



Building Dashboard

High School			21 Barr Ave		
Building Data					
Structural Details		HVAC		Appliances/equipment	
Year Built	New construction completed in 2015 - Auditorium (only part of original building) built in 1957	Heating System	3 gas-fired hot water boilers, AHU-1 for gym, AHU-2 for café, RTU-1 auditorium, RTU-2 library, RTU-3 offices and nurse, cabinet heaters at entrances, 18 mini-splits assorted rooms	Interior Lighting	All high efficiency LEDs
Square footage	169,650	Air Conditioning	Economisers on units, mini-splits serve specific rooms	Exterior Lighting	All high efficiency LEDs
Envelope	High performance thermal envelope with multiple insulation layers - R-34	Hot Water Heater	Two Aerco International gas-fired heaters and storage tank	Vending Machines	N/A
Roof	White membrane flat roof to reduce cooling loads, solar ready	Ventilation	In addition to above, 8 ERUnits for classrooms, and 11 exhaust fans	Emergency Generator	550 kW Diesel
Windows	Double glazed windows maximizing daylighting strategies	Heat Distribution	In addition to above, water boilers work with fin tube radiation system		
Insulation	R-34 walls, roof - Needs Data	EMS	Siemens management system: controls temp setbacks and scheduling for heat and ventilation as well as exterior lights.		
Building Summary	New LEED Gold High School opened in Fall 2015, auditorium is only original space that remained from old building. Roof is solar-ready, and there are plans to add panels and battery storage in FY20-21.				
Energy Profile - FY2019					
Energy Efficiency (BTU per Square Foot)					
Electric	Heat	Total			
20,301	20,253	40,554			
If Total is ≤ 40K Great!	40K-80K OK	>80K Needs Work			
Annual Energy Cost					
Electric	Heat	Total			
\$205,607	\$31,395	\$237,002			
Berkshire Gas Rate Class	G42				
Electric Service Rate Class	T2				
Average Monthly Demand (kW)	330				
Completed Work					
Fiscal Year	Project	Project Cost	Grants/Rebates	Life Expectancy	Warranty
2016	Renovations completed (MSBA)	\$65,743,393	\$41,787,165	varies	varies
Capital Improvement Plan Projects					
Fiscal Year	Project	Town Cost	Grant/Rebate	Life Expectancy	Warranty
2020-21	Solar Panels and Battery Storage	\$200,000	\$367,310	20-30 years	10-20 years
2020-22	Food Service Appliance Replacement (with Middle School)	\$152,500	N/A	N/A	N/A
Additional Maintenance and Replacement Projects Identified					
	Project	Predicted Cost	Payback Time	Supporting Info	
	Continue with BMS Assessment - implement optimized start/stop schedules	\$2,500	1 year	Peregrine Proposal	
Audits/Assessments					
Fiscal Year	Type	Findings			
2017	Solar and Storage Assessments	DOER Clean Energy Resiliency Initiative Grant awarded in 2016 - new RFP to be issued FY20			