

Deferred Maintenance Report - All assessed facilities
Montcalm Community College

Facility Stats

Number of Buildings	16
Oldest Building	1916
Newest Building	2012
Avg. Year Built	1975
Avg. Cost per S.F.	\$281

Facilities Condition Index - All assessed facilities

	Priority Issues Data					0-5 Year Cumulative Data				
254,801	\$71,573,040	\$970,864	\$0	1.48%	GOOD	\$3,593,585	\$14,933	5.02%	\$1,431,461	FAIR
TOTAL S.F.	CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING

Deferred Maintenance Detail Report - by Building

Montcalm Community College

Notes:

Data from previous assessments is included for reference purposes.
Current assessment notes indicate if past issues have been addressed.

Campus: Main			Use Types:				Notes:		original building - 35,194 SF
Bldg. No: 01			35 % Athletic						2007 - Bookstore renovation/addition (+1,000 SF)
Building: Activities			35 % Student Union						
Area: 36,190sf		Yr Built: 1975	Floors: 1	30 % Natatorium					
		CRV of System		Pct. of system value to budget for repair/replacement:					
System	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	System/Component Notes		
Structure	15	\$1,630,530	0	0	5	95	No reported problems		
			\$0	\$0	\$81,527	\$1,549,004			
							2007-2015 assessment: No changes reported		
							2016 Assessment: No changes reported. No reported problems.		
							2018 Assessment: Severe corrosion of steel ladder in pool water treatment room. Severe corrosion of reinforced concrete floor slab and beams.		
							2019 Assessment: Continued Severe corrosion of steel ladder in pool water treatment room.		
							2021 Assessment: Structural concrete repair completed in pool equipment room, including new ship's ladder.		
							2022 Assessment: No changes or problems reported.		
Roof	5	\$543,510	0	0	80	20	2004- Trocal PVC roof replaced with EPDM (\$105,000)		
			\$0	\$0	\$434,808	\$108,702			
							2007 assessment: No reported problems		
							2009 assessment:		
							Roof membrane detached at perimeter due to moisture problems in wall system, temporarily repaired. Permanent repair scheduled and funded.		
							2010 assessment: Pool roof replaced with white EPDM membrane roof		
							2011-2015 assessment: No changes. Roof inspected annually, no reported problems.		
							2016 Assessment: No changes reported. No reported problems. Projected replacement from roof report: 2024		
							2018 Assessment: No changes reported. Roof sections 2, 5, and 6 scheduled for roof replacement in 2030. Section 1 to be replaced in 2035. Roof comprised of single-ply membrane, with insulation on metal deck, steel joists		
							2019 Assessment: No changes reported. No reported problems.		
							2021 Assessment: No changes reported. No reported problems.		

									Projected roof replacement in 2026.				
									2022 Assessment: No reported changes or problems.				

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Glazing	3	\$326,106	0	0	20	90	Original glazing. Skylight resealed.		
			\$0	\$0	\$65,221	\$293,495			
							2002-new dbl. pane glazing in kitchen		
							2007-2014 Assessment: No reported problems, no changes reported.		
							2015 - No changes reported. Recommend reviewing condition of sealants on original units.		
							2016, 2018 Assessment: No changes reported.		
							2019 Assessment: Several windows replaced at the pool. No other problems reported.		
							2021-2022 Assessment: No changes reported. No reported problems.		
Cladding	7	\$760,914	0	0	10	90	2001-Recently replaced mortar, caulk, control joints.		
			\$0	\$0	\$76,091	\$684,823			
							2001-Recently waterproofed to counteract efflorescence, although problem expected to return due to high humidity and salinity of air in building.		
							2003-Replacement of pool humidity control system appears to have solved problem with masonry		
							2007 assessment: No reported problems		
							2009 assessment:		
							Moisture barrier in pool area exterior walls not performing properly, allowing moisture into wall structure. Problem under investigation.		
							2010 assessment:		
							Moisture barrier issue resolved as part of roof replacement. Wall/roof transition insulated.		
							2011-2016: assessment: No changes. No reported problems.		
							2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.		

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HVAC	24	\$2,608,848	13	0	10	77	2000-Independent HVAC system - original. 2 new rooftop units.	
			\$339,150	\$0	\$260,885	\$2,008,813	HVAC system unable to control high humidity from pool.	
							2002-pool energy/humidity mgmt. system budgeted for replacement	
							2003-pool energy/humidity mgmt. system replaced.	
							2005-2 coils replaced, balance of system generally original	
							2007 assessment:	
							Fitness center RTU original, with newer compressor. Coil leaks and loses charge.	
							System at end of life, due for replacement.	
							Perimeter fin tube heating in pool repaired, no reported problems.	
							Repairs and maintenance keeping aging system operating.	
							2009 Assessment:	
							2008-Fitness center RTU replaced (\$14,000)	
							Dehumidification unit piping upgraded	
							2010 Assessment:	
							Minor HVAC work performed to convert cafeteria to Subway shop. Majority of building equipment still original and due for replacement.	
							Gas meter systems replaced by Consumers Energy.	
							2011 assessment:No changes reported. Equipment still due for replacement.	
							2012 assessment:	
							System controls (actuators and valves) upgraded to DDC as part of new energy management system. HVAC equipment still due for replacement.	
							2013 assessment:	
							2 RTUs over north half of building past end of life and due for replacement.	
							2014 assessment:	
							(2) RTUs budgeted for replacement in 2015. Expected cost of at least \$75,000	

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Plumbing/Drainage	7	\$760,914	3	0	15	82	Damaged fixtures replaced, hardware replaced, toilet partitions replaced.	
			\$22,827	\$0	\$114,137	\$623,949		
							2003-pool pH system replaced (from acid to CO-2)	
							2004-due for replacement: pool equip room plumbing, pool heat exchanger due for replacement (\$15-20,000)	
							2005-pool equipment room plumbing and heat exchanger replaced	
							2007 assessment: No reported problems.	
							2009 Assessment: No changes reported.	
							2010 assessment:	
							Piping in pool equipment room repaired to improve efficiency (\$120,000)	
							Pool circulation pump drive replaced with variable frequency drive unit.	
							2011 assessment:	
							Majority of pool equipment room piping still original (except for repaired sections), still due for replacement.	
							2012 assessment: No changes reported.	
							2013 assessment:	
							New filter, circulation pump, controls, valves installed, relocated out of basement Deteriorated piping replaced. (approx. \$130,000)	
							2014 assessment: No reported problems.	
							2015 assessment:	
							Pool supply and drain piping leaks have washed out sand under pool deck, caused floor damage. Piping and collateral floor damage repaired in 2015.	
							2016, 2018 Assessment: No changes reported. No reported problems.	
							2019 Assessment: Pool medium was replaced. No reported problems.	
							2021 Assessment: No changes reported. No reported problems.	

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Primary/Secondary	10	\$1,087,020	0	0	20	80	Primary - good condition		
			\$0	\$0	\$217,404	\$869,616	Secondary - good condition		
							2007 assessment:		
							No reported problems		
							2009 Assessment: No changes reported.		
							2010 assessment:		
							Campus primary service upgraded by Consumers Energy to provide additional capacity.		
							2011 - 2015 Assessment: No changes reported.		
							2016 Assessment: No changes reported. No reported problems.		
							2018 Assessment: Building served by 480/277V, 3-phase service with 600A capacity.		
							Main gear and most distribution gear is Federal Pacific QMQB Style with fusible		
							switches for overcurrent protection. This equipment is no longer available, but still		
							maintainable. Need to clean and tighten all connections.		
							Emergency panel tapped ahead of the main switch is no longer code-compliant.		
							2019 Assessment: Federal panels replaced with Square D panels.		
							2021-2022 Assessment: No changes reported. No reported problems.		
Distribution	5	\$543,510	3	3	10	84	Some corroded and damaged electrical equipment in pool area relocated.		
			\$16,305	\$16,305	\$54,351	\$456,548	Majority of electrical panels and switchgear is Federal Pacific. Panels are		
							obsolete and parts are difficult to find.		
							2007-2014 assessment: No changes reported.		
							2015 Assessment: No changes reported. Obsolete panels should be budgeted		
							for replacement. College estimates approximately \$50,000		
							2016 Assessment: No changes reported.		
							2018 Assessment: Many branch panelboards are Federal Pacific breaker panels.		
							It is common for these panels to not trip as they should in short-circuit conditions.		
							MCC is in the process of replacing. Recommend accelerate the replacement process.		

