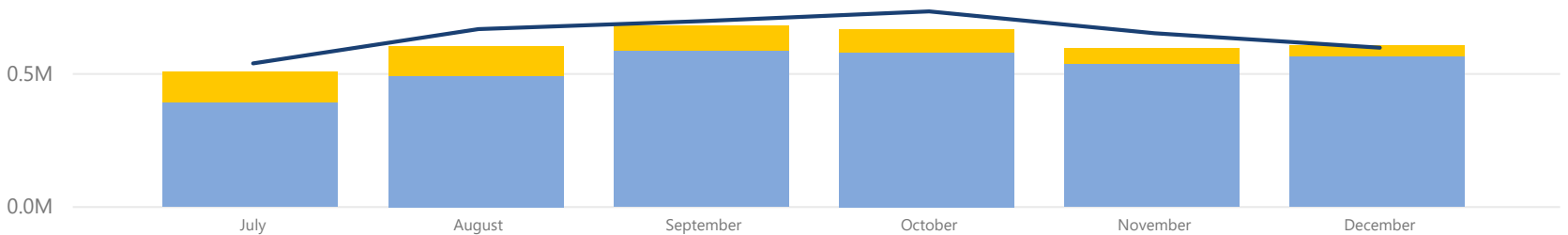


District Totals do not include totals from Malibu HS, due to the lack of data from the significant construction being performed.

## Savings Compared to Baseline (FY 2017-18)

### Total Electric Usage vs. 2017/18 Baseline

● Utility Purchased (kWh) ● Solar Generation (kWh) ● Baseline Purchased Electric Usage



FY 2017-18 Electric Use	FY 2019-20 Electric Use	Energy kWh Savings
4.405M	3.664M	740.9K
FY 2017-18 Electric Cost	FY 2019-20 Electric Cost	SCE Electric Cost Savings
\$653.6K	\$611.7K	\$41.98K

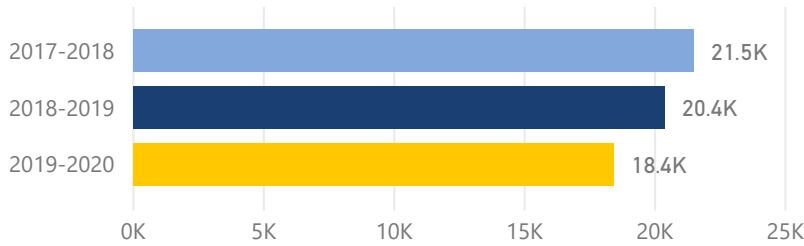
### District Monthly Energy Overview

Santa Monica-Malibu School District (SMMUSD) is dedicated to creating a successful learning environment for students through sustainable initiatives. One of the major focuses is through the reduction of energy consumption through behavioral and controls related energy efficiency measures. The District's goal is to reduce electrical energy usage by 5% each year for the next two years, and reduction for the following 3 years to be determined based on observations of measures taken and resultant savings from the previous years. The energy baseline and subsequent usage will be reconciled to a reasonable extent to consider affecting factors, which may include but is not limited to normal solar PV degradation and additional loads. For FY 2017/18, the total energy usage baseline was set at 9,276,513 kWh and the total cost was approximately \$1,292,819. The energy usage will serve as the baseline usage for savings goals and will be adjusted based on the addition of new loads as necessary and within technical reason.

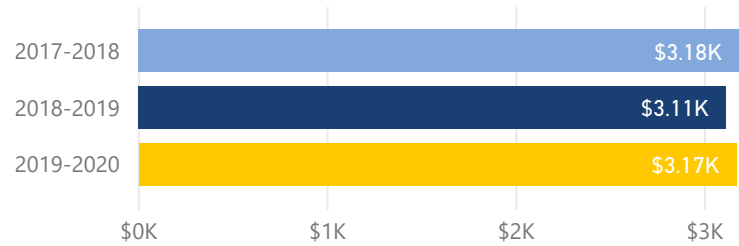
During between the months of July 2019 and December 2019, the District decreased its electrical energy usage by 740,920 kWh (17% reduction) and costs to SCE decreased by about \$41,983 (6% reduction) compared to the baseline year (FY 2017-18). Solar performance in the months of July through December culminated in approximately 565,502 kWh in solar generation, which equates to about 103% in total expected performance. The cost rates have increased with the addition of the partnership with the Clean Power Alliance (CPA). From this partnership, the District's energy comes from 100% clean renewable energy sources. This has led to a slight increase in electrical utility rates, which is why costs have not decreased proportionally to energy reduction. The District appears to be on the right path toward meeting the goals established in the Sustainability Plan. SiteLogIQ will continue to monitor energy usage and provide support to make sure that wise energy habits stay in place and are continually practiced.

### Bus Barn Energy Totals

#### Total Electric (kWh) by Fiscal Year

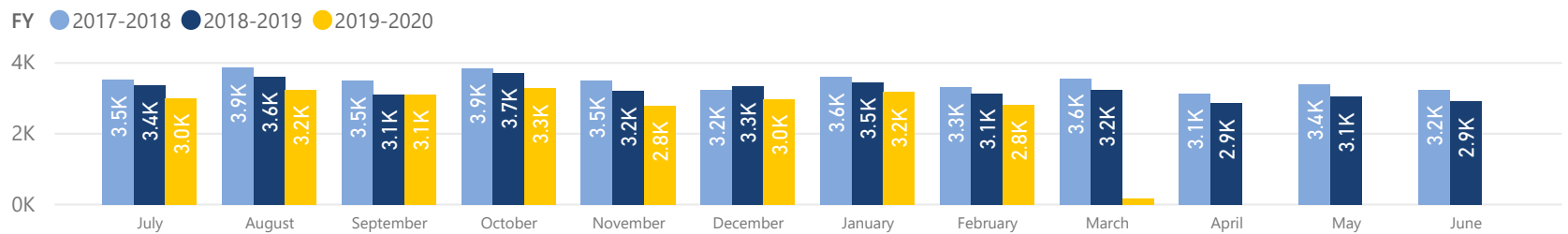


#### Total Electric Cost (\$) by Fiscal Year

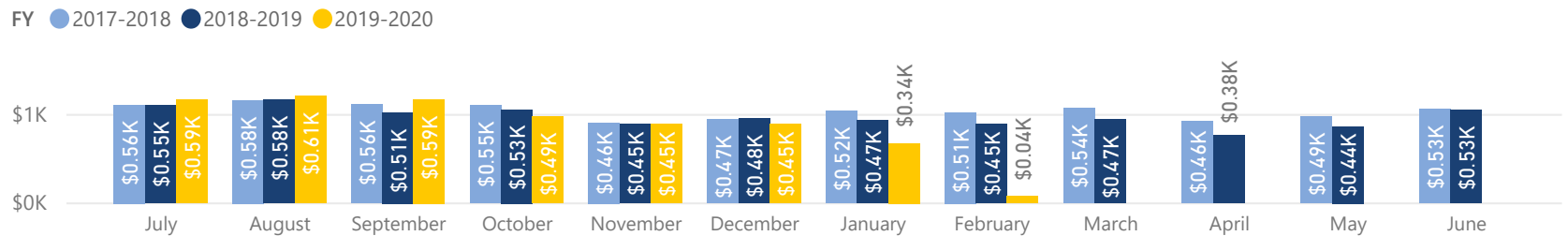


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

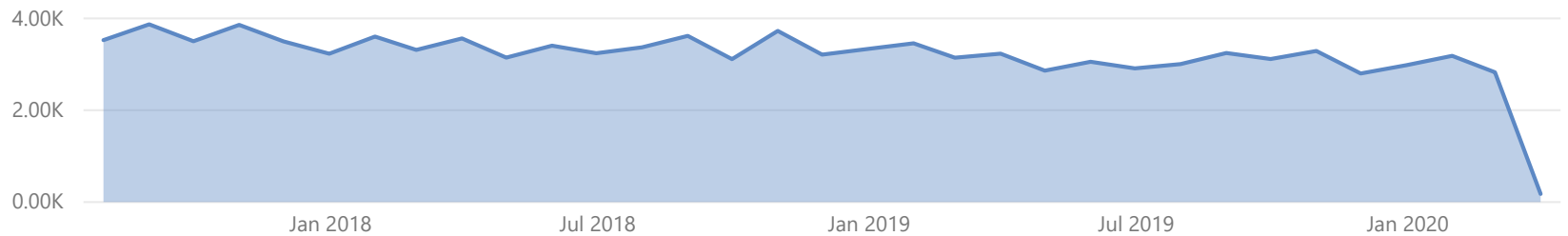
#### Total Electric (kWh) by Month and Fiscal Year



#### Total Electric Cost (\$) by Month



#### Total Energy Use (kWh) by Month



#### Site Overview

In FY 2019-20 from July through December, the Bus Barn showed a decrease in electricity of 3,050 kWh (14% reduction), though costs have increased by about \$14 compared to FY 2017-18. Part of the reason for this difference in percent energy vs cost savings is due to the rate increase from obtaining energy through clean generation sources.

