



Building Dashboard

Middle School			195 Federal Street			
Building Data						
Structural Details		HVAC		Condition	Appliances/equipment	
Year Built	1924 Main building/auditorium with additions	Heating System	Two Gas-Fired Condensing Boilers, Mini-splits in offices Several Air Handlers Four Heat Recovery Units 3 Rooftop Units	EXCELLENT GOOD EXCELLENT (Replaced 2019)	Interior Lighting	all upgraded to LEDs 2018
Square footage	120,692	Air Conditioning	Economisers in ERUs, Mini-Splits in Admin Offices, Air Conditioner in Server Room	GOOD or EXCELLENT	Exterior Lighting	Needs Data
Envelope	3- Story Brick	Hot Water Heater	2 NG Water Heaters Supplying a 963 Gallon Tank	EXCELLENT	Vending Machines	Needs Data
Roof	Flat roof with rubber membrane over steel deck and bar joists. Auditorium (original building) has pitched roof with asphalt shingles on wood sheathing and wood framing.	Ventilation	Four Energy Recovery Units on Roof Several Ventilators and Exhaust Fans	GOOD/EXCELLENT		
Windows	Double Glazed	Heat Distribution	Baseboard Radiation Using 2 Circulation Pumps	POOR		
Insulation	3" of foam insulation in roof	EMS	SNE/Siemens systems - Controls Boilers, Pumps, Setbacks. Upgrades in Scheduling and Demand Control Ventilation in 2015			
Building Summary	Major Renovation in 1998 general construction, mechanical and electrical. Converted from oil to natural gas in 2011. Upgraded fixtures, lamps, and ballasts and installed occupancy sensors in 2015. In 2016, School Admin moved in requiring an HVAC upgrade (heat pumps). Three rooftop units replaced in January 2019					
Energy Profile - FY2021			Usage Trends			
Energy Usage			Monthly Use (Blue bars), Annual Use (12 Month Rolling Sum) (Grey line). An asterisk over a bar indicates building interventions completed in that month. Click on the bar to display more information about the interventions.			
Electric (kWh)	Heat (therms)	EUI (kBtu/sqft)				
595,200	50,511	59				
EUI < 35 Meets Zero Energy Goal	EUI = 35-50 Efficient	EUI > 50 Priority to Improve				
Annual Energy Cost						
Electric	Heat	Total				
\$108,836	\$40,702	\$149,538				
Berkshire Gas Rate Class		G41 and G42				
Electric Service Rate Class		G2				
Average Monthly Demand (kW)		185.7				
Completed Work						
Fiscal Year	Project	Project Cost	Grants/Rebates	Life Expectancy	Warranty	
2011	Oil to natural gas conversion	N/A	N/A	N/A	N/A	
2013	Boiler Upgrade	N/A	N/A	N/A	N/A	
2017	School Admin moved to Middle School; Heat pumps added to office space	N/A	N/A	N/A	N/A	
2019	LED lighting upgrade- on bill financed	\$73,226	\$31,385	20+ years	5 years	
2019	3 new Rooftop Units (Green Communities Grant)	\$158,678	\$108,870	20+ years	5 years	
2019	Auditorium Lighting Upgrade	\$50,786	N/A	N/A	N/A	
Capital Improvement Plan Projects						
Fiscal Year	Project	Project Cost	Grants/Rebates	Life Expectancy	Warranty	
2020-22	Food Service Appliance Replacement (with High School)	\$152,500	N/A	N/A	N/A	
Audits/Assessments						
Fiscal Year	Type	Findings				
2009	Siemens Whole building assessment	Report available upon request				
2019	Solect Solar Assessment	Roof cannot support solar				