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Lighting	5	\$543,510	0	0	5	95	Fixtures typically original - in good condition		
			\$0	\$0	\$27,176	\$516,335	Locker room lighting replaced in 2003, 2004		
							HID fixtures in natatorium due for replacement - difficult to maintain		
							2007 assessment: New lighting in bookstore area, no other changes		
							2009 Assessment: No changes reported.		
							2010 assessment:		
							Gym lighting replaced with high bay T8 fluorescent fixtures (\$10,000).		
							Pool lighting still due for replacement.		
							2011 assessment:		
							Pool lighting replaced with high bay T8 fluorescent fixtures (\$10,000)		
							2012 assessment:		
							Lighting upgraded as part of ECM contract.		
							2013-2015 Assessment: No changes reported.		
							2016 Assessment: No changes reported. No reported problems.		
							2018 Assessment: No reported problems.		
							Fluorescent lighting in pool, gym, and bookstore. MCC has replaced corridor and Cyber Café lighting with flat panel LED lighting.		
							2019 Assessment: No reported problems.		
							2021 Assessment: Light fixtures changed to LED in gym.		
							2022 Assessment: Lighting work completed in common area. No other changes or problems reported		
Voice/Data	2	\$217,404	0	0	5	95	Not much in building - installed around 2000. No reported problems		
			\$0	\$0	\$10,870	\$206,534	2007-2010 assessment: No changes reported.		
							2011-2016 Assessment: No changes reported.		
							2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.		

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Ceilings	3	\$326,106	0	2	10	88	Sagging ceilings replaced in corridors and bookstore. Condition will return if humidity problems not addressed.		
			\$0	\$6,522	\$32,611	\$286,973			
							2003 - humidity problems resolved		
							2007-2010 assessment: No changes reported.		
							2011-2015 Assessment: No changes reported.		
							2016 Assessment: No changes reported. No reported problems.		
							2018 Assessment: No reported problems.		
							Corridor ceiling replaced with new LED lights in 2018.		
							2019, 2021 Assessment: No reported changes. No reported problems.		
							2022 Assessment: Minor renovations to convert kitchen to offices.		
Walls/Casework	2	\$217,404	0	2	10	88	Recently repainted in gym & pool. Interior face of exterior walls are showing efflorescence similar to problem on exterior face - due to high humidity in building.		
			\$0	\$4,348	\$21,740	\$191,316			
							2003 - humidity problems resolved		
							2004- gym due for repainting.		
							2005 - bleachers at end of life, due for replacement in 2-5 years. Facility use may not require replacement with same number of bleachers.		
							2007 assessment: No changes reported		
							2009 Assessment: 2008-new lower bleachers installed in gym, miscellaneous painting work done in gym		
							2010-2015 Assessment: No changes reported.		
							2016 Assessment: No changes reported. No reported problems.		
							2018 Assessment: No reported problems.		
							Gym painted in 2018.		

Campus: Main
 Bldg. No: 02
 Building: Barn Theater
 Area: 3,932sf

Yr Built: 1917 Floors: 2

Use Types:
 100% Auditorium

Notes: 2016-Building infrequently used.
 2007-seating replaced, sprinkler system added, egress improved.
 2016-the exterior envelope was replaced with new barn siding.
 This building cannot be replaced with an equivalent building.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$142,140	0	0	20	80	Wood structure exposed on interior, no reported problems. 2003-Chimney repaired. 2007 assessment: No changes, no reported problems. 2009-2015 Assessment: No changes reported. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Modifications may trigger structural upgrades of building. This building would be difficult to bring up to current structural requirements in building code. Structure comprises of wood timbers and gambrel barn roof form. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Roof	7	\$66,332	15	10	25	50	Tin roof/ some asphalt shingle on later addition 2007 assessment: No changes, no reported problems. 2009-2012 Assessment: No changes reported. 2013 Assessment: Metal barn roof due for repaint. Asphalt shingles in fair condition. 2014-2015 Assessment: No changes reported. 2018 Assessment: Existing tin roof on original barn, with asphalt shingles on addition. No changes reported. No reported problems. 2019, 2021-2022 Assessment: No changes reported. No reported problems.

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Glazing	1	\$9,476	0 \$0	0 \$0	20 \$1,895	80 \$7,581	<p>Minimal glazing - only on addition. 1972 - wood frame, single pane windows installed (approx. 12)</p> <p>2007 Assessment: No changes, no reported problems.</p> <p>2009-2012 Assessment: No changes reported.</p> <p>2013 Assessment: Windows observed to be deteriorating, with many at end of expected life. Paint worn on many frames, some showing signs of deterioration due to age. Recommendation to repaint and replaced as necessary.</p> <p>2014 - 2015 Assessment: No changes reported, windows still due for repair/replacement.</p> <p>2016 assessment: all wood frame windows replaced with vinyl insulated unit windows.</p> <p>2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>
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Cladding	9	\$85,284	0 \$0	0 \$0	10 \$8,528	90 \$76,756	<p>Siding at entry repaired in 2001. Some additional deterioration noted at north exterior wall.</p> <p>2007 - 2012 assessment: No changes reported</p> <p>2013 assessment: Wood planks on barn showing continued deterioration at base. Top coat of paint is failing where old base coat is deteriorated. T111 plywood siding on addition showing signs of paint peeling and some deterioration at edges.</p> <p>2014 - 2015 Assessment: No changes reported. Exterior wood and trim continue showing deterioration.</p> <p>2016 assessment: all exterior wood siding replaced with new painted wood siding. Project cost approx. \$60,000</p> <p>2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>
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	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	20	\$189,520	25	20	0	55	System upgraded in 1991 Fan unit above stage noisy, often shut off during performances. Temperature varies significantly from low seats to high seats. 2007 assessment: No changes, no reported problems. 2009 Assessment: No changes reported. 2011 assessment: No changes reported. 2012 assessment: Barn not on campus-wide building automation system. 2013 assessment: Barn ground mounted twin-condensor A/C unit installed in 1991 is near end of expected life. Budgeting for replacement recommended. 2014 Assessment: No changes reported. 2015 Assessment: No changes reported. HVAC system remains near end of expected life. 2016 Assessment: No changes reported. 2018 Assessment: The barn Theater HVAC is served by gas-fired heat and DX cooling AHUs/RTUs and both in good condition, should continue to function. The building HVAC controls do not report to the School Campus's BEMS system. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$47,380	\$37,904	\$0	\$104,236	

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	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	6	\$56,856	0 \$0	0 \$0	25 \$14,214	75 \$42,642	<p>Replaced in 1972. Septic system near capacity. Additional fixtures will likely overload system.</p> <p>2007 assessment: Piping for sprinkler system added.</p> <p>2009-2014 Assessment: No changes reported.</p> <p>2015 assessment: water supply piping from well replaced to both farmhouse and barn. Septic system remains near capacity.</p> <p>2016 Assessment: No changes reported.</p> <p>2018 Assessment: The Theater Building is an assembly space full of combustibles, fully sprinkled. The restroom plumbing was upgraded and appears to be in good condition.</p> <p>2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>
Primary/Secondary	5	\$47,380	0 \$0	0 \$0	30 \$14,214	70 \$33,166	<p>Recently upgraded</p> <p>2007 assessment: No changes, no reported problems.</p> <p>2009 Assessment: No changes reported.</p> <p>2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity.</p> <p>2011-2015 Assessment: No changes reported.</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: The building has two electrical services, both served overhead from the power lines along West Sidney Road. One service is 240/120V single phase and provides lighting and convenience power throughout the building. The other service is 480V three phase and only serves the two condensing units on the Wiring in the building is a mixture of many types, with some open junction boxes in the control room. No fire alarm exists in the building. As an assembly occupancy, this is recommended to comply with life safety codes.</p> <p>2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>

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	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	6	\$56,856	10	10	10	70	Recently upgraded Electrical system inadequate to support desired lighting levels. 2007 assessment: No changes, no reported problems. 2009 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported.
			\$5,686	\$5,686	\$5,686	\$39,799	
Lighting	5	\$47,380	0	10	10	80	Need better lighting for stage - other OK 2007 assessment: Seat-mounted aisle lighting added as part of seating replacement project. Balance of theater lighting remains unchanged. 2009-2011 Assessment: No changes reported 2012 assessment: Lighting system upgraded as part of ECM contract. 2013-2015 Assessment: No changes reported. 2016, 2018, 2019, 2021-2022 Assessment: No changes reported.
			\$0	\$4,738	\$4,738	\$37,904	

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Voice/Data	1	\$9,476	0	0	10	90	Minimal - upgraded
			\$0	\$0	\$948	\$8,528	2007 assessment:No changes, no reported problems.
							2009-2015 Assessment: No changes reported.
							2016 Assessment: No changes reported.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Ceilings	3	\$28,428	0	0	15	85	Exposed in theater, 2x4 suspended in other areas- OK
			\$0	\$0	\$4,264	\$24,164	2007 assessment:No changes, no reported problems.
							2009-2015 Assessment: No changes reported.
							2016 Assessment: No changes reported.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Walls/Casework	8	\$75,808	0	0	10	90	Exposed sprayed-on insulation in theater - no reported problems. Seats worn and failing.
			\$0	\$0	\$7,581	\$68,227	2007 assessment: Seating replaced.
							2009-2015 Assessment: No changes reported.
							2016 Assessment: No changes reported.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

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	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Doors	2	\$18,952	0	0	10	90	Modified barn doors with panic hardware Hardware nearing end of life
			\$0	\$0	\$1,895	\$17,057	
							2007 Assessment: Egress hardware added as required. Exterior door weatherstripping added as required.
							2009-2012 Assessment:No changes reported.
							2010 assessment:No changes reported.
							2013 assessment: Secondary doors showing signs of additional deterioration.
							2014 - 2015 Assessment: No changes reported. Exterior doors continuing to show aging.
							2016 assessment: exterior wood doors replaced with new painted wood doors as part of siding replacement.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Floors	2	\$18,952	0	10	15	75	Wood/concrete - OK. Carpet in dressing rooms
			\$0	\$1,895	\$2,843	\$14,214	
							2007 assessment: Carpet added in theater aisles. No reported problems.
							2009-2015 Assessment: No changes reported.
							2016 Assessment: No changes reported.
							2018 Assessment: No changes reported. No reported problems. Existing floors are concrete slab-on-grade, with wood-frame construction, vinyl floors and carpeted floors in the 2-story addition.
							2019, 2021-2022 Assessment: No changes reported. No reported problems.