#### Energy (kWh) Savings

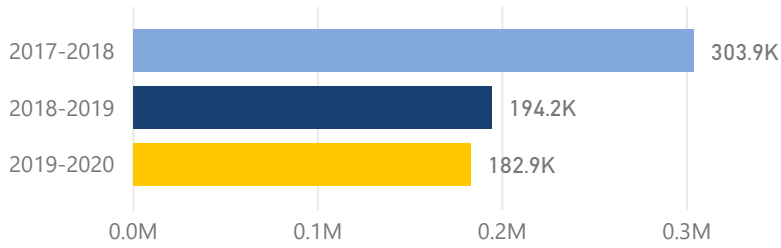
**3.05K**

#### Cost Savings (\$)

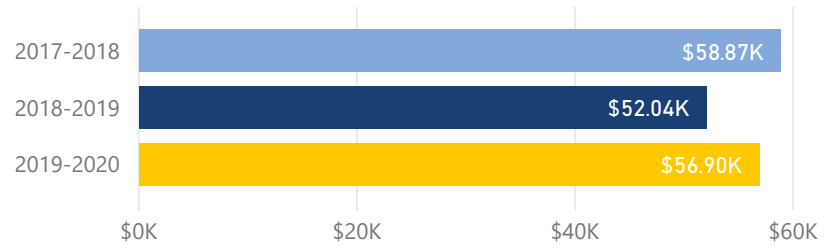
**\$0.01K**

## District Office Energy Totals

### Total Electric (kWh) by Fiscal Year

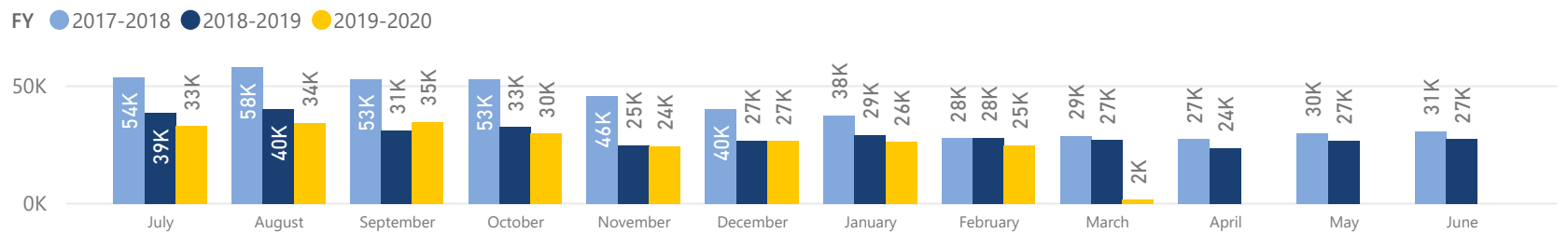


### Total Electric Cost (\$) by Fiscal Year

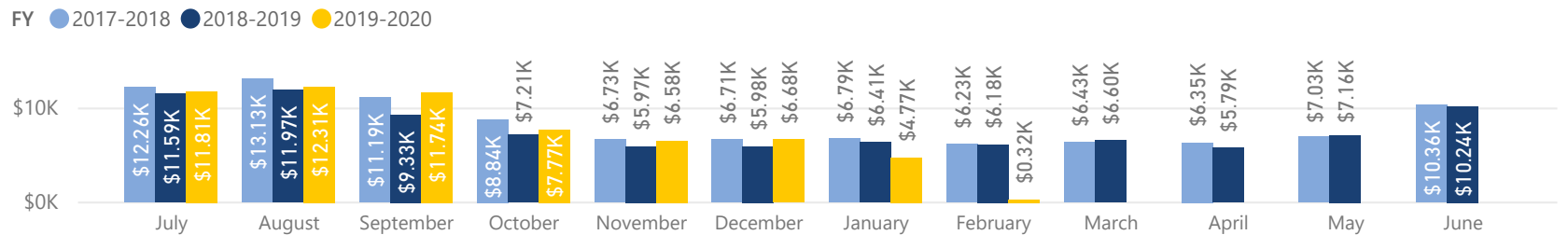


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

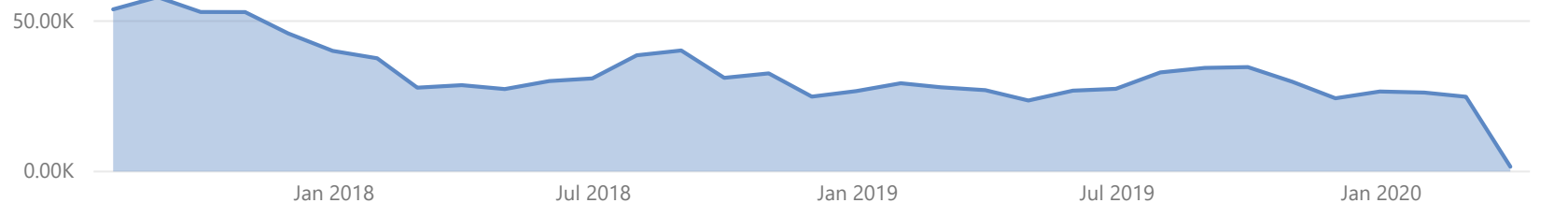
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, the District Office showed a **decrease in electricity of 121,002 kWh (40% reduction), yielding a cost savings of about \$1,967 (3% reduction) compared to FY 2017-18.** This drastic difference in energy usage is largely due to optimization of the cooling system District server area. The District Office has also made significant progress becoming very conscious of making behavior changes. However, part of the reason for this difference in percent energy vs cost savings is due to the rate increase from obtaining energy through clean generation sources.

### Energy (kWh) Savings

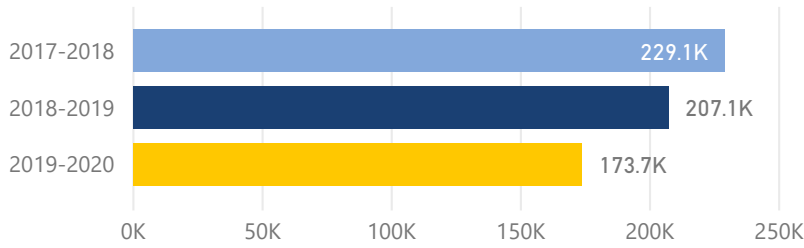
121.00K

### Cost Savings (\$)

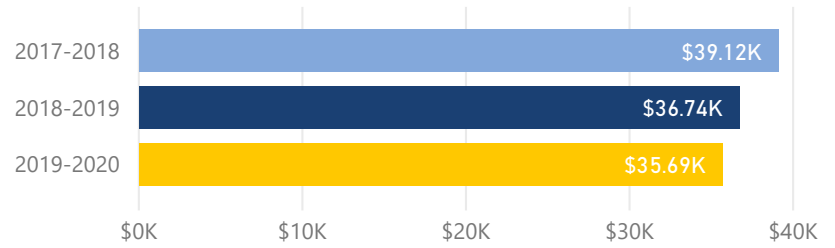
\$1.97K

## Edison Language Academy Energy Totals

### Total Electric (kWh) by Fiscal Year

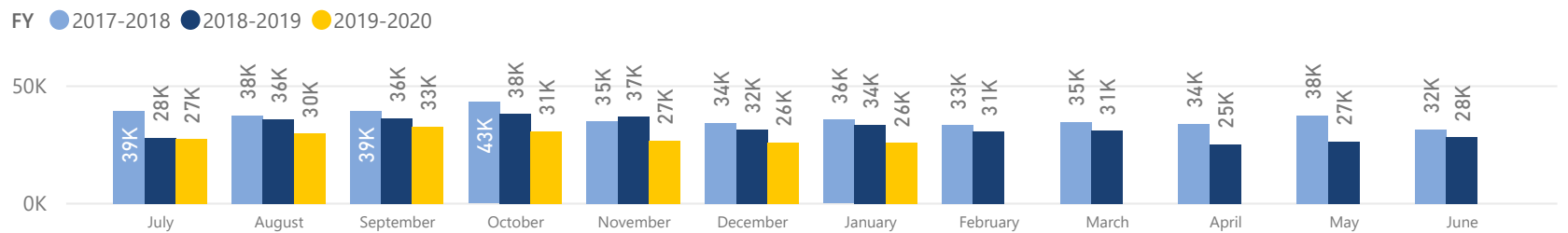


### Total Electric Cost (\$) by Fiscal Year

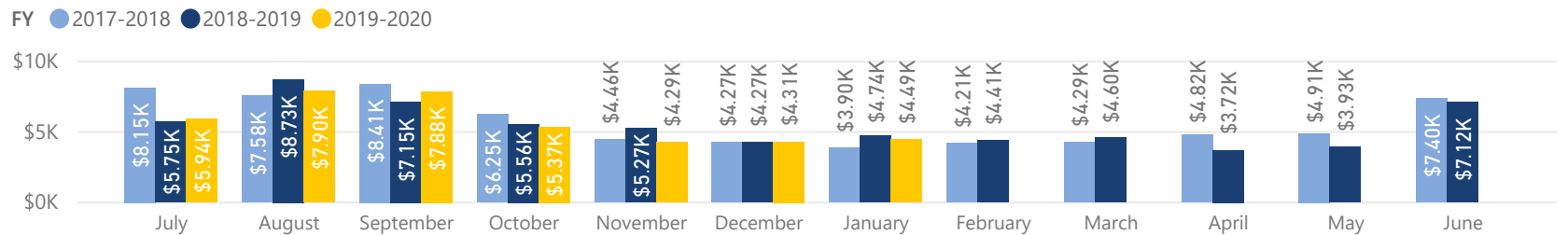


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

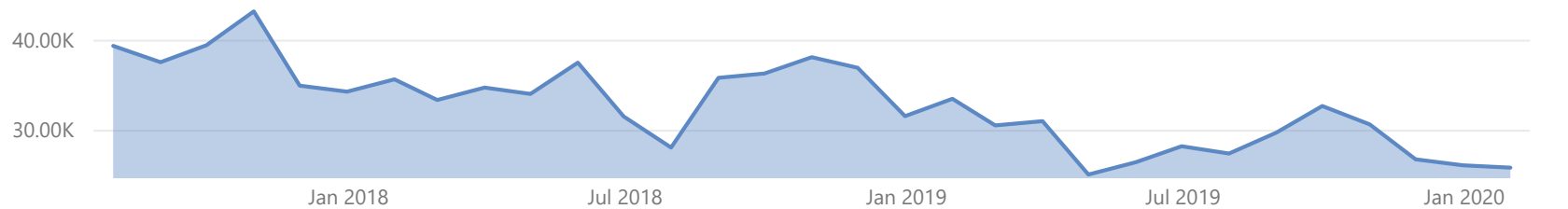
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, Edison Language Academy showed a **decrease in electricity of 55,435 kWh (24% reduction), yielding a cost savings of \$3,431 (9% reduction) compared to FY 2017-18.** Part of the reason for this difference in percent energy vs cost savings is due to the rate increase from obtaining energy through clean generation sources.

### Energy (kWh) Savings

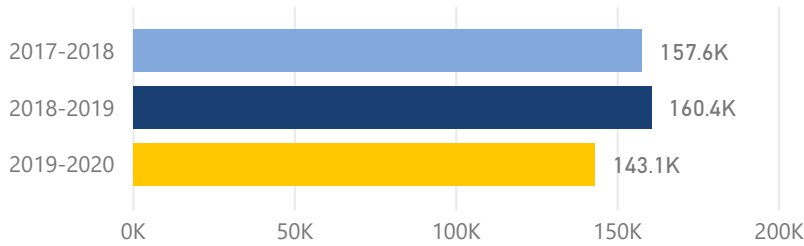
55.43K

### Cost Savings (\$)

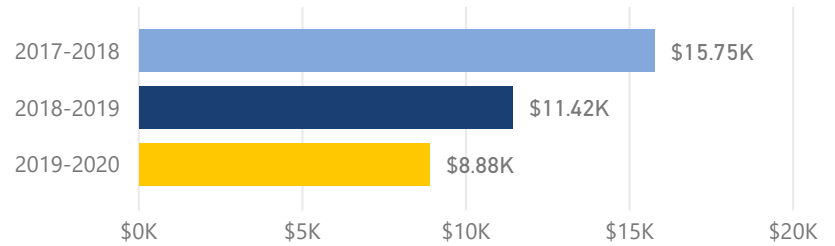
\$3.43K

## Franklin Elementary Energy Totals

### Total Electric (kWh) by Fiscal Year

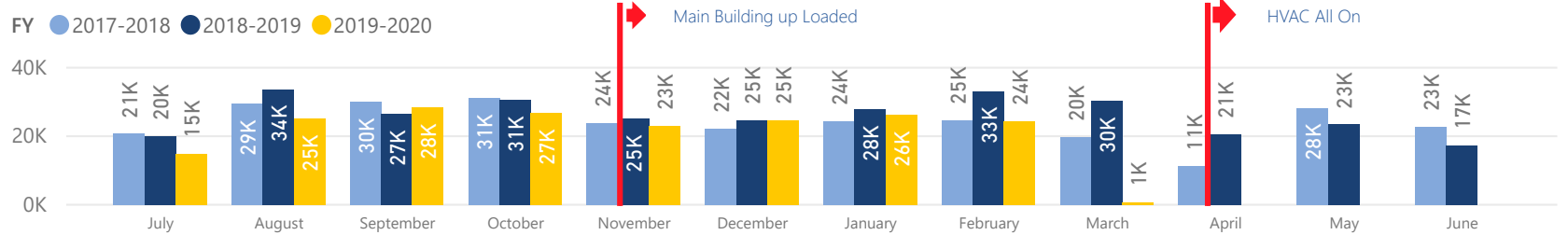


### Total Electric Cost (\$) by Fiscal Year

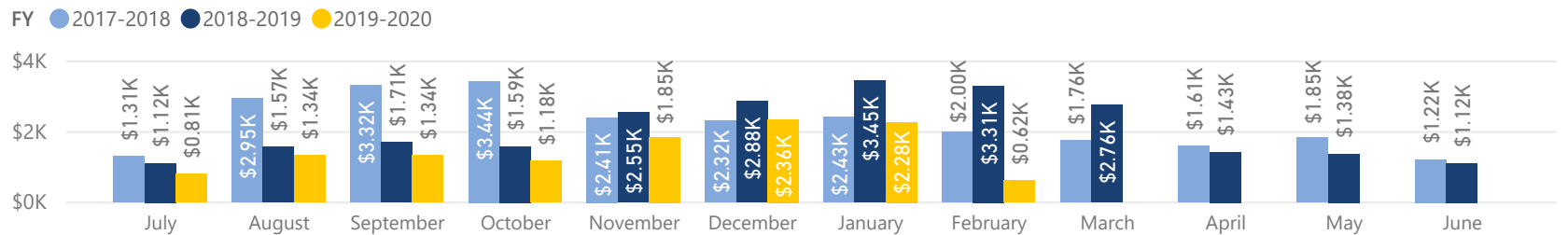


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

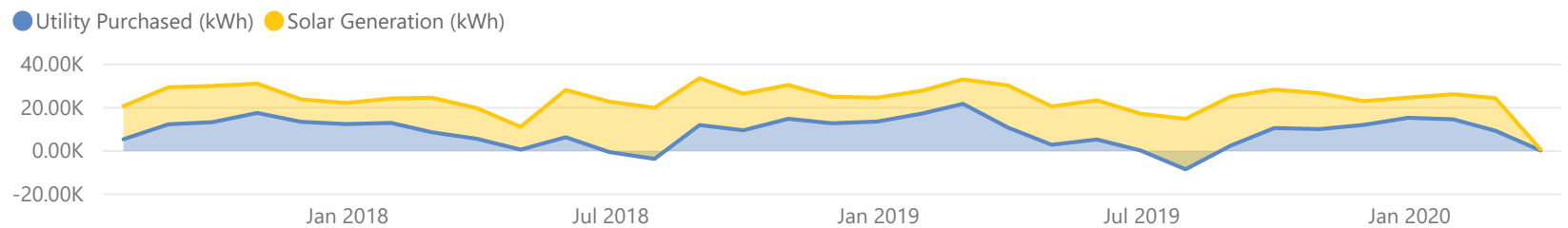
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, Franklin Elementary showed a **decrease** in electricity use of 14,559 kWh (9% decrease), though a costs have decreased by about 44% compared to FY 2017-18.

