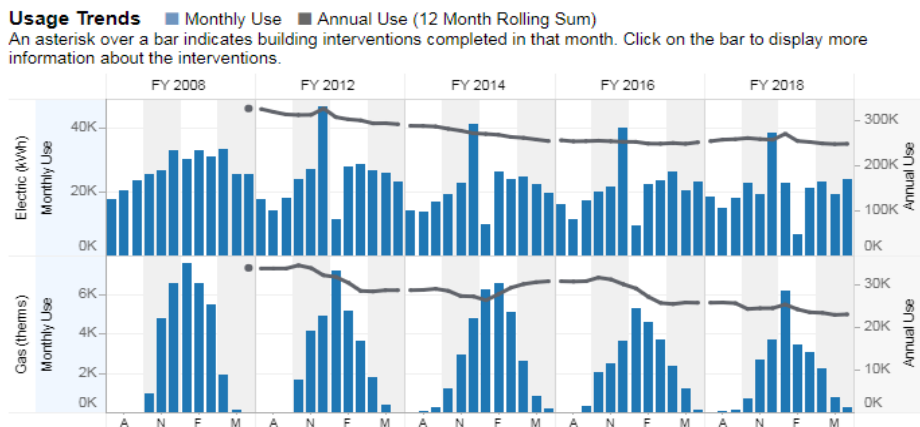


BUILDING DASHBOARD

Federal Street School		125 Federal Street				
Building Data						
Structural Details		HVAC		Condition	Equipment	Type/Age
Year Built	1950	Heating System	Condensing Gas-fired Hot Water Rooftop Air-Handling units in gym and cafeteria	EXCELLENT GOOD	Interior Lighting	all upgraded to LEDs 2018
Square footage	62,140	Air Conditioning	Some Window air conditioners.	GOOD	Exterior Lighting	Wall packs and pole lights are LEDs
Envelope	Masonry	Hot Water Heater	3 Electric Hot Water Heaters - 50 gal	FAIR GOOD EXCELLENT	2 Vending Machines	Vending misers installed 2013
Roof	Flat Membrane North and South; Gabled Center. Gabled roof	Ventilation	8 Exhaust Fans; 25 Ventilators	GOOD		
Windows	Double-Pane Replaced in 2016	EMS	Controls Boilers, Pumps, Outdoor Lights Upgrades in Scheduling and Demand Control Ventilation in 2015			
Insulation	8" Blown Cellulose Added to North Attic 2016 - Vermiculite in South Attic	Heat Distribution	Two-pipe system with two primary pumps and four zone pumps. Unit ventilators in classrooms with fin tube wings, common areas have convectors, baseboards or fan coil units.			
Building Summary	Building has 3 parts, North, South and Center. Variable Frequency Drives added 2013; Roof, boiler and windows replaced 2016; Insulation added North Attic, 2016. Challenges: Vermiculite in South attic; inefficient heat distribution system.					

Energy Profile - FY2018		
Energy Efficiency (BTU per Square Foot)		
Electric	Heat	Total
13,688	37,148	50,835
< 40,000	40,000-80,000	>80,000
Annual Energy Cost		
Electric	Heat	Total
\$43,965	\$21,514	\$65,479
Berkshire Gas Rate Class		G42
Electric Service Rate Class		G2
Average Monthly Demand		90 kW



BUILDING DASHBOARD

Federal Street School			125 Federal Street		
Completed Work					
Fiscal Year	Project	Project Cost	Grant/Rebates	Life Expectancy	Warranty
2015	Siemens ESCO Work (Multiple buildings)	\$1,922,207	none	varied	varied
2016	Attic Insulation and air sealing	\$10,466	\$5,233	15-30 years	1 year
2016	Replaced boiler, windows, and roof (MSBA)	\$3,594,356	\$2,766,057	20+ years	N/A
FY19	LED lighting upgrade- on bill financed	\$17,157	\$14,699	20+ years	5 years
Capital Improvement Plan Projects					
Fiscal Year	Project	Cost	Life Expectancy	Warranty	
2020	Flooring Replacement - asbestos abatement (shared by 4 schools)	\$550,000	N/A	N/A	
2020	Fencing Replacement (all schools)	\$23,000	N/A	N/A	
2020	Elevator Replacement	\$250,000	N/A	N/A	
2020	Paving	\$95,000	N/A	N/A	
Additional Maintenance and Replacement Projects Identified					
	Project	Predicted Cost	Payback Time	Supporting Info	
	Motion detectors for interior lighting	N/A	N/A	N/A	
Audits/Assessments					
Year	Type	Findings	Link		
2009	Siemens Whole building assessment	See Report	See Report		
2016	CET Insulation assessment	North attic would benefit from more insulation and air sealing	see CET Assessment		
2016	Solect Solar Assessment	Potential for 115 KW system on roof	Solect Proposal		