

## Early Start Analysis Electricity Consumption (kWh) June-August 2010-2014

The table below provides information regarding the District's electricity consumption for the months of June and August for the years 2010-2014. For the purpose of this comparison 2010 is considered the baseline that 2011-14 electricity consumption is measured against. Assuming \$0.16 per kWh and based on annual kWh differences, the data indicates the following cost impact:

- Due to the reduction of occupied days in June, Early Start resulted in an approximate decrease of \$371,384 in 2013 and \$6,806 in 2014 for electricity costs versus baseline.
- Due to the addition of occupied days in August, Early Start resulted in an approximate increase of \$1,789,871 in 2012, \$1,143,166 in 2013, and \$1,870,355 in 2014 for electricity costs versus baseline.

Additional factors to be considered when interpreting the data:

- The Early Start calendar went into effect in August 2012 (highlighted).
- The average temperature for August of 2012 and 2014 was higher than previous years, as indicated by a higher number of cooling degree days\*. Cooling degree days are determined from the KCQT weather station, located on the campus of USC.
- The same set of sites were used for each year, excluding new sites opening during or after 2010, and sites with solar photovoltaic systems.

For August, the electricity consumption will increase because students and staff are on campus and using the air-conditioning systems. Note that 2015 data is not available at this time.

	June				August			
	KWH	Cooling Degree Days*	Percent Difference to Baseline (2010)	Cost Difference to Baseline (2010)	KWH	Cooling Degree Days*	Percent Difference to Baseline (2010)	Cost Difference to Baseline (2010)
<b>2010</b>	37,786,311	152			37,401,200	255		
<b>2011</b>	38,858,171	66	2.84%		38,586,678	232	3.17%	
<b>2012</b>	38,294,813	98	1.35%		48,587,898	<b>369</b>	29.91%	\$1,789,871.68
<b>2013</b>	35,465,161	167	-6.14%	-\$371,384	44,545,993	241	19.10%	\$1,143,166.88
<b>2014</b>	37,743,774	128	-0.11%	-\$6,806	49,133,454	<b>329</b>	31.37%	\$1,877,160.64

\* **Cooling Degree-Days** or CDD are the number of degrees that a day's average temperature is above 65° Fahrenheit. To calculate the CDD, take the average of a day's high and low and subtract 65. For example, if the day's average temperature is 80°F, its CDD is 15. If every day in a 30 day month had an average temperature of 80°F, the month's CDD value would be 450 (15 x 30).