### Energy (kWh) Savings

**14.56K**

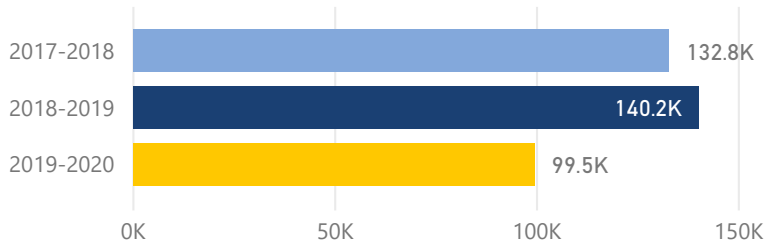
### Cost Savings (\$)

**\$6.87K**

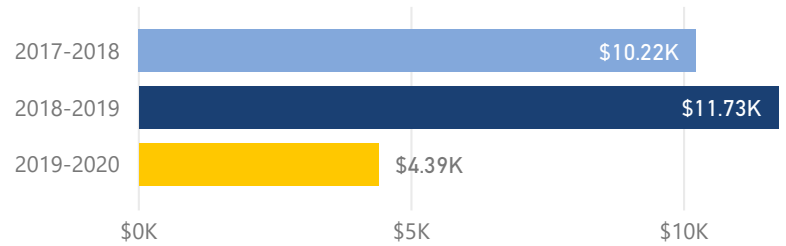


## Grant Elementary Energy Totals

### Total Electric (kWh) by Fiscal Year

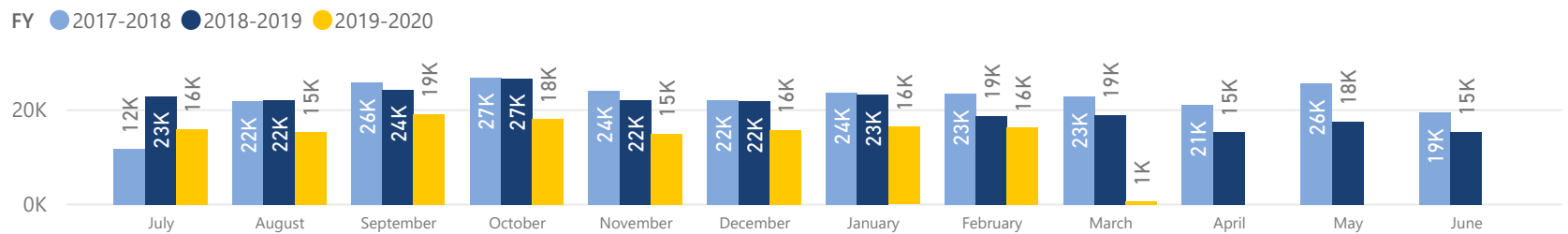


### Total Electric Cost (\$) by Fiscal Year

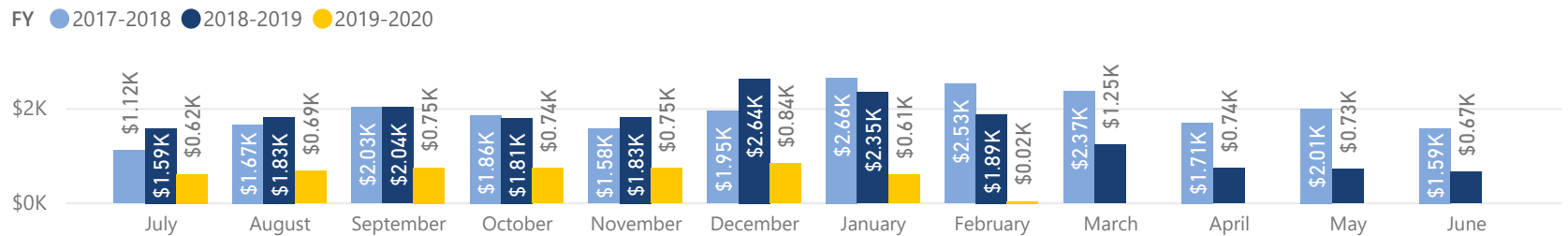


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

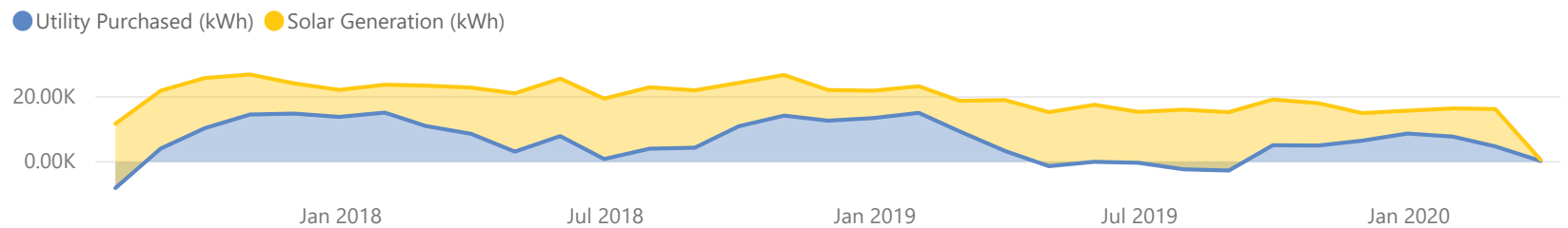
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, Grant Elementary showed a decrease in electricity of 33,309 kWh (25% reduction), yielding a cost savings of about \$5,827 (57% reduction) compared to FY 2017-18.

### Energy (kWh) Savings

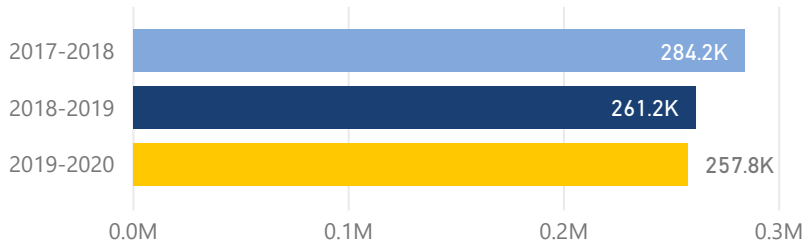
33.31K

### Cost Savings (\$)

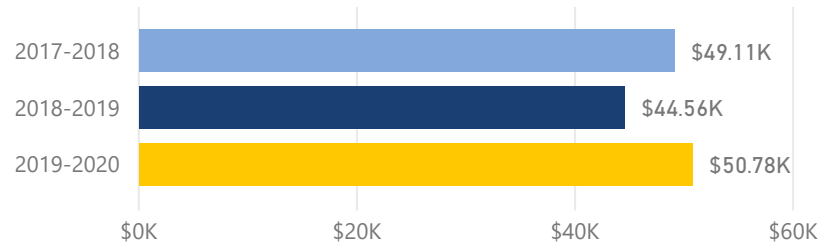
\$8.34K

## John Adams MS Energy Totals

### Total Electric (kWh) by Fiscal Year

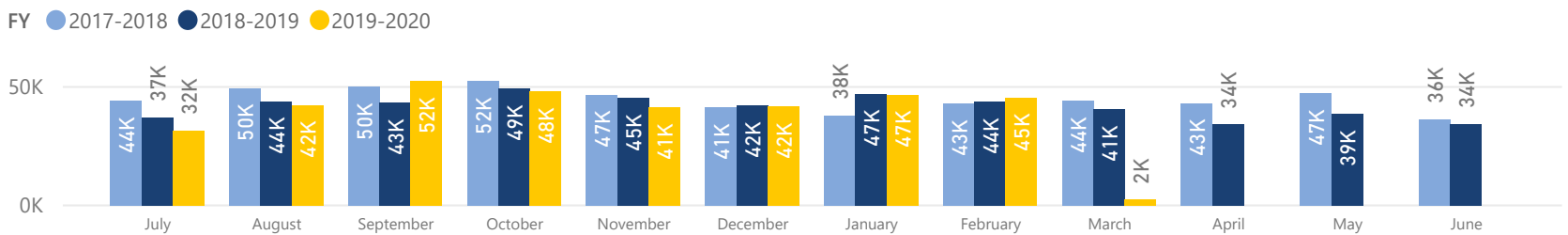


### Total Electric Cost (\$) by Fiscal Year

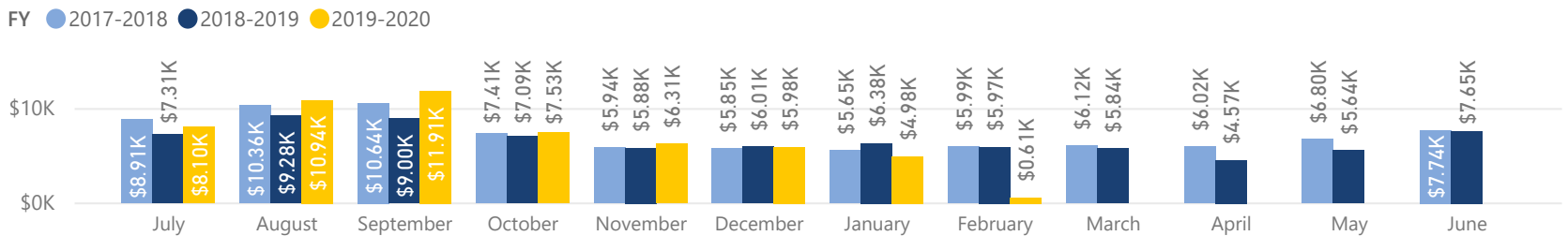


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

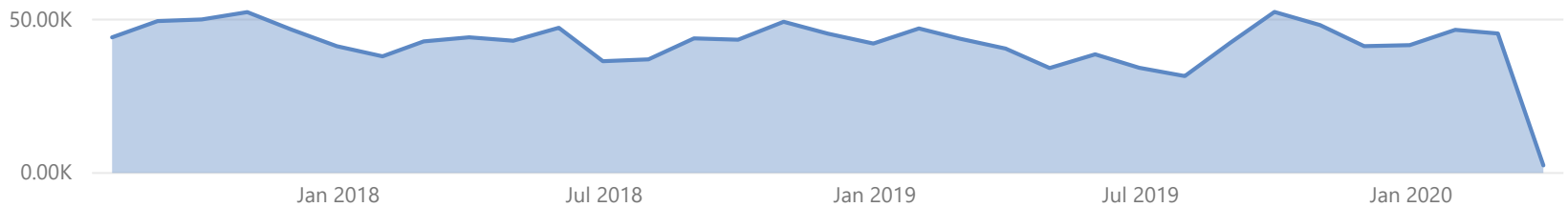
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, the John Adams Middle School showed a decrease in electricity of 26,486 kWh (9% reduction), though costs increased by about \$1,666 compared to FY 2017-18. Part of the reason for this difference in percent energy vs cost savings is due to the rate increase from obtaining energy through clean generation sources.