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Bldg., Fire, ADA, Elevators	7	\$66,332	0	10	10	80	No fire alarm/ sprinklers. Building generally not ADA compliant.
			\$0	\$6,633	\$6,633	\$53,066	2002-Portable wheelchair lift added
							2007 assessment: New handrails installed in aisles. New ADA accessible seating added. Automatic sprinkler system added. Toilet rooms not modified, not ADA compliant. No fire alarm system.
							2009-2016 Assessment: No changes reported.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Immed. Site, Ext. Ltg., etc	3	\$28,428	0	0	5	95	Paving repaired 2000-2001. Site OK.
			\$0	\$0	\$1,421	\$27,007	2007 assessment: Exterior platform with railings added at stage door.
							2009 Assessment: No changes reported.
							2010 assessment: Exterior walks replaced.
							2011-2015 Assessment: No changes reported.
							2016 Assessment: No changes reported.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

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 100% Auditorium

Notes: 2016-Building infrequently used.
 2007-seating replaced, sprinkler system added, egress improved.
 2016-the exterior envelope was replaced with new barn siding.
 This building cannot be replaced with an equivalent building.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	

CRV Totals: 100 \$953,295 \$63,015 \$63,489 \$119,871 \$701,224 \$947,600

Priority Issues Data					0-5 Year Cumulative Data				
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING
\$947,600	\$63,015	\$15,730	6.65%	FAIR	\$123,928	\$76,263	13.00%	\$18,952	POOR

Campus: Main
 Bldg. No: 03
 Building: Cold Storage
 Area: 3,880sf

Yr Built: 1967 Floors: 1

Use Types:
 100% Storage

Notes: Pre-engineered building

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	35	\$59,360	0 \$0	0 \$0	0 \$0	100 \$59,360	No reported problems 2007 assessment: No changes 2009 - 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Structure is comprised of steel beams, corrugated metal walls and metal panel roof. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Roof	15	\$25,440	0 \$0	0 \$0	0 \$0	100 \$25,440	Metal roof 2007 assessment: No changes 2009-2013 Assessment: No changes reported. 2014 assessment: Roof inspected, repaired as necessary. 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Metal panel roof. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Glazing	0	\$0	0 \$0	0 \$0	0 \$0	100 \$0	N/A 2014 - 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. No reported problems. 2018, 2019, 2021, 2022 Assessment: No changes reported. No reported problems.

Campus: Main
 Bldg. No: 03
 Building: Cold Storage
 Area: 3,880sf

Yr Built: 1967 Floors: 1

Use Types:
 100% Storage

Notes: Pre-engineered building

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Cladding	20	\$33,920	0	10	10	80	Metal siding, minor damage, not an issue 2007 assessment: No changes 2009-2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$3,392	\$3,392	\$27,136	
HVAC	0	\$0	0	0	0	100	N/A 2014 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$0	\$0	
Plumbing/Drainage	0	\$0	0	0	0	100	N/A 2014 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$0	\$0	

Campus: Main
 Bldg. No: 03
 Building: Cold Storage
 Area: 3,880sf

Yr Built: 1967 Floors: 1

Use Types:
 100% Storage

Notes: Pre-engineered building

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Primary/Secondary	4	\$6,784	0 \$0	0 \$0	0 \$0	100 \$6,784	minimal 2007 assessment:No changes 2009 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Distribution	4	\$6,784	0 \$0	0 \$0	0 \$0	100 \$6,784	minimal 2007 assessment:No changes 2009-2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Lighting	4	\$6,784	0 \$0	0 \$0	0 \$0	100 \$6,784	minimal, No reported problems 2007 assessment:No changes 2009 - 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Incandescent light fixtures. 2019 Assessment: No changes reported. No reported problems. 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
Bldg. No: 03
Building: Cold Storage
Area: 3,880sf

Yr Built: 1967 **Floors: 1**

Use Types:
 100% Storage

Notes: Pre-engineered building

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Voice/Data	0	\$0	0 \$0	0 \$0	0 \$0	100 \$0	N/A 2014 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Ceilings	0	\$0	0 \$0	0 \$0	0 \$0	100 \$0	N/A 2014 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Walls/Casework	0	\$0	0 \$0	0 \$0	0 \$0	100 \$0	N/A 2014 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
 Bldg. No: 03
 Building: Cold Storage
 Area: 3,880sf

Yr Built: 1967 Floors: 1

Use Types:
 100% Storage

Notes: Pre-engineered building

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Doors	10	\$16,960	0 \$0	10 \$1,696	10 \$1,696	80 \$13,568	Sliding doors, No reported problems 2007 assessment:No changes 2009-2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Floors	4	\$6,784	0 \$0	0 \$0	0 \$0	100 \$6,784	concrete, No reported problems 2007 assessment:No changes 2009-2015 Assessment: No changes reported. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Concrete slab-on-grade. 2021-2022 Assessment: No changes reported. No reported problems.
Bldg., Fire, ADA, Elevators	2	\$3,392	0 \$0	0 \$0	0 \$0	100 \$3,392	No reported problems 2007 assessment:No changes 2009-2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
 Bldg. No: 03
 Building: Cold Storage
 Area: 3,880sf

Yr Built: 1967 Floors: 1

Use Types:
 100% Storage

Notes: Pre-engineered building

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Immed. Site, Ext. Ltg., etc	2	\$3,392	0	0	0	100	No reported problems
			\$0	\$0	\$0	\$3,392	2007 assessment: No changes
							2009-2016 Assessment: No changes reported.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

CRV Totals:	100	\$169,600	\$0	\$5,088	\$5,088	\$159,424	\$169,600
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Priority Issues Data					0-5 Year Cumulative Data				
\$169,600	\$0	\$0	0.0%	GOOD	\$5,088	\$0	3.0%	\$3,392	GOOD
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	S/YR MAINTAIN	RATING

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$1,701,330	0	0	5	95	Foundation wall cracked in 4 locations in computer lab. Some moisture infiltration. 2007 assessment: computer lab exterior wall cracking sealed, no moisture problem noted. 2009 -2012 assessment: No changes reported 2013 assessment: Small amount of water infiltration in computer lab wall continuing. 2014 Assessment: No changes reported. 2015 assessment: water infiltration into computer lab reported to be resolved. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Building in good structural condition, no deficiencies noted. No changes reported. No reported problems. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$85,067	\$1,616,264	

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Roof	6	\$680,532	30	35	0	35	Ballasted single ply EPDM.
			\$204,160	\$238,186	\$0	\$238,186	2007 assessment: No changes. No reported problems.
							2009 Assessment: No changes reported.
							2010 Assessment: Roof evaluation performed. Roof membrane pulled away at parapets, repaired in 2010 under warranty.
							2011 assessment: Minor roof leaks repaired as part of annual maintenance.
							2012 assessment: No changes reported
							2013 assessment: Minor roof leaks repaired and roof seams serviced as part of annual maintenance.
							2014 assessment: Roof inspected, repaired as necessary.
							2015 Assessment: No changes reported. No reported problems.
							2016 Assessment: No changes reported. No reported problems. Projected roof membrane replacement from roof report: 2022
							2018 Assessment: No changes reported. No reported problems. Roof replacement scheduled in 2027.
							2019 Assessment: No changes reported. No reported problems.
							2021 Assessment: No changes reported. No reported problems. Projected roof replacement in 2023.
							2022 Assessment: Partial roof repair/replacement in 2023, including 12' at roof edges.