### Energy (kWh) Savings

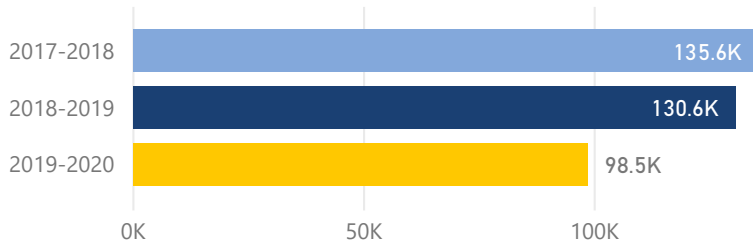
26.49K

### Cost Savings (\$)

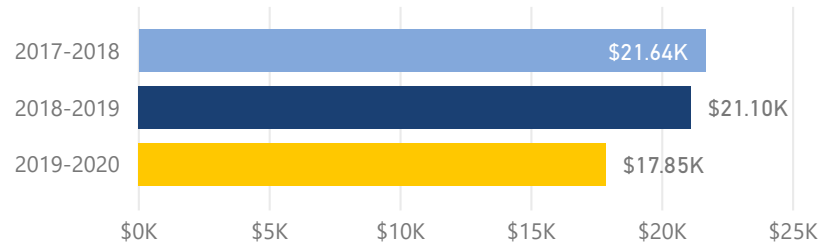
(\$1.67K)

## John Muir Elementary/SMASH Energy Totals

### Total Electric (kWh) by Fiscal Year

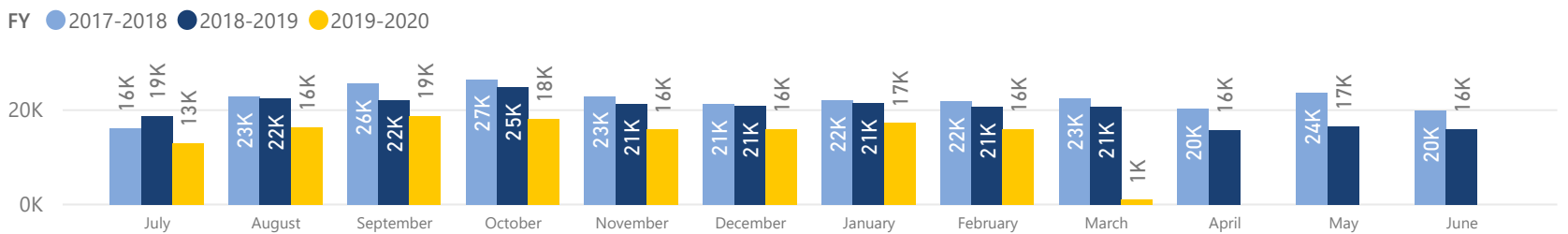


### Total Electric Cost (\$) by Fiscal Year

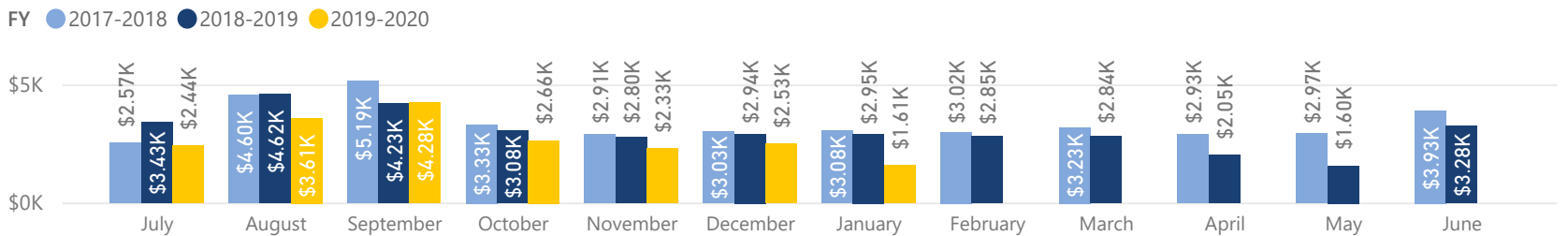


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

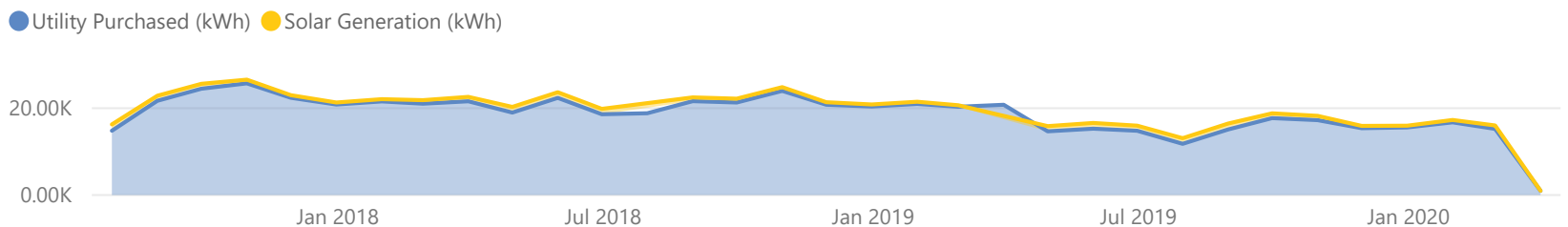
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, the John Muir/SMASH site showed a decrease in electricity of 37,118 kWh (27% reduction), yielding a cost savings of about \$3,789 (18% reduction) compared to FY 2017-18.

### Energy (kWh) Savings

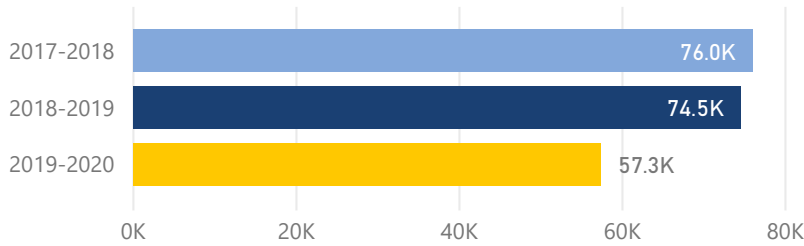
37.12K

### Cost Savings (\$)

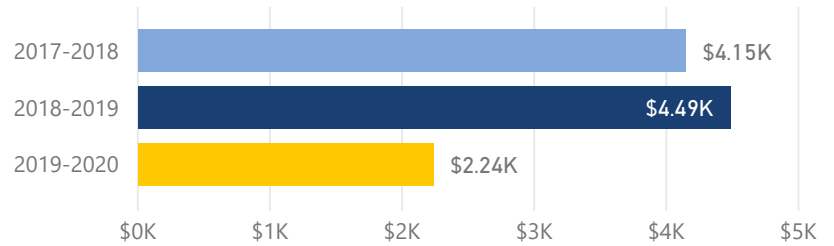
\$3.79K

## Juan Cabrillo Elementary Energy Totals

### Total Electric (kWh) by Fiscal Year

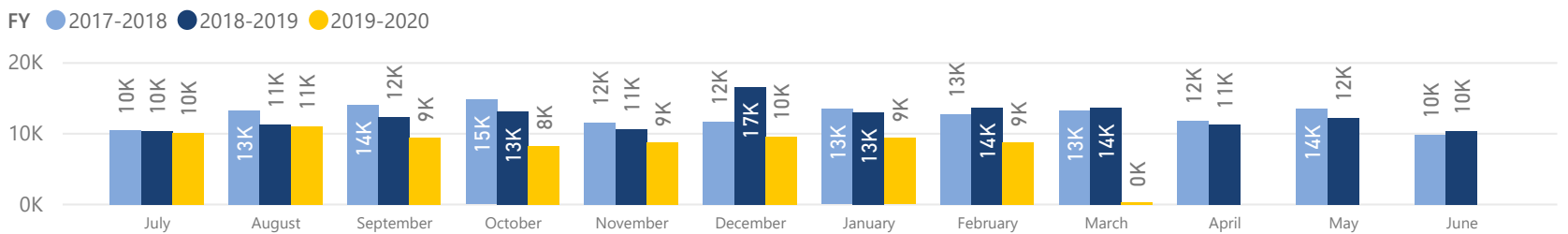


### Total Electric Cost (\$) by Fiscal Year

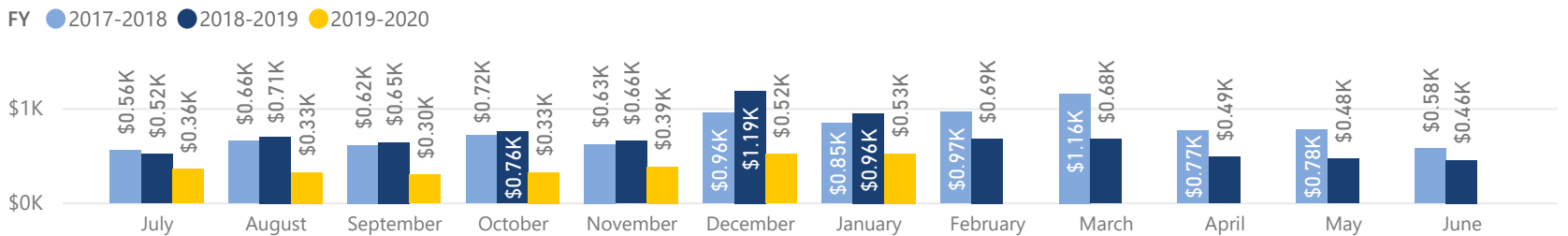


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

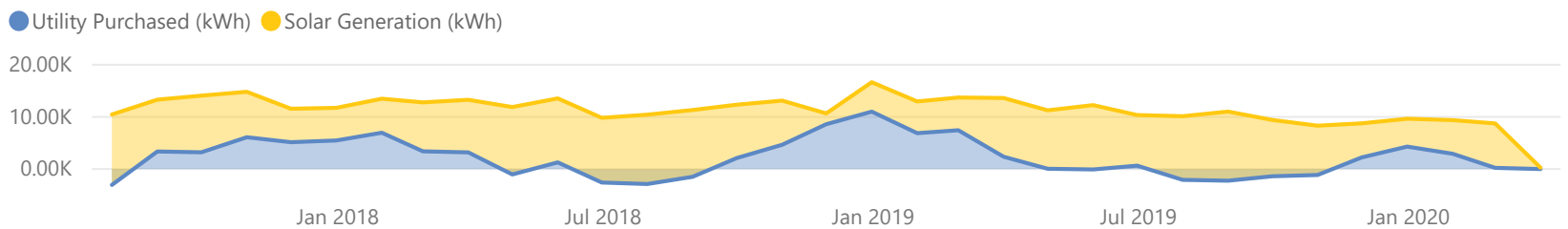
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

Juan Cabrillo Elementary is currently undergoing construction and will be unoccupied throughout the majority of the year, with its students combining with Malibu Elementary (formerly Point Dume). Once construction is complete, the site facilities will be combined with Malibu HS/MS. Savings were therefore not included within this analysis.