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	5	\$567,110	0	0	15	85	Window roller shade termination bars failing from handling and misuse. 2007 assessment: No changes. Roller shades repaired as required. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$85,067	\$482,044	
Cladding	6	\$680,532	0	0	15	85	No reported problems 2007 assessment: Brick sills at air intakes failing. Brick swelling, buckling and spalling. No relief for brick expansion at either end. Exterior sealants not wearing well, near end of life and due for replacement. 2009 Assessment: 2008-brick at air intakes repaired. 2008-building exterior sealants replaced as required. 2010 Assessment: No changes reported. 2011 assessment: No changes. No reported problems. 2012 assessment: No changes reported 2013 assessment: Flashing at base of wall in southwest corner of building torn, some loose. Due for repair. 2014 - 2016 Assessment: No changes reported. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$102,080	\$578,452	

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	24	\$2,722,128	0	0	20	80	Building on central boiler system with independent reheat coil boiler
			\$0	\$0	\$544,426	\$2,177,702	2002-Add'l AC unit added in telecom
							2002-reheat boiler correctly piped
							2005-package AC unit in telecom room (installed 2002) replaced with 4 Trane DX units (\$40,000)
							Variable Frequency Drive units controls failing. Several have been replaced.
							2005-No reported problems
							2007 assessment:No changes. No reported problems.
							2009 Assessment:
							2008-Additional reheat boiler installed to improve building humidity control (\$50,000).
							2010 Assessment: Gas meter systems replaced by Consumers Energy.
							2011 assessment:No changes. No reported problems. VFD units working well.
							2012 assessment:
							System controls upgraded to DDC as part of new energy management system.
							3 VAV units replaced. New actuators, dampers and control valves installed as required.
							2013-2014 assessment: No changes reported

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC (continued)	24	\$2,722,128	0	0	20	80	2015 assessment: (2) variable frequency drives replaced in return air system. No reported problems.
			\$0	\$0	\$544,426	\$2,177,702	2016 Assessment: No changes reported. No reported problems.
							2018 Assessment: The HVAC system is served by two (2) central AHUs which appear in relatively good condition. The system uses electric reheat coils and electric boilers which is recommended to be replaced with gas-fire boiler and hot water reheat coils for energy savings. Chilled water is supplied by an outdoor air-cooled chiller using 25% ethylene glycol. The current outdoor chiller is in good condition and will continue to provide 10 to 20 years. Recommend improvements on the summer humidity for both the north and south AHU systems by implementing CO2 demand ventilation control. The building is fully DDC controlled with the standed campus BEMS systems but recommended improved VAV zone control for the administration offices. Current IT Data room HVAC units are failing and not reliable with 2 for 4 AC units Units have reached their expected lives, recommended for replacement with 2 new AC units.
							2019 Assessment: Data room AC units were replaced.
							2021 Assessment: No changes reported. No reported problems.
							2022 Assessment: Water/humidity issues resolved with HVAC and building controls.

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$567,110	0	0	5	95	No reported problems
			\$0	\$0	\$28,356	\$538,755	2007 assessment: No changes. No reported problems.
							2009-2016 Assessment: No changes reported. No reported problems.
							2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
Primary/Secondary	8	\$907,376	0	0	5	95	No reported problems
			\$0	\$0	\$45,369	\$862,007	2007 assessment: No changes. No reported problems.
							2009 Assessment: No changes reported.
							2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity.
							2011-2015 Assessment: No changes reported. No reported problems.
							2016 Assessment: No changes reported. No reported problems.
							2018 Assessment: The building is served power via a unit substation which has a loop-feed primary and contains a 750kVA transformer with 480/277V secondary. Recommended to exercise / clean / tighten the newer Square D equipment same as older gear. The building has a Simplex 4005 fire alarm system, which appears to meet life safety code. The building has the only permanent onsite generator (serving server room) - new, no issues. The electrical equipment in catering kitchen appears to now handle permanent appliances.
				2019, 2021-2022 Assessment: No changes reported. No reported problems.			
Distribution	5	\$567,110	0	0	5	95	No reported problems
			\$0	\$0	\$28,356	\$538,755	2007 assessment: No changes. No reported problems.
							2009-2015 Assessment: No changes reported. No reported problems.
				2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.			

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Lighting	5	\$567,110	0	10	10	80	Insects in fixtures cannot be removed without disassembling fixture, no economical resolution found. 2007 - 2011 assessment: No changes. No reported problems. 2012 assessment: Lighting system upgraded as part of ECM contract. 2013- 2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: The main electrical room lacks emergency lighting. Recommend adding this for worker safety. Lighting throughout is T8 fluorescent technology. Classrooms typically have a mixture of switched and dimmed fluorescent indirect linear fixtures. Future remodels should have planned budget to replace with LED lighting for energy savings, maintenance savings, and ease of control/dimming. 2019 Assessment: Replaced 70 light fixtures. No reported problems. 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Upgrade classroom lighting over next five years
Voice/Data	5	\$567,110	0	0	0	100	No reported problems 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
Ceilings	3	\$340,266	0	0	5	95	No reported problems 2007 assessment: No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Walls/Casework	2	\$226,844	0	0	5	95	Recently repainted 303 & 305 2007 - 2010 Assessment: No changes reported. 2011 assessment: Routine wall painting performed in corridors. No reported problems. 2012 assessment: No changes reported 2013 assessment: Routine wall painting performed in corridors. No reported problems. 2014 - 2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$11,342	\$215,502	
Doors	3	\$340,266	0	0	5	95	No reported problems 2007- 2012 assessment: No changes reported 2013 assessment: Classroom door hardware changed to lockdown type for security. 2014 assessment: Damaged doors to conference room replaced. 2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Connector doors to Activities Building replaced in 2018. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$17,013	\$323,253	

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Floors	3	\$340,266	0	0	10	90	2005-loose VCT in catering kitchen repaired 2007 assessment:No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment:
			\$0	\$0	\$34,027	\$306,239	
Bldg., Fire, ADA, Elevators	2	\$226,844	0	0	10	90	fully sprinkled Interior railings warping and failing-do not meet code for weight support, require replacement 2003-interior railings replaced with painted steel, problem resolved 2007 assessment:No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Building adccess control upgraded
			\$0	\$0	\$22,684	\$204,160	

Campus: Main
 Bldg. No: 04
 Building: Doser Building
 Area: 38,013sf

Yr Built: 1999

Floors: 1

Use Types:
 10 % Administration
 45 % Technology Lab
 45 % Classroom

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Immed. Site, Ext. Ltg., etc	3	\$340,266	10	0	10	80	No reported problems
			\$34,027	\$0	\$34,027	\$272,213	2007 assessment: No changes. No reported problems.
							2009-2012 Assessment: No changes reported. No reported problems.
							2013 assessment: Grade at northeast corner (outside computer lab) is very flat and may be contributing to the water infiltration problem. Regrading with a swale may improve situation.
							2014 - 2015 Assessment: No changes reported. No reported problems.
							2016 Assessment: No changes reported. No reported problems.
							2018 Assessment: No changes reported. No reported problems. South parking lot lights replaced in 2017.
							2019, 2021-2022 Assessment: No changes reported. No reported problems.

CRV Totals: 100 \$11,342,200 \$238,186 \$294,897 \$1,111,536 \$9,697,581 \$11,342,200

Priority Issues Data					0-5 Year Cumulative Data				
\$11,342,200	\$238,186	\$0	2.1%	GOOD	\$533,083	\$0	4.7%	\$226,844	GOOD
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING

Campus: Main
 Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

Yr Built: 1916 Floors: 2

Use Types:
 100% Residence

Notes: 2015 - Farmhouse no longer used by College, leased out.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$76,680	0	0	10	90	Wood frame structure on stone foundation. 2007 - 2012 assessment: No changes reported. 2013 assessment: Stone foundation cracking at mortar joints observed. 2014 Assessment: No changes reported. 2015 assessment: Entry porch rebuilt. No changes to building foundation wall. 2016 Assessment: No changes reported. 2018 Assessment: No changes reported. No reported problems. Fieldstone and concrete block foundation. Wood frame house. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$7,668	\$69,012	
Roof	8	\$40,896	0	20	20	60	Tin roof on original house membrane roof on addition 2007 - 2012 assessment: No changes reported. 2013 assessment: Metal roof due for repainting. 2014 - 2015 Assessment: No changes reported. 2016 assessment: Metal roof due for repair and repainting. 2018 Assessment: No changes reported. No reported problems. Tin roof on wood gable structure. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$8,179	\$8,179	\$24,538	

Campus: Main
 Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

Yr Built: 1916 Floors: 2

Use Types:
 100% Residence

Notes: 2015 - Farmhouse no longer used by College, leased out.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	5	\$25,560	0	15	20	65	Old - OK (Single pane) 2007 assessment: No changes. No reported problems. 2009-2012 Assessment: No changes reported. 2013 assessment: Wood window frames showing peeling paint and wood deterioration. Windows due for repainting and limited replacement. 2014 - 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. Windows continue to show need for repair/replacement. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Cladding	10	\$51,120	0	15	20	65	2003-Wood siding replaced (60%)/repainted (100%) 2007 assessment: No changes. No reported problems. 2009 Assessment: 2009-exterior repainted 2010- 2012 assessment: No changes reported. 2013 assessment: Wood soffit showing paint aging and deterioration, some wood rotting, especially at entry. Painted wood trim due for replacement at main door and other limited areas. 2014 - 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. Wood siding, trim continue to show need for repair/replacement. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main

Use Types:

Notes: 2015 - Farmhouse no longer used by College, leased out.

Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

100% Residence

Yr Built: 1916 Floors: 2

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	10	\$51,120	0	0	10	90	Newer residential grade system- 1995
			\$0	\$0	\$5,112	\$46,008	2007 assessment:No changes. No reported problems.
							2009 Assessment:No changes reported.
							2010 Assessment: Gas meter systems replaced by Consumers Energy.
							2011 - 2013 assessment:No changes reported. Building not on campus-wide building management system.
							2014 assessment: Furnace replaced with new residential unit, using existing AC unit.
							2015 Assessment: No changes reported.
							2016 Assessment: No changes reported
							2018 Assessment: No changes reported. No reported problems. Forced air furnace with central air-conditioning.
							2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
 Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

Yr Built: 1916 Floors: 2

Use Types:
 100% Residence

Notes: 2015 - Farmhouse no longer used by College, leased out.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$25,560	0	0	20	80	Pipes in basement - old. All other new in 1995 Septic system separate from Barn Theater No reported problems 2007 assessment:No changes. No reported problems. 2009-2014 assessment:No changes. No reported problems. 2012 - 2014 Assessment: No changes reported. 2015 assessment: water supply piping from well replaced to both farmhouse and barn. 2016, 2018-2019, 2021-2022 Assessment: No changes reported
			\$0	\$0	\$5,112	\$20,448	
Primary/Secondary	10	\$51,120	0	0	5	95	Newer service 2007 assessment:No changes. No reported problems. 2009 Assessment:No changes reported. 2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity. 2011-2016 Assessment: No changes reported. 2018-2019, 2021-2022 Assessment: No changes reported
			\$0	\$0	\$2,556	\$48,564	

Campus: Main
 Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

Yr Built: 1916 Floors: 2

Use Types:
 100% Residence

Notes: 2015 - Farmhouse no longer used by College, leased out.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	5	\$25,560	0	0	5	95	Newer service 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$1,278	\$24,282	
Lighting	4	\$20,448	0	5	10	85	Newer Service 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Incandescent lighting. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$1,022	\$2,045	\$17,381	
Voice/Data	3	\$15,336	0	0	0	100	New - minimal 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$0	\$15,336	

Campus: Main
 Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

Yr Built: 1916 Floors: 2

Use Types:
 100% Residence

Notes: 2015 - Farmhouse no longer used by College, leased out.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Ceilings	3	\$15,336	0	10	10	80	Recently renovated 2007 assessment: 2009-2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Plaster on lath. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$1,534	\$1,534	\$12,269	
Walls/Casework	7	\$35,784	0	10	10	80	Recently renovated 2007 assessment: No reported problems 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Plaster on lath. Drywall partitions in additions and 2nd floor. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$3,578	\$3,578	\$28,627	
Doors	2	\$10,224	0	20	15	65	Recently renovated 2007 assessment: Exterior entry door replaced. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$2,045	\$1,534	\$6,646	

Campus: Main
 Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

Use Types:
 100% Residence

Notes: 2015 - Farmhouse no longer used by College, leased out.

Yr Built: 1916 Floors: 2

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Floors	5	\$25,560	0	20	10	70	Recently renovated 2007 assessment: Exterior front door replaced. 2009-2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Concrete slab-on-grade, hardwood, vinyl tile in kitchen and bathroom. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$5,112	\$2,556	\$17,892	
Bldg., Fire, ADA, Elevators	5	\$25,560	0	0	10	90	Smoke detectors/CO sensors. No central fire alarm. Toilet rooms ADA compliant. 2007 assessment: No changes. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$2,556	\$23,004	
Immed. Site, Ext. Ltg., etc	3	\$15,336	0	0	15	85	2007 assessment: No changes. No reported problems. 2009 - 2013 assessment: No changes reported. 2014 Assessment: Exterior concrete steps and ramps replaced. 2015, 2016 Assessment: No reported changes. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$2,300	\$13,036	

Campus: Main
 Bldg. No: 05
 Building: Farmhouse
 Area: 2,550sf

Use Types:
 100% Residence

Notes: 2015 - Farmhouse no longer used by College, leased out.

Yr Built: 1916 Floors: 2

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	

CRV Totals: 100 \$511,200 \$0 \$32,972 \$61,344 \$416,884 \$511,200

Priority Issues Data					0-5 Year Cumulative Data				
\$511,200	\$0	\$0	0.0%	GOOD	\$32,972	\$7,412	6.5%	\$10,224	FAIR
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 25,132sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$1,389,975	0	0	0	95	Occasional water infiltration, maintained regularly. 2005 - water infiltration problem resolved except for water entering mechanical room through areaway during heavy rains 2007 assessment: Water infiltration problem resolved as part of renovation. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Greenhouse addition brick has substantial moisture damage. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
Roof	5	\$463,325	0	0	0	100	1996 - EPDM roof installed 2004: greenhouse roof due for replacement 2007 assessment: Greenhouse reshingled. No other issues reported 2009 - 2010 Assessment: No changes reported. 2011-2014 Assessment: No changes. Roof inspected annually, repaired as needed. Roof nearing end of expected life. 2015, 2016 Assessment: No changes reported. Projected roof membrane replacement from roof report: 2024 2018, 2019 Assessment: No changes reported. No reported problems. 2021 Assessment: No changes reported. No reported problems. Projected roof replacement in 2023. 2022 Assessment: Renovations and additions nearing completion. No reported problems.

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 25,132sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	5	\$463,325	0	0	0	100	OK condition. Some single pane. Greenhouse windows in poor condition 2007 Assessment: Curtain wall system at east wall replaced as part of door replacement work. 2009 -2011 assessment:No changes reported. Glazing on greenhouse continues to be an issue. 2012 assessment:No changes reported. 2013 assessment:No changes reported. Glazing on greenhouse continues to be an issue. 2014 Assessment: No changes reported. 2015 Assessment: No changes reported. Glazing on greenhouse continues to be an issue. 2016 assessment: New greenhouse being built on campus. The deteriorating greenhouse may be demolished. 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
			\$0	\$0	\$0	\$463,325	

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 25,132sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Cladding	6	\$555,990	0	0	0	100	Brick, No reported problems on main building. Brick on greenhouse deteriorating. 2007 Assessment: minimal brickwork performed as part of Ash Building construction. 2009-2012 Assessment: No changes reported. No reported problems. 2013 assessment: No changes reported. Brick on greenhouse spalling, failing, due for repair, replacement or removal. 2014 Assessment: No changes reported. 2015 Assessment: No changes reported. Greenhouse brick continues to deteriorate. 2016 assessment: New greenhouse being built on campus. The deteriorating greenhouse may be demolished. 2018 Assessment: No changes reported. No reported problems. Greenhouse brick continues to deteriorate. 2019 Assessment: No changes reported. No reported problems. 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	25	\$2,316,625	0	0	10	90	<p>System mostly new in 1999.</p> <p>Building on central steam loop. Heat exchanger provides HW for perimeter heating. (1) interior AHU with steam coil and chilled water coil. Heat provided by single steam coil in AHU. Fume hoods original, not up to current ventilation standards, no hoods in classrooms or storage/prep area. Potential addition of Organic Chemistry may require additional hoods.</p> <p>2004 - new biohazard unit added.</p> <p>2007 Assessment: Existing HVAC system, distribution, and controls remain. DDC controls connected to existing DDC system in Ash Building. Existing chiller connected in loop with new chiller for Ash Building to provide cooling to both buildings. Chemistry lab relocated to new building. Ventilation system upgraded to meet current standards.</p> <p>2009 Assessment: No changes reported.</p> <p>2012 assessment: Controls upgraded to DDC</p> <p>2010 Assessment: Gas meter systems replaced by Consumers Energy.</p> <p>2011 Assessment: No changes reported. No reported problems.</p>
			\$0	\$0	\$231,663	\$2,084,963	

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC (continued)	25	\$2,316,625	0	0	0	0	2012 assessment: System controls upgraded to DDC as part of new energy management system. Actuators on dampers and control valves replaced as required. 2013 - 2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: The HVAC system is served by a steam to hot water heat exchanger to provide heat to perimeter classroom unit ventilators. Chilled water is supplied by an outdoor air-cooled chiller using 25% ethylene glycol. The current outdoor chiller is in good condition and will continue to provide 10 to 20 years. The building controls were improved in 2009 with occupancy sensors which save energy. It is recommended to upgrade building controls with the standard campus BEMS system. The present classroom unit ventilators do not perform well in providing comfort & noise control. Recommend horizontal units to be replaced with improved floor mounted vertical type to provide the proper ventilation and reuse the existing distribution & control systems. 2019 Assessment: No changes reported. No reported problems. 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$463,325	0	0	10	90	New fixtures and associated exposed plumbing installed in 1999.
			\$0	\$0	\$46,333	\$416,993	Laboratory plumbing due for replacement.
Primary/Secondary	9	\$833,985	0	0	5	95	Primary - no reported problems
			\$0	\$0	\$41,699	\$792,286	2007 Assessment: Primary feeds Ash Building, no reported problems.
							2009 Assessment: No changes reported.
							2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity.
							2011-2015 Assessment: No changes reported. No reported problems.
							2016 Assessment: No changes reported. No reported problems.
							2018 Assessment: The building is served via an exterior primary pad-mount switch (S&C PMH-13) This unit substation consists of a main switch and two transformers (one rated 750kVA with a 480/277V secondary and the other a 15kVA with a 240/120V secondary) Recommended that gear is exercised, cleaned, tightened during a scheduled outage. Most 120V utilization power within the building is served via smaller step-down transformers fed from the 480V system.
							Systems throughout the building were mostly upgraded around 2007 when the Ash Building was added on No immediate concerns with lighting, fire alarm, or other systems.
							2019 Assessment: No changes reported. No reported problems.
							2021 Assessment: No changes reported. No reported problems.
							2022 Assessment: Renovations and additions nearing completion. No reported problems.

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	5	\$463,325	0	0	10	90	New in 1999 2007 Assessment: minimal modifications, no reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
Lighting	5	\$463,325	0	0	10	90	2001-Complete T8 upgrade funded 2002-new lighting installed 2007 Assessment: Classroom lighting replaced as part of ceiling replacement. Corridor lighting reinstalled. No reported problems. 2009 - 2011 assessment:No changes reported. No reported problems. 2012 assessment:No changes reported. Lighting upgrade not required. 2013 assessment: Some lighting upgrades performed as part of performance contract work. 2014 Assessment: No changes reported. 2015, 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Voice/Data	5	\$463,325	0	0	10	90	Recently updated 2007 Assessment: No changes. No reported problems. 2009-2014 assessment: No changes reported. No reported problems. 2015, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
			\$0	\$0	\$46,333	\$416,993	
Ceilings	3	\$277,995	0	0	20	80	Most new. Some areas beginning to show signs of sagging, possibly caused by humidity. 2007 Assessment: Ceilings replaced with 2x2 lay-in as part of sprinkler system installation. 2009-2014 assessment: No changes reported. No reported problems. 2015, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
			\$0	\$0	\$55,599	\$222,396	
Walls/Casework	2	\$185,330	0	0	20	80	Masonry corridor walls, balance of walls painted gypsum - recently repainted. 2007 Assessment: minimal wall removal/addition as part of renovation. Interior walls repainted. 2009-2014 assessment: No changes reported. No reported problems. 2015, 2018, 2019, 2021 assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
			\$0	\$0	\$37,066	\$148,264	

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Doors	2	\$185,330	0	0	10	90	Exterior: original hollow metal doors 2005-hinges and hardware failing and deteriorating, doors rusting at bottoms, due for replacement. Interior: Original solid core wood doors. Finish worn ,some swelling. 2007 Assessment: Exterior: (3) exterior doors replaced Interior: (3) new doors added, (2) removed. 2009-2012 assessment:No changes reported. No reported problems. 2013 assessment: Classroom door hardware changed to lockdown type for security. 2014 Assessment: No changes reported. 2015, 2018, 2019, 2021 assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
			\$0	\$0	\$18,533	\$166,797	

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Floors	3	\$277,995	0	0	20	80	Quarry tile in corridors, no reported problems. Some new carpet, new VCT. 2004-Some offices still need new carpet. 2007 Assessment: flooring replaced as required by renovation. Sheet vinyl installed in labs. VCT installed in small portions of classrooms (near sinks). Carpet installed in office, some classrooms. 2009-2014 assessment: No changes reported. No reported problems. 2015 assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Carpet replacement in selected area. 2019 Assessment: No changes reported. No reported problems. 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Renovations and additions nearing completion. No reported problems.
Bldg., Fire, ADA, Elevators	2	\$185,330	0	0	10	90	Stairway doors propped open on lower level. Unisex ADA toilet room added. New fire alarm system. Elevator installed in 1999, no reported problems 2007 Assessment: New exit signage added. Existing emergency lighting remains. Connection to Ash Building resolves ADA toilet room issues. 2009-2014 assessment: No changes reported. No reported problems. 2015 assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. 2019 Assessment: No changes reported. No reported problems.

2021 Assessment: No changes reported. No reported problems.

2022 Assessment: Renovations and additions nearing completion. No reported problems.

Campus: Main
Bldg. No: 06
Building: Kenneth J. Smith Instructional Building
Area: 23,152sf **Yr Built: 1966** **Floors: 2**

Use Types:
 40 % Lab
 60 % Classroom

Notes: 2015-Formerly called Instruction East
 2007-Renovated as part of Ash Building project
 2005-Building scheduled for major renovation as part of planned addition in 2006-2007
 Minor renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Immed. Site, Ext. Ltg., etc	3	\$230,684	0	0	10	90	No reported problems
			\$0	\$0	\$23,068	\$207,616	
							2007 Assessment: Sitework performed as part of Ash Building construction. No reported problems.
							2009-2014 assessment: No changes reported. No reported problems.
							2015, 2018, 2019, 2021 assessment: No changes reported. No reported problems.
							2022 Assessment: Renovations and additions nearing completion. No reported problems.

CRV Totals: 100 \$9,266,500 \$0 \$0 \$667,090 \$8,482,600 \$9,149,690

Priority Issues Data					0-5 Year Cumulative Data				
\$9,266,500	\$0	\$0	0.0%	GOOD	\$0	\$0	0.0%	\$185,330	FAIR
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING

Campus: Main
Bldg. No: 07
Building: Instruction North
Area: 21,780sf

Yr Built: 1968

Floors: 1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	12	\$517,680	0	0	5	95	Unprotected steel structure with block infill. 2000-Some cracks in walls, some blocks replaced, still some water infiltration. 2003-severe exterior wall damage - see cladding notes. 2007 assessment: Structure at exterior walls modified as part of renovation - exterior wall was providing lateral support. Exterior column deterioration (due to water infiltration) repaired. Water infiltration problems resolved as part of renovation. 2009-2014 assessment:No changes reported. No reported problem 2015 Assessment: No changes reported. No reported problems. 2018 Assessment: Building in good structural condition, no deficiencies noted. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$25,884	\$491,796	

Campus: Main
Bldg. No: 07
Building: Instruction North
Area: 21,780sf

Yr Built: 1968

Floors: 1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Roof	7	\$301,980	0	70	0	30	Trocal roof in 1998
			\$0	\$211,386	\$0	\$90,594	
							2003-icecicles and roof runoff clinging to drip edge (covered over with Trocal roof), running down wall and into mortar joints, causing severe wall damage. Lack of gutters exacerbating problem.
							2007 assessment: Gutters and downspouts added. No reported problems
							2009 Assessment:No changes reported.
							2010 Assessment:No changes reported.
							2011 assessment: Minor roof leaks repaired as part of annual maintenance. Roof inspected annually, no reported problems, but roof nearing end of expected life.
							2012 assessment:No changes reported.
							2013 assessment:No changes reported.
							2014 assessment: Roof inspected, due for replacement within 5 years.
							2015 assessment: Roof membrane near end of expected life. Projected roof membrane replacement from roof report: 2019
							2018 Assessment: Single-ply membrane with insulation. Roof replacement scheduled in 2024.
							2019, 2021 Assessment: No changes reported. No reported problems.
							2022 Assessment: No reported problems. Roof replacement within next five years.

Campus: Main
 Bldg. No: 07
 Building: Instruction North
 Area: 21,780sf

Yr Built: 1968 Floors: 1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	5	\$215,700	0 \$0	5 \$10,785	5 \$10,785	90 \$194,130	<p>Minimal original alum frame single pane, in fair condition, resealed in 2000.</p> <p>2007 assessment: All exterior windows in north and south walls replaced with insulated aluminum frame units as part of renovation. Windows in east wall not replaced (minimal)</p> <p>2009-2014 Assessment: No changes reported.</p> <p>2015 Assessment: No changes reported.</p> <p>2018, 2019, 2021 Assessment: No changes reported. No reported problems.</p> <p>2022 Assessment:</p>
Cladding	15	\$647,100	0 \$0	5 \$32,355	5 \$32,355	90 \$582,390	<p>Block. Repainted, waterproofed and caulked in 2001-Monitor condition for</p> <p>2001-recurring leaking problems.</p> <p>2002-entry canopy repaired</p> <p>2003-water infiltration problem continues, block severely damaged (spalled, shattered, growing algae) from roof runoff at most exterior door jambs on north and south sides of building. concrete lintels also showing damage. Deep raked mortar joints allowing water into block and spalling of block surface. Repair or replacement of damaged block required. Roof condition will also require repair to avoid future damage.</p> <p>2007 assessment: North and south exterior concrete block walls replaced with prefinished metal siding and concrete block base. All remaining walls cleaned, repaired as required, and repainted.</p> <p>2009-2016 Assessment: No changes reported. No reported problems.</p> <p>2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>