### Energy (kWh) Savings

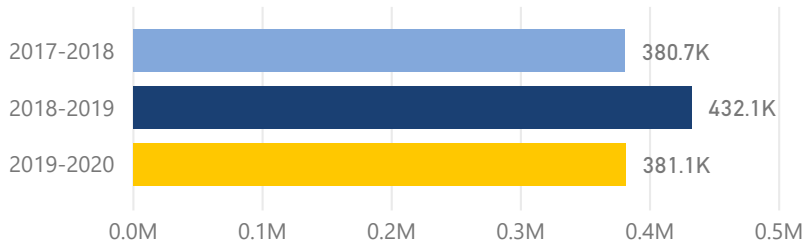
**18.66K**

### Cost Savings (\$)

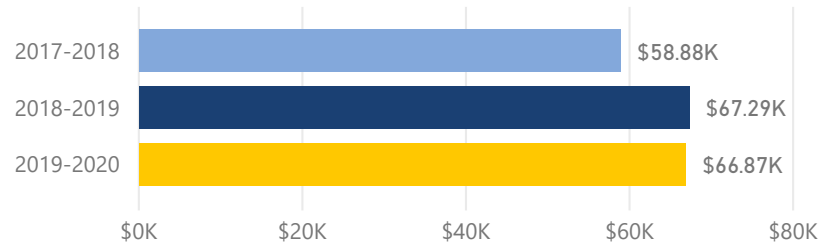
**\$1.91K**

## Lincoln MS Energy Totals

### Total Electric (kWh) by Fiscal Year

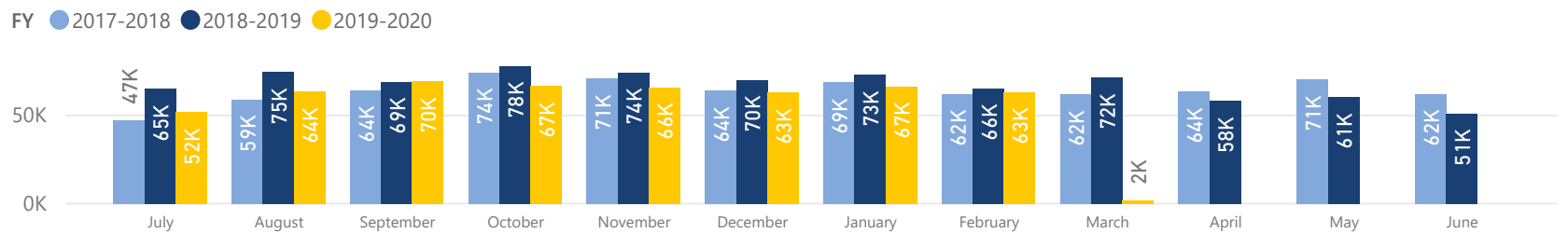


### Total Electric Cost (\$) by Fiscal Year

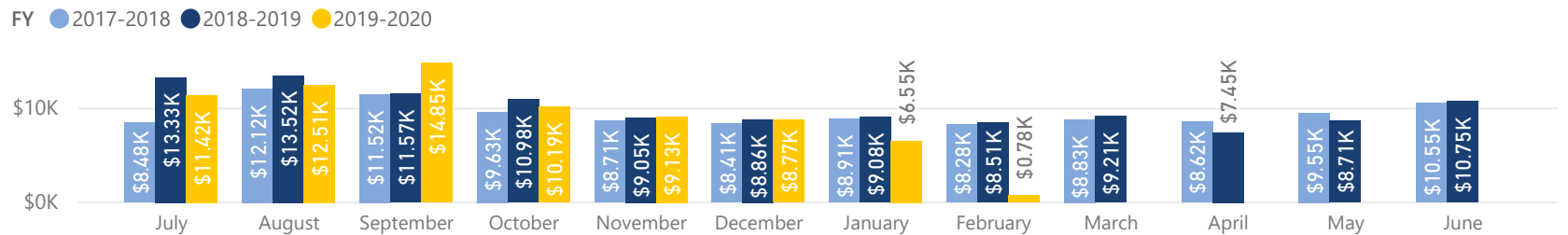


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

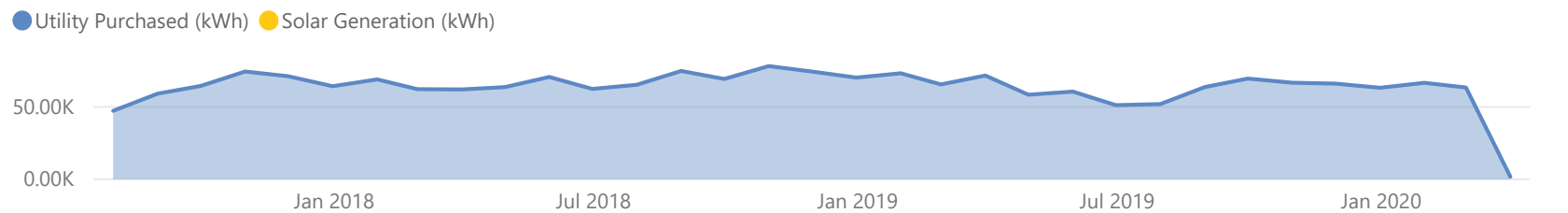
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through September, Lincoln MS showed an increase in electricity of 576 kWh (0.2% increase), increasing utility costs by \$7,999 (14% increase) compared to FY 2017-18.

### Energy (kWh) Savings

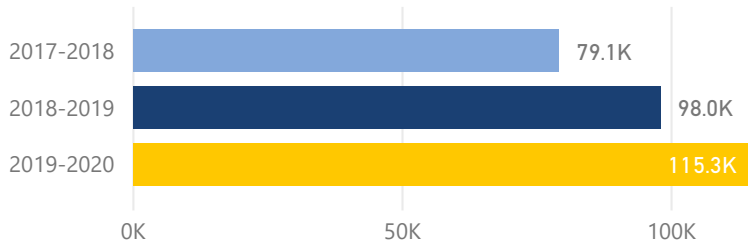
**-0.42K**

### Cost Savings (\$)

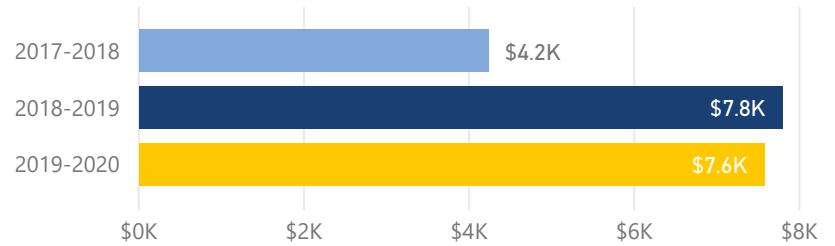
**(\$8.00K)**

## Malibu Elementary Energy Totals

### Total Electric (kWh) by Fiscal Year

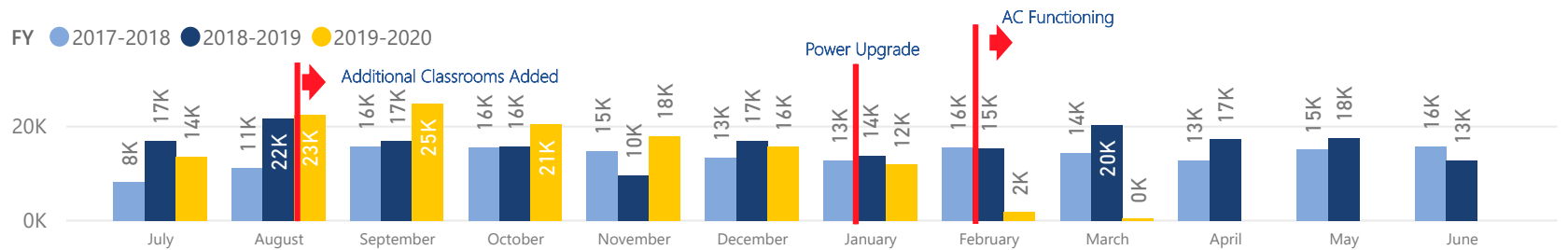


### Total Electric Cost (\$) by Fiscal Year

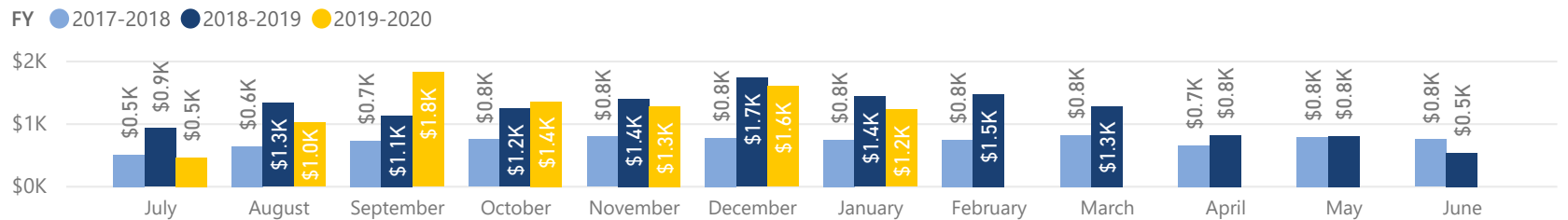


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

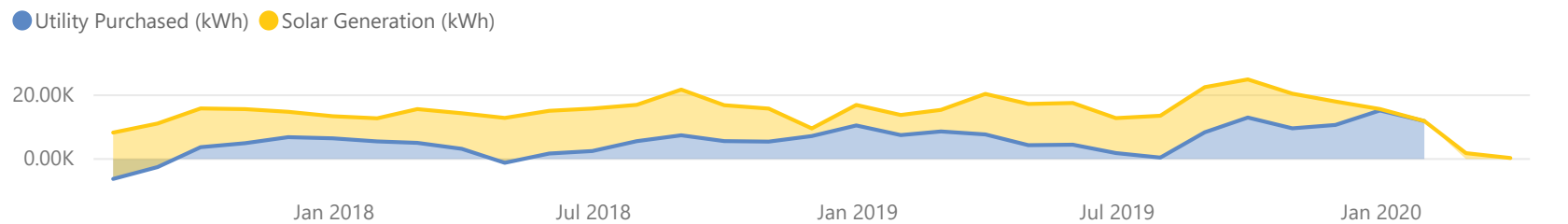
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, Malibu Elementary (previously Point Dume Elementary) showed an **increase in electricity of 36,139 kWh (46% increase)**, increasing utility costs by **\$3,345 (79% increase)** compared to FY 2017-18. This energy increase may be attributed to the installation of AC units at the site in February 2019 and the addition of portables and additional students with the merging with Juan Cabrillo Elementary.

### Energy (kWh) Savings

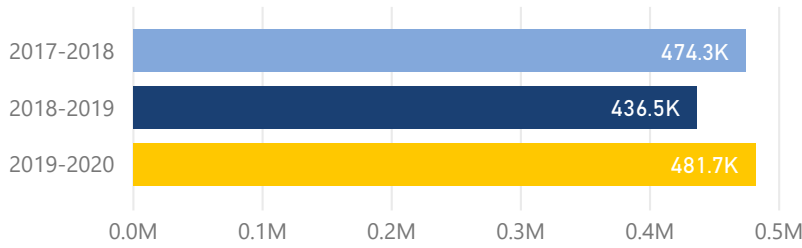
**-36.14K**

### Cost Savings (\$)

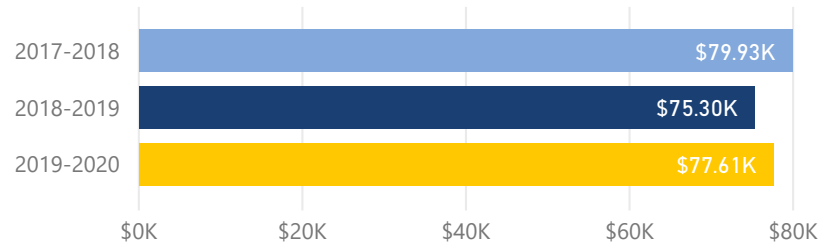
**(\$3.34K)**

## Malibu HS/MS Energy Totals

### Total Electric (kWh) by Fiscal Year

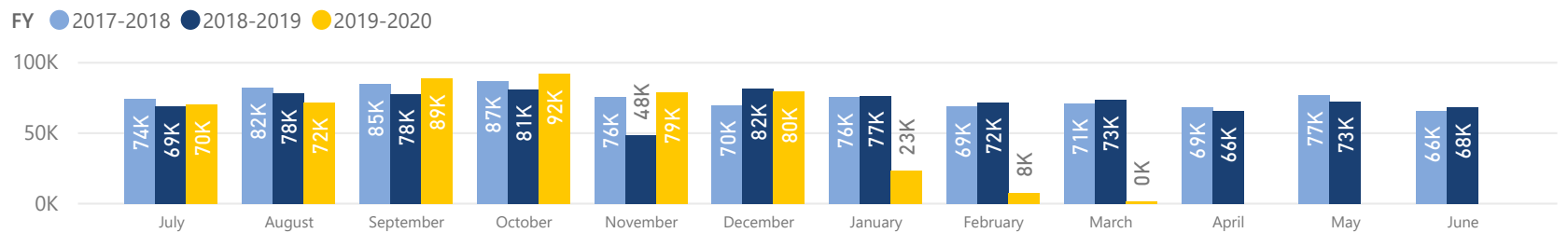


### Total Electric Cost (\$) by Fiscal Year

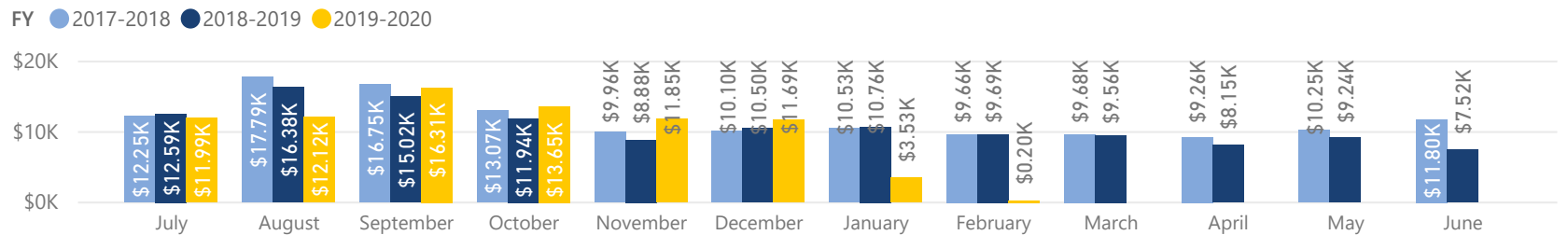


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

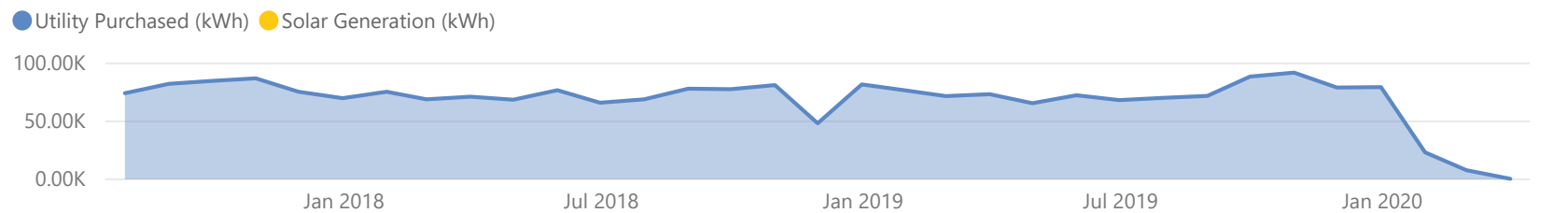
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

At Malibu HS/MS, there has been significant construction during the summer, resulting in inconsistent billing and energy usage. Energy savings will resume reporting once all construction is completed. The data above shows all energy and cost data that has been received and updated to date.

### Energy (kWh) Savings

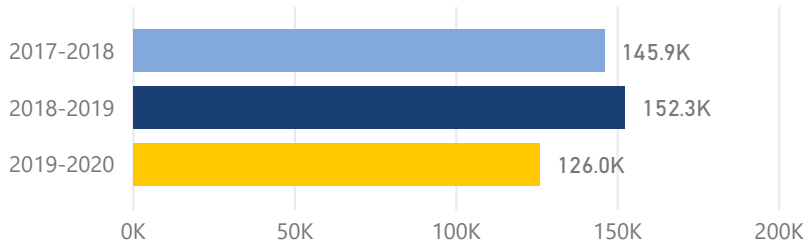
**-9.52K**

### Cost Savings (\$)

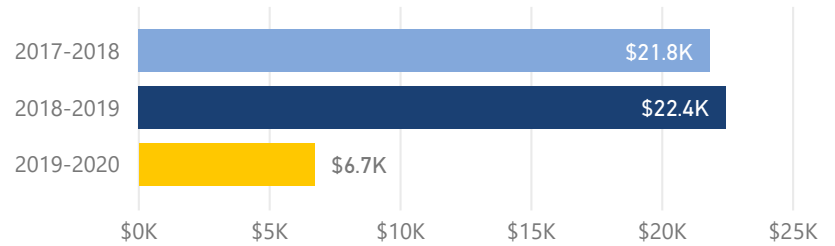
**\$2.32K**

## McKinley Elementary Energy Totals

### Total Electric (kWh) by Fiscal Year

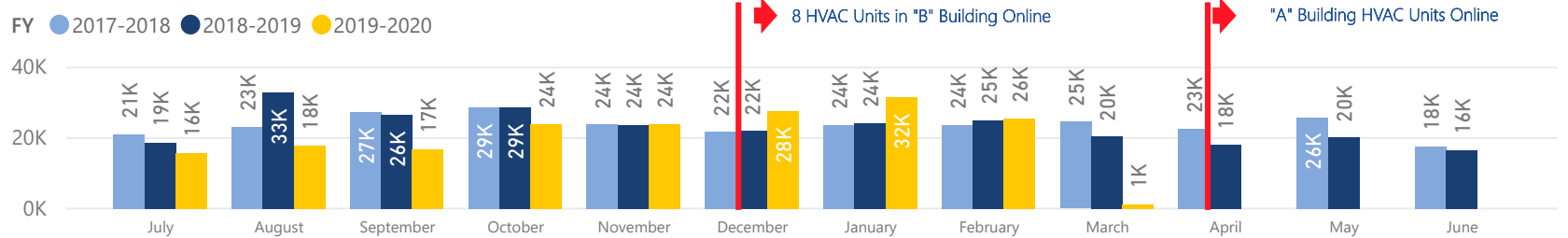


### Total Electric Cost (\$) by Fiscal Year

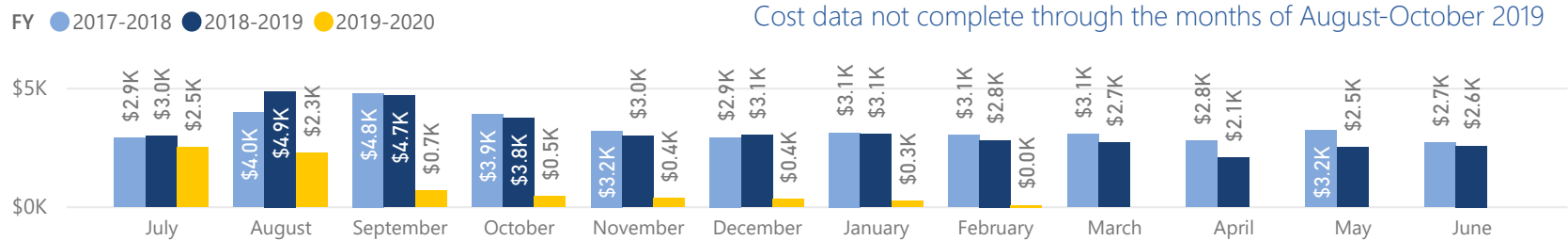


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

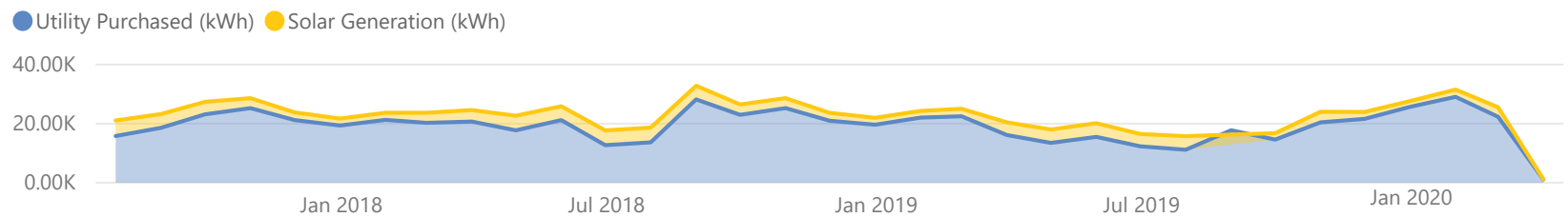
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, McKinley Elementary showed a **decrease in electricity of 19,932 kWh (14% reduction)** compared to FY 2017-18. Due to issues with gathering cost data, cost savings is not shown.

### Energy (kWh) Savings

19.93K

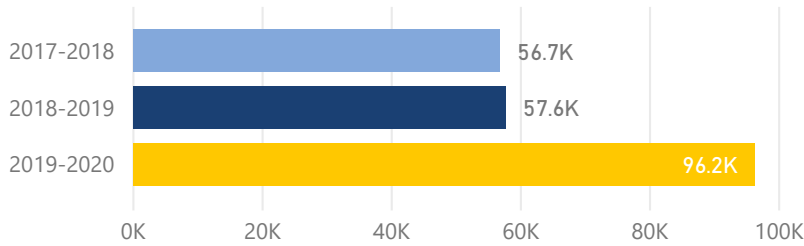
### Cost Savings (\$)

N/A

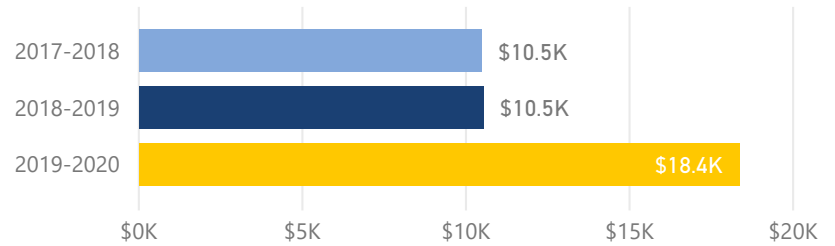


## Obama Center for Inquiry and Exploration Energy Totals

### Total Electric (kWh) by Fiscal Year



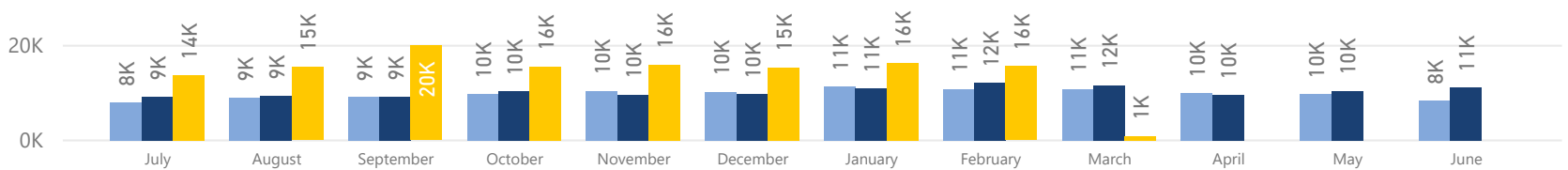
### Total Electric Cost (\$) by Fiscal Year



**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

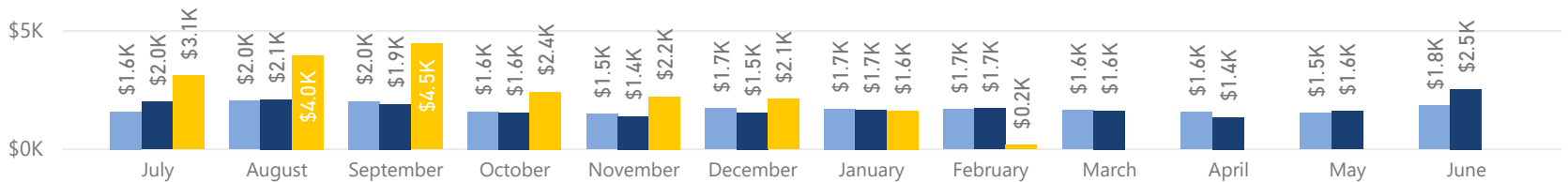
### Total Electric (kWh) by Month and Fiscal Year

FY ● 2017-2018 ● 2018-2019 ● 2019-2020

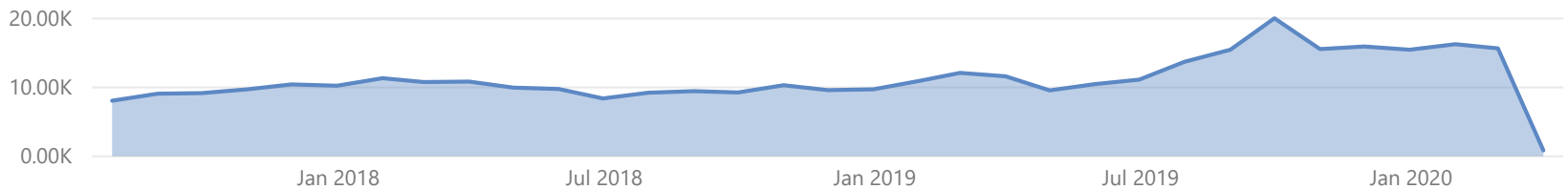


### Total Electric Cost (\$) by Month

FY ● 2017-2018 ● 2018-2019 ● 2019-2020



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, the Michelle and Barack Obama Center for Inquiry and Exploration (previously Olympic HS) showed an increase in electricity of 39,486 kWh (70% increase), increasing utility costs by \$7,896 (75% increase) compared to FY 2017-18. This energy increase is attributed to the facilities upgrade that was completed near the end of FY 2017-18 and beginning of FY 2018-19. Now that the site is in full use compared to the baseline year, energy usage is expected to increase.

### Energy (kWh) Savings

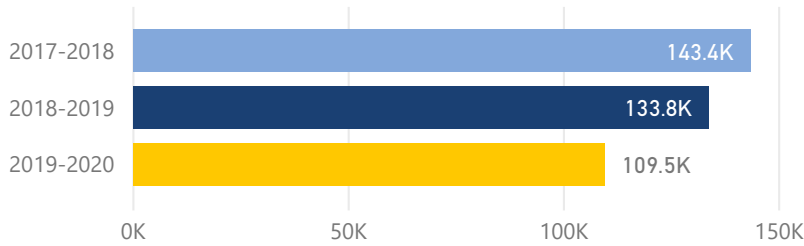
**-39.49K**

### Cost Savings (\$)

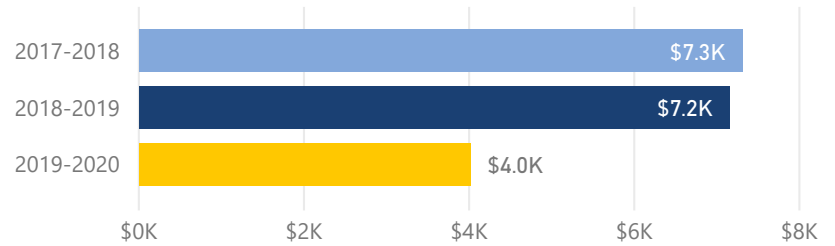
**(\$7.90K)**

## Roosevelt Elementary Energy Totals

### Total Electric (kWh) by Fiscal Year

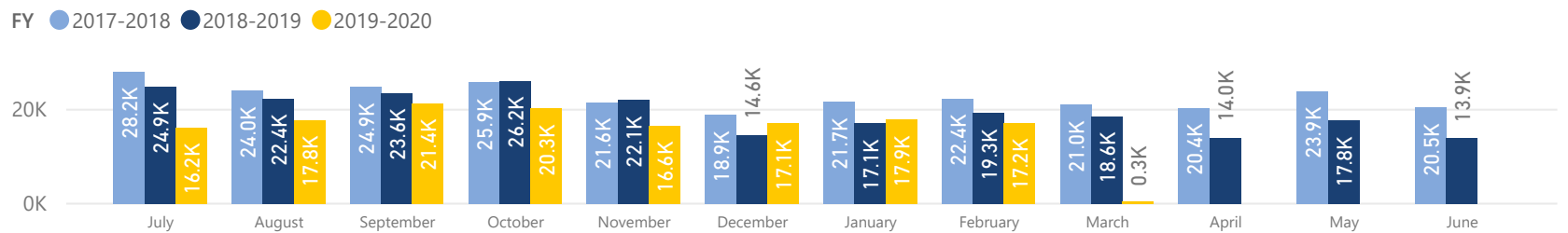


### Total Electric Cost (\$) by Fiscal Year

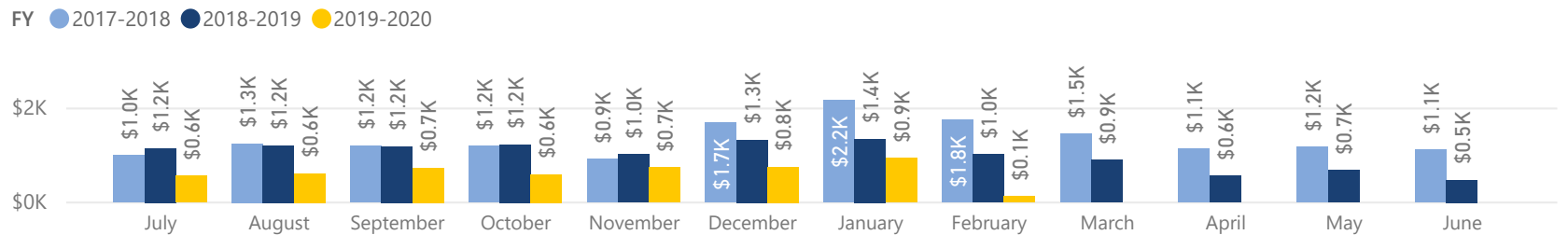


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

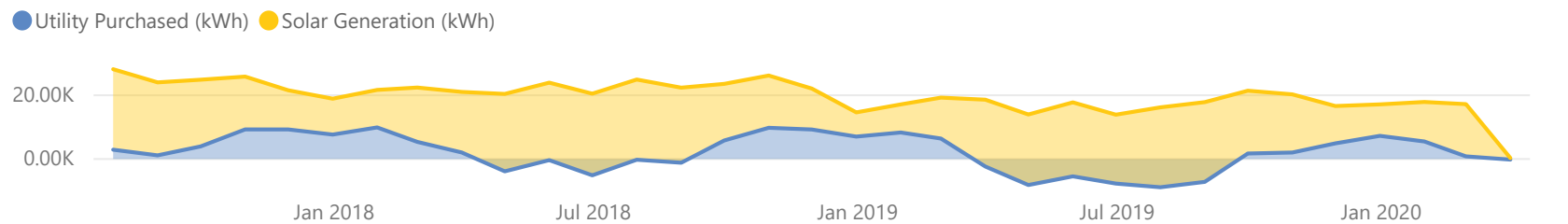
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, Roosevelt Elementary showed a decrease in electricity of 33,912 kWh (24% reduction), yielding a cost savings of about \$3,291 (45% reduction) compared to FY 2017-18.

### Energy (kWh) Savings

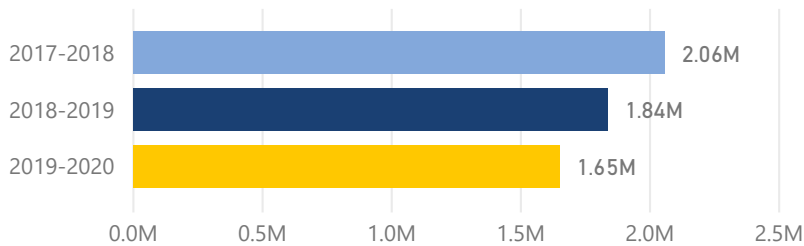
33.91K

### Cost Savings (\$)

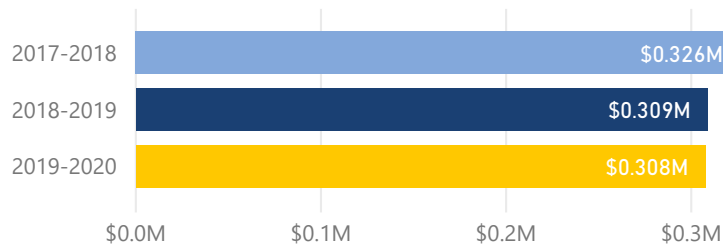
\$3.29K

## Santa Monica HS Energy Totals

### Total Electric (kWh) by Fiscal Year

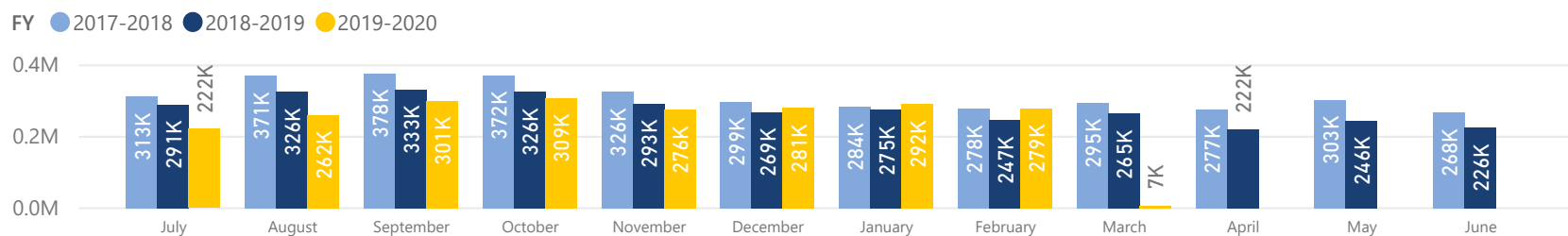


### Total Electric Cost (\$) by Fiscal Year

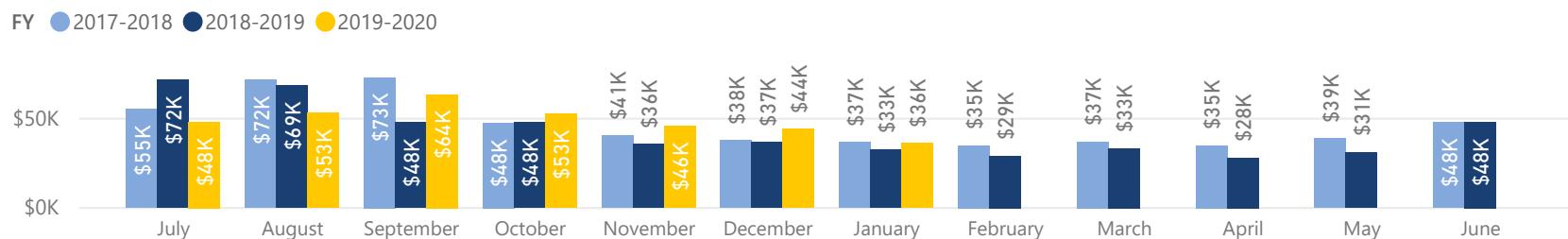


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

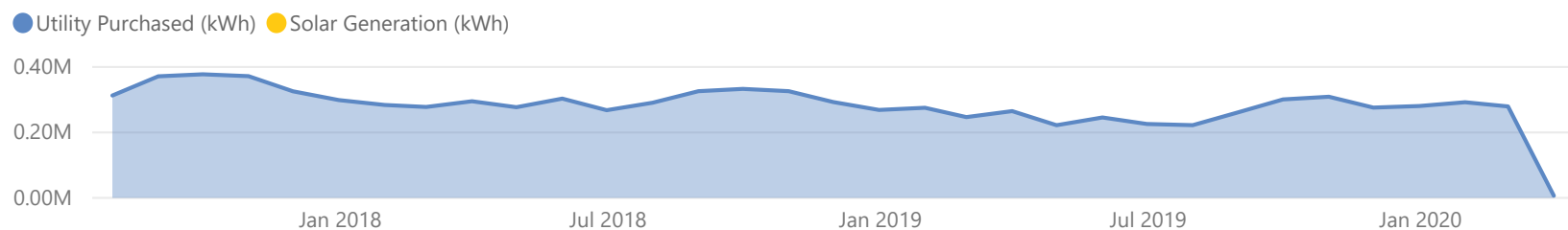
### Total Electric (kWh) by Month and Fiscal Year



### Total Electric Cost (\$) by Month



### Total Energy Use (kWh) by Month



### Site Overview

In FY 2019-20 from July through December, Santa Monica HS showed a **decrease in electricity of 407,733 kWh (20% reduction)**, yielding a **cost savings of about \$18,663 (6% reduction)** compared to FY 2017-18. A large portion of the school is currently under construction, which may account for part of the high energy reduction. Part of the reason for this difference in percent energy vs cost savings is due to the rate increase from obtaining energy through clean generation sources.

### Energy (kWh) Savings

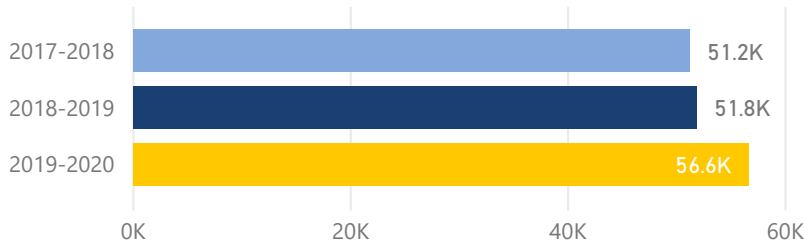
**407.7K**

### Cost Savings (\$)

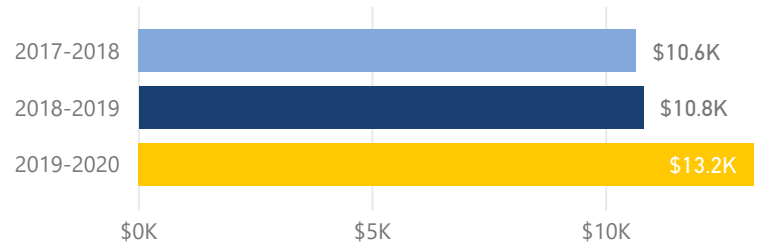
**\$18.7K**

## Washington Pre-School / FIP Office Energy Totals

### Total Electric (kWh) by Fiscal Year



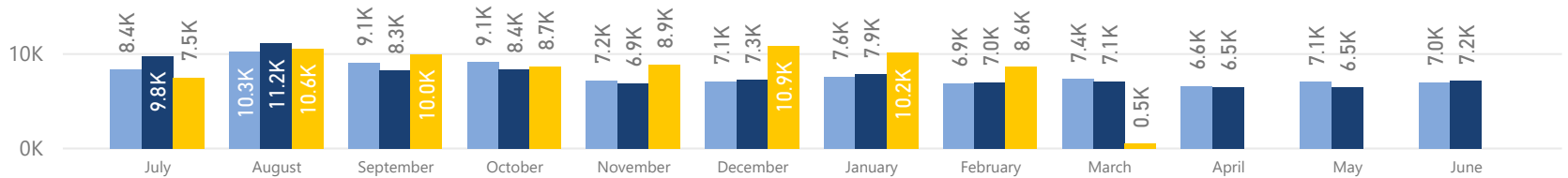
### Total Electric Cost (\$) by Fiscal Year



**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

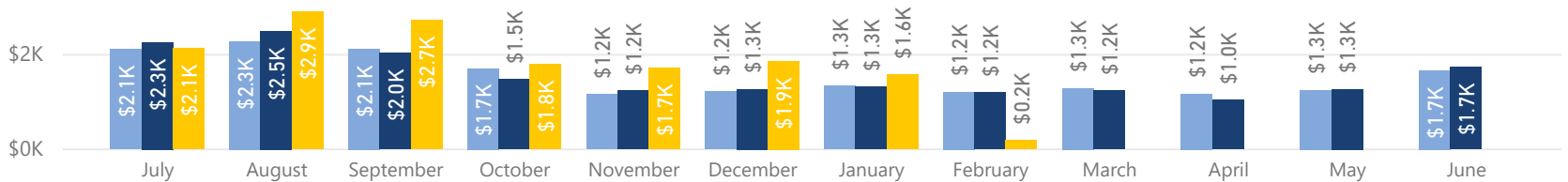
### Total Electric (kWh) by Month and Fiscal Year

FY ● 2017-2018 ● 2018-2019 ● 2019-2020



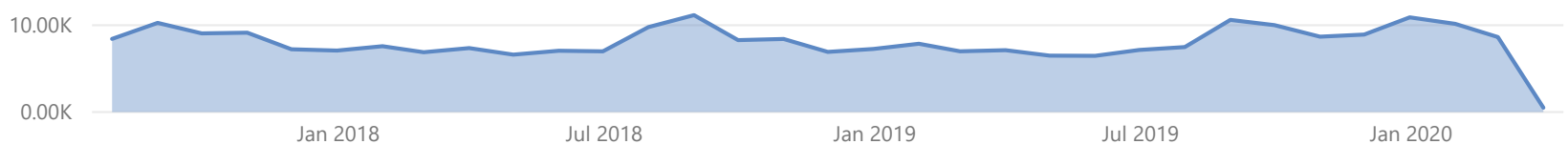
### Total Electric Cost (\$) by Month

FY ● 2017-2018 ● 2018-2019 ● 2019-2020



### Total Energy Use (kWh) by Month

● Utility Purchased (kWh) ● Solar Generation (kWh)



### Site Overview

In FY 2019-20 from July through December, the Washington Pre-school/FIP Office showed an increase in electricity of 5,411 kWh (11% increase), increasing utility costs by \$2,528 (24% increase) compared to FY 2017-18. Part of the reason for this difference in percent energy vs cost savings is due to the rate increase from obtaining energy through clean generation sources.

### Energy (kWh) Savings

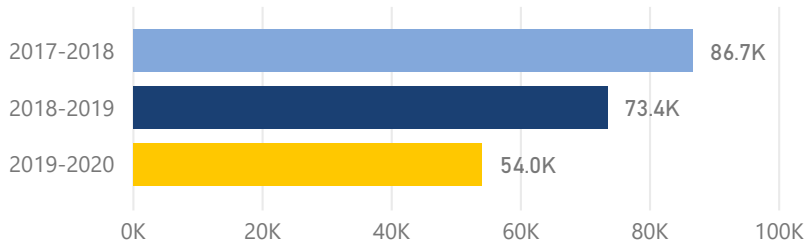
**-5.41K**

### Cost Savings (\$)

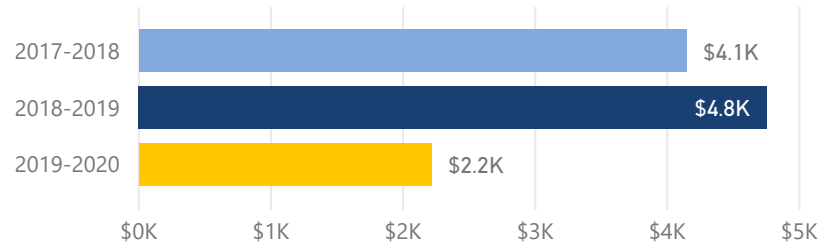
**(\$2.5K)**

## Webster Elementary Energy Totals

### Total Electric (kWh) by Fiscal Year



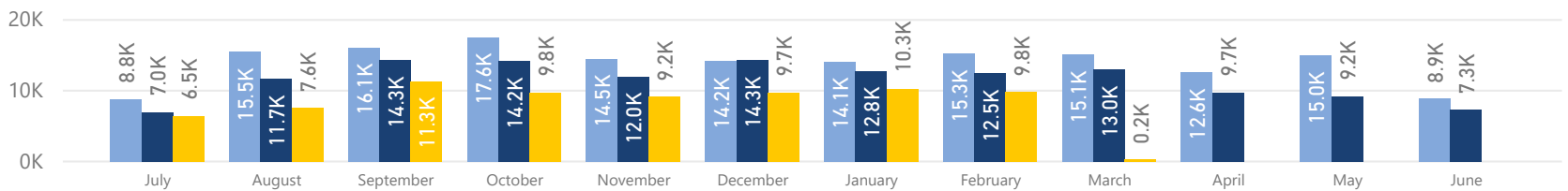
### Total Electric Cost (\$) by Fiscal Year



**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

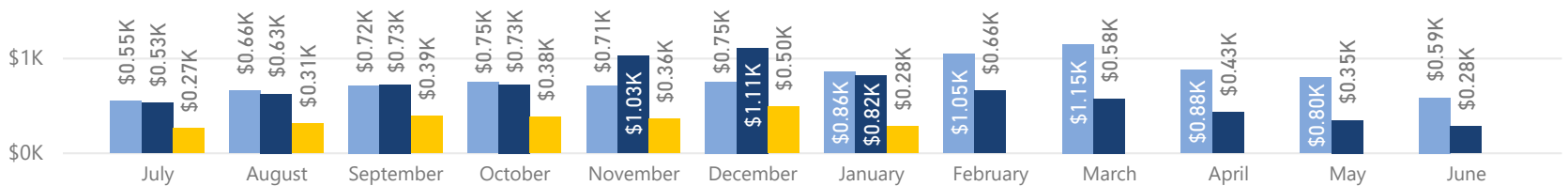
### Total Electric (kWh) by Month and Fiscal Year

FY ● 2017-2018 ● 2018-2019 ● 2019-2020



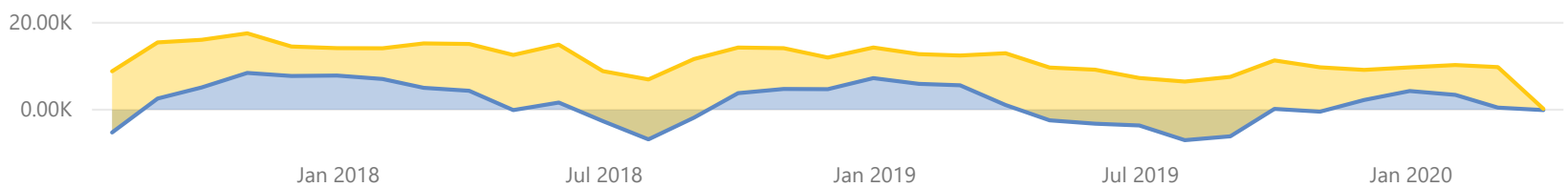
### Total Electric Cost (\$) by Month

FY ● 2017-2018 ● 2018-2019 ● 2019-2020



### Total Energy Use (kWh) by Month

● Utility Purchased (kWh) ● Solar Generation (kWh)



### Site Overview

In FY 2019-20 from July through December, Webster Elementary showed a decrease in electricity of 32,666 kWh (38% reduction), yielding a cost savings of about \$1,932 (47% reduction) compared to FY 2017-18.

### Energy (kWh) Savings

**32.7K**

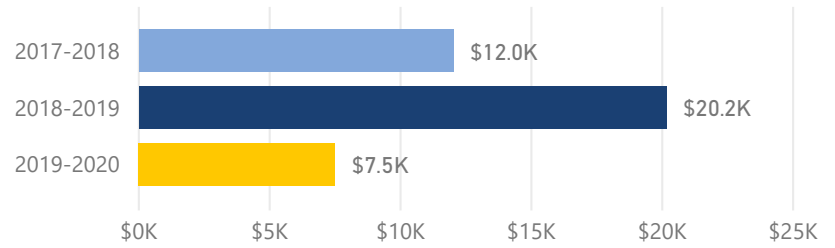
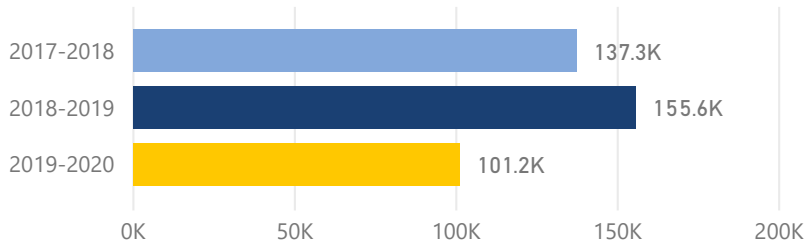
### Cost Savings (\$)

**\$1.9K**

# Will Rogers Elementary Energy Totals

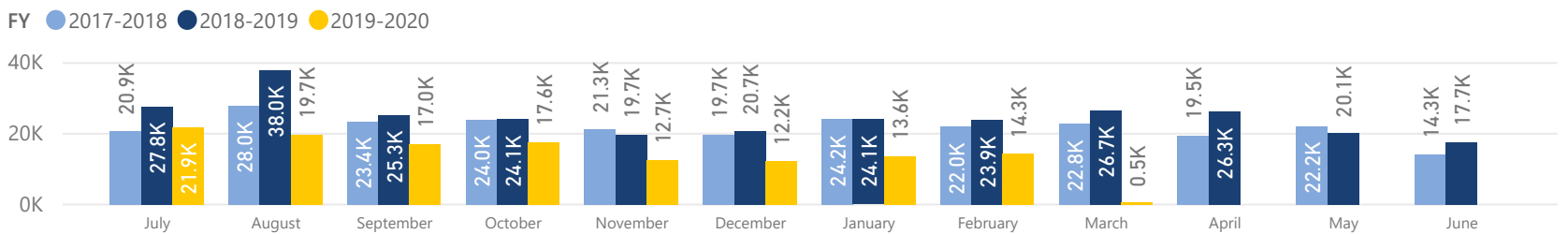
## Total Electric (kWh) by Fiscal Year

## Total Electric Cost (\$) by Fiscal Year

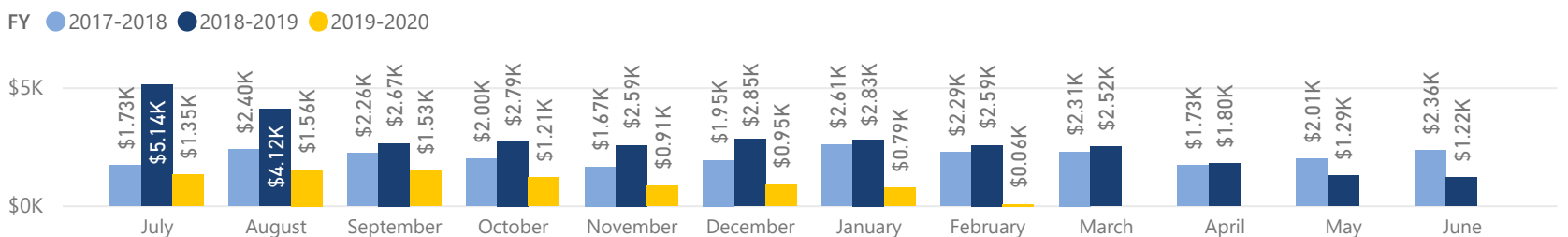


**Fiscal Year 2017-18 (July 2017 to June 2018)** is the Baseline Year for comparison to the current year's usage.

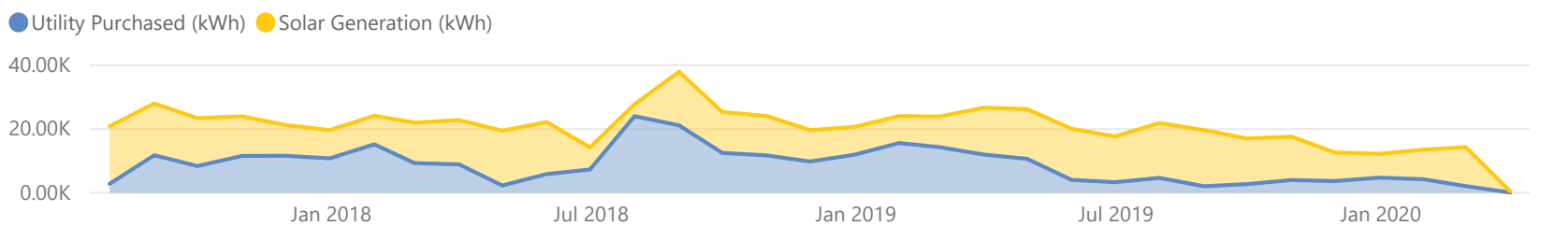
## Total Electric (kWh) by Month and Fiscal Year



## Total Electric Cost (\$) by Month



## Total Energy Use (kWh) by Month



**Site Overview**

In FY 2019-20 from July through December, Will Rogers Elementary showed a reduction in electricity of 36,179 kWh (26% decrease), decreasing utility costs by \$4,516 (38% reduction) compared to FY 2017-18.

**Energy (kWh) Savings**

**36.2K**

**Cost Savings (\$)**

**\$4.5K**