Campus: Main
Bldg. No: 07
Building: Instruction North
Area: 21,780sf

Yr Built: 1968

Floors: 1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	20	\$862,800	0	5	5	90	Original (steam from power plant building) - in poor but working condition, building is heated, although not properly.
			\$0	\$43,140	\$43,140	\$776,520	<p>2003-steam pipes reported in poor condition, failures often require removal of several feet of deteriorated pipe. Some AHU's non-functioning and disconnected. A/C only provided to a few classrooms - most DX units at end of life.</p> <p>2005-One DX unit has failed, but repairs not planned due to upcoming proposed renovation. Some fin tube units damaged. Most ceiling mounted unit heaters not working. Inadequate ventilation in darkroom, clay mixing area and kiln area.</p> <p>2003-Unit ventilator in one classroom replaced.</p> <p>2007 Assessment: East half of building - piping, units and controls replaced. No reported problems. Steam line repaired and reinsulated as required. (2) mezzanine-mounted AHU's provide heating and cooling in east half of building. Cooling: (2) ground mounted Trane DX units added. Ceiling mounted gas-fired heaters added at overhead door locations. West half of building-existing unit heaters reused, controls minimal. No reported problems.</p> <p>2009 Assessment: No changes reported.</p> <p>2010 Assessment: Gas meter systems replaced by Consumers Energy.</p> <p>2011 assessment:No changes reported. Older HVAC equipment still operating, but past end of useful life and due for replacement.</p> <p>2012 assessment: System controls on newer HVAC equipment upgraded to DDC as part of new energy management system. Actuators on dampers and control valves replaced as required.</p> <p>2013-2015 Assessment: No changes reported. Older HVAC equipment still operating, but past end of useful life and due for replacement.</p>

Campus: Main
Bldg. No: 07

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007

Building: Instruction North

Area: 21,780sf

Yr Built: 1968

Floors: 1

One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC (continued)	20	\$862,800	0	0	0	0	2016 Assessment: No changes reported.
			\$0	\$0	\$0	\$0	2018 Assessment: The HVAC system is a combination of classroom unit ventilators and air handling units served by hot water heating split DX A/C outdoor condensing units. The building is a metal building with minimal insulation and is currently under-utilized. Shop Classrooms appear to have minimum heat and ventilation (served by overhead doors) Recommend old steam radiators (at shop classrooms/storage) to be replaced with hot water. Gas fired unit heaters are to remain. Steam and condensate services enter into the building, are converted to hot water heating and mainly serve perimeter fin tube or hot water coils located in central AHUs. East offices areas are served by wall hung split air conditioning units which appear in good working condition.
							2019 Assessment: Replaced one heater. No reported problems.
							2021 Assessment: No changes reported. No reported problems.
							2022 Assessment: Steam pipes need to be replaced.

Campus: Main
 Bldg. No: 07
 Building: Instruction North
 Area: 21,780sf

Yr Built: 1968 Floors: 1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$215,700	0	5	5	90	Some piping in poor condition, fittings deteriorated. Drains near art classroom plug occasionally due to inadequate clay traps. 2005-New hand sink installed in facilities work area. 2007 Assessment: East half of building - all new plumbing, toilet rooms and art sinks. No reported problems. Trench drains removed and infilled with concrete. West half of building - existing toilet rooms remain, in poor condition. Due for renovation or removal. 2009-2015 Assessment: No changes reported. West half - older toilet rooms remain. 2016 Assessment: No changes reported. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$10,785	\$10,785	\$194,130	
Primary/Secondary	8	\$345,120	0	5	5	90	Original - in working condition, capacity available 2007 assessment: No reported problems 2009 Assessment:No changes reported. 2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity. 2011-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: The building is powered by a pad-mounted transformer, which serves 480/277V to a main 600A panel on the mezzanine. The transformer appears old, rusted, with possible leak. A sticker indicates it has been tested clear of PCBs. Recommend full electrical testing on this transformer to help in determining remaining useful life and budgeting for its replacement. The building has an existing manual fire alarm system, National Time & Signal 902 series, with no issues. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Primary service may need to be redesigned and replaced.
			\$0	\$17,256	\$17,256	\$310,608	

Campus: Main
Bldg. No: 07
Building: Instruction North
Area: 21,780sf

Yr Built: 1968

Floors:1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	5	\$215,700	5 \$10,785	5 \$10,785	5 \$10,785	85 \$183,345	<p>Original - in working condition, but most panels are obsolete Federal-Pacific</p> <p>2007 assessment: East half of building - all power and lighting panels replaced. West half of building - original Federal Pacific panels remain. (2) near end of life and scheduled for replacement.</p> <p>2009 Assessment: All distribution panels upgraded, no reported problems.</p> <p>2010-2015 Assessment: No changes reported. No reported problems.</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: Some branch panelboards in the building are Federal Pacific brand have known issues with the failure of breakers to trip in fault conditions. Recommend replacement of all such panels for life safety reasons.</p> <p>2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>

Campus: Main
 Bldg. No: 07
 Building: Instruction North
 Area: 21,780sf

Yr Built: 1968 Floors:1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Lighting	5	\$215,700	0	5	5	90	Majority original T12, working, with no more than typical ballast replacement. 2007 assessment: East half of building - all lighting replaced with T8 fixtures. No "Darkroom in use" warning light installed outside darkroom door. West half of building - original lighting remains. No reported problems 2009-2011 Assessment:No changes reported. 2012 assessment:No changes reported. Lighting upgrades not required. 2013-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Majority of lighting is T8 linear fluorescent, though some T12 lamps. T12 have been phased out due to energy efficiency, these should be replaced with LEDs. Exterior wall packs are compact fluorescent with battery packs. While previously appropriate, these are not the best solution for exterior lighting in northern climate, as it is difficult to start in cold weather with light output significantly reduced. Recommend replacement with LED wall packs. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Replace lighting with LED in the next 5 years
			\$0	\$10,785	\$10,785	\$194,130	
Voice/Data	3	\$129,420	0	0	15	85	No reported problems 2007 assessment: System upgraded in east half of building. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Building access control upgraded. No reported problems.
			\$0	\$0	\$19,413	\$110,007	

Campus: Main
Bldg. No: 07
Building: Instruction North
Area: 21,780sf

Yr Built: 1968 **Floors: 1**

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Ceilings	1	\$43,140	5	5	5	85	Mostly open to deck, some suspended ceiling (replaced in 2000-2001). 2007 assessment: East half of building - Underside of deck cleaned and repainted. Minimal lay-in ceiling added as required. West half of building - no changes, no reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$2,157	\$2,157	\$2,157	\$36,669	
Walls/Casework	4	\$172,560	5	5	5	85	Interior walls recently repainted, monitor condition for recurring problems. 2003 - water problems in exterior walls damaging paint. 2007 assessment: East half of building - walls removed/built as necessary for renovation work. Remaining walls repainted. West half of building - no changes. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$8,628	\$8,628	\$8,628	\$146,676	

Campus: Main
 Bldg. No: 07
 Building: Instruction North
 Area: 21,780sf

Yr Built: 1968 Floors: 1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Doors	3	\$129,420	5 \$6,471	5 \$6,471	5 \$6,471	85 \$110,007	<p>Exterior hollow metal doors rusting, sills deteriorating, a few replaced in 1998.</p> <p>2002-main OH door replaced, others OK.</p> <p>Damage to lintels and jambs may require removal of doors to repair. Interior doors OK.</p> <p>2007 assessment: All exterior man and overhead doors and frames replaced. East half of building - interior doors replaced. West half of building - interior doors remain as is, no reported problems.</p> <p>2009-2013 Assessment: No changes reported.</p> <p>2014 assessment: Classroom door hardware changed to lockdown type for security.</p> <p>2015 Assessment: No changes reported. No reported problems.</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: Select doors need to be replaced.</p> <p>2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>
Floors	3	\$129,420	5 \$6,471	5 \$6,471	5 \$6,471	85 \$110,007	<p>concrete - OK</p> <p>2007 assessment: East half of building - floors patched and coated with epoxy. Exiting trench drains removed and infilled with concrete. Carpet installed in offices and classroom. West half of building - no changes, no reported problems.</p> <p>2009-2015 Assessment: No changes reported. No reported problems.</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: No changes reported. No reported problems. Concrete slab-on-grade.</p> <p>2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>

Campus: Main
Bldg. No: 07
Building: Instruction North
Area: 21,780sf

Yr Built: 1968

Floors: 1

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Bldg., Fire, ADA, Elevators	2	\$86,280	5 \$4,314	5 \$4,314	5 \$4,314	85 \$73,338	<p>Fire alarms updated. Toilets not ADA, but space exists to rework. Exit signs replaced. No sprinkler system.</p> <p>2007 assessment: East half of building: Fire alarm upgraded as required by renovation. Emergency and exit lighting upgraded as required by renovation. No sprinkler system. ADA toilet rooms added.</p> <p>West half of building - no changes, no reported problems. 2009 Assessment: No changes reported.</p> <p>2010 Assessment: ADA door openers added to toilet rooms.</p> <p>2011-2015 Assessment: No changes reported. No reported problems.</p> <p>2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems.</p> <p>2022 Assessment: No reported problems.</p>
Immed. Site, Ext. Ltg., etc	2	\$86,280	5 \$4,314	5 \$4,314	5 \$4,314	85 \$73,338	<p>Paving problems - some deterioration of sidewalks</p> <p>2003-lot resealed and restriped.</p> <p>2007 assessment: concrete sidewalks on south side of building replaced. No reported problems.</p> <p>2009-2015 Assessment: No changes reported. No reported problems.</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: Asphalt paving is in poor condition and should be replaced.</p> <p>2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>

Campus: Main
Bldg. No: 07
Building: Instruction North
Area: 21,780sf

Yr Built: 1968 **Floors: 1**

Use Types:
 100% Vo/Tech

Notes: 2007-majority of building renovated. North and south exterior walls replaced.
 2005-Building scheduled for major repairs and renovation as part of Instruction East work in 2006-2007
 One classroom renovated in 2001.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11- Years	

CRV Totals: 100 \$4,314,000 \$43,140 \$379,632 \$213,543 \$3,677,685 \$4,314,000

Priority Issues Data					0-5 Year Cumulative Data				
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING
\$4,314,000	\$43,140	\$0	1.0%	GOOD	\$422,772	\$437,739	9.8%	\$86,280	FAIR

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors: 1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes:
 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$502,560	0	5	10	85	No reported problems 2007 assessment: No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Penthouse screen wall support steel has significant corrosion – will need cleaning and paint. Penthouse block cracked at support steel bearing due to thermal expansion contraction – slide bearing will be required to prevent continued deterioration Efflorescence on face of Penthouse block indicates moisture penetration into wall – block should be painted or sealed. Possible clogged roof drain on Penthouse roof. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Roof	5	\$167,520	0	90	10	0	Firestone EPDM in 1999 2005 - some flashing due for replacement 2007 assessment: Flashing problems resolved during construction of covered walkway to Ash Building. 2009 Assessment: No changes reported. 2010 Assessment: Minor roof leaks discovered, repaired under warranty. 2011 assessment: Leaks Resolved. Roof inspected annually, no reported problems, but roof past half of expected life. 2012 assessment: No changes reported. 2013 assessment: Minor roof leaks at penthouse on west side. Extending membrane up to wall flashing to eliminate leaks. 2014 assessment: Roof inspected, repaired with new RTU installation.

2015 assessment: Projected roof membrane replacement from roof report: 2024

2016 Assessment: No changes reported. No reported problems.

2018 Assessment: Roof scheduled for replacement in 2024.

2019 Assessment: No changes reported. No reported problems.

2021 Assessment: No changes reported. No reported problems.
Projected roof replacement in 2026.

2022 Assessment: Projected replacement in 2026. No reported problems.

Glazing	5	\$167,520	0	0	15	85	Original - good condition
			\$0	\$0	\$25,128	\$142,392	

2007 assessment: No changes. No reported problems.

2009 -2015 Assessment: No changes reported. No reported problems.

2016, 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.

Cladding	5	\$167,520	0	0	5	95	Brick, No reported problems
			\$0	\$0	\$8,376	\$159,144	

2007 assessment: No changes. No reported problems.

2009-2016 Assessment: No changes reported. No reported problems.

2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors: 1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes: 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	25	\$837,600	0	5	20	75	(2) AHU's in penthouse (2) rooftop condenser units for AC. Original Pneumatic controls at end of life 2003-some piping deterioration possible - continue to monitor condition 2004-major system components due for replacement (\$225,000), scheduled for 2006. 2007 assessment: system components scheduled for replacement not yet done. steam line to building replaced. (2) AHU's in penthouse original, at end of life, due for replacement. (2) rooftop condenser units original, at end of life, due for replacement. Coolant leaks slowly, but units functioning. Pneumatic controls functioning. 2009 Assessment:No changes reported. 2010 Assessment: Gas meter systems replaced by Consumers Energy. HVAC system still due for upgrade / replacement. 2011 assessment:No changes reported. HVAC system still due for upgrade / replacement. 2012 assessment: Majority of HVAC system replaced as part of ECM contract (\$200,000): New Trane heat pump/steam coil RTU's, controls, VAV units, actuators, dampers, water pumps. Distribution ductwork reworked as required for new system. 2013 assessment: Building now on campus-wide Building Automation System. 2014 - 2015 Assessment: No changes reported. No reported problems.

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors: 1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes: 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC (continued)	25	\$837,600	0 \$0	0 \$0	0 \$0	0 \$0	2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Steam is supplied to the building with a hot water converter used for the Building's primary heating system at the perimeter of the building. Steam heating AHUs are to be replaced with new hot water system that currently serves the auditorium. Existing gas-fired RTU model TCH301F400AD was installed in 2012. The air condition does not operate with no demand for cooling in the space. Recommend controls upgrade for the HVAC systems serving the entries to incorporate security access control. Recommend control upgrades to be integrsated into the Campus BEMS. Domestic hot water heater is electric. The School District should consider a new gasfired water heater in the future for energy savings. (The existing gas service appears to be a 3" piped into the Classroom building) 2019 Assessment: 4 heaters replaced. No problems reported. 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Unit ventilators and VAV boxes were replaced
Plumbing/Drainage	5	\$167,520	0 \$0	5 \$8,376	20 \$33,504	75 \$125,640	Plumbing fixtures and associated exposed plumbing recently replaced. 2007 assessment:No changes. No reported problems. 2009-2011 Assessment:No changes reported. 2012 Assessment: New water heater installed. 2013 assessment: Toilet rooms renovated and fixtures relocated as necessary for meet ADA goals. Urinals replaced. 2014-2015, 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Recommend new roof drains and overflow drains at time of roof upgrades to the current Mansard roof system.

2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors: 1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes: 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Primary/Secondary	10	\$335,040	0	0	10	90	No reported problems
			\$0	\$0	\$33,504	\$301,536	2007 assessment: No changes. No reported problems. 2009 Assessment: No changes reported. 2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity. 2011-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: The main panel is a new Eaton PRL3a panel serving the building 200A at 480/277V, 3 phase. The source of this 480V is not apparent, though it is likely fed from the unit substation in the basement of the Smith Building. The existing fire alarm system head-end is upgraded to a National Time & Signal PT series, but many of the devices are original. The pull stations are not at a height that complies with current ADA requirements. 2019 Assessment: No changes reported. No reported problems. 2021 Assessment: No changes reported. No reported problems. 2022 Assessment:

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors: 1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes: 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	5	\$167,520	0	5	5	90	No reported problems 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
Lighting	5	\$167,520	5	5	5	85	Corridor lighting replaced in 2001. Auditorium lighting funded for replacement with compact fluorescent. 2007 assessment: recessed can lighting in auditorium upgraded to compact fluorescent. 2009 Assessment: No changes reported. 2010 Assessment: A few T12 fixtures remain, due for upgrade to T8 2011 assessment: No changes reported. 2012 assessment: Lighting upgraded as part of ECM contract. 2013 assessment: occupancy sensors added to control classroom lighting. 2014-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Lighting is mainly T8 fluorescent. Recommend replacement with LED technology and upgraded lighting controls as budget allows to lower operating and energy costs. Emergency lighting is served throughout using unit battery "bugeye" style fixtures. Future lighting upgrades will trigger an upgrade to current life safety code requirements. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: No changes reported. No reported problems. Replace lighting in next five

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors:1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes: 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Voice/Data	5	\$167,520	0	0	5	95	Recently upgraded
			\$0	\$0	\$8,376	\$159,144	2007 assessment:No changes. No reported problems.
							2009-2016 Assessment: No changes reported. No reported problems.
							2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
Ceilings	3	\$100,512	0	5	10	85	Corridor ceilings replaced as part of lighting upgrade.
			\$0	\$5,026	\$10,051	\$85,435	2007 assessment:No changes. No reported problems.
							2009-2012 Assessment:No changes reported.
							2013 assessment: toilet room ceilings replaced as part of renovation.
							2014-2016 Assessment: No changes reported. No reported problems.
							2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
Walls/Casework	2	\$67,008	0	5	10	85	Masonry corridor walls, balance of walls painted gypsum - recently repainted.
			\$0	\$3,350	\$6,701	\$56,957	2007 assessment:No changes. No reported problems.
							2009-2012 Assessment:No changes reported.
							2013 assessment: Toilet rooms renovated recently, including partitions, tiling, etc.
							2014-2016 Assessment: No changes reported. No reported problems.
							2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors: 1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes: 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Doors	2	\$67,008	0	0	10	90	Exterior: Original hollow metal doors 2005-hinges and hardware failing and deteriorating, doors rusting at bottoms, due for replacement. Interior: Original solid core wood doors. Finish worn ,some swelling. 2007 assessment: Exterior doors cleaned, patched and repainted. Hardware and doors still due for replacement. Interior doors - no changes. 2009 Assessment:No changes reported. 2010 Assessment:No changes reported. 2011 assessment: Exterior doors continuing to deteriorate. Doors and hardware are at end of their useful life and due for replacement. 2012 assessment: Penthouse door replaced. 2013 assessment: All classroom door hardware be changed to lockdown type for security. 2014 Assessment: No changes reported. 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. Exterior entrance doors continuing to deteriorate. Doors and hardware are at end of their useful life and due for replacement. 2018 Assessment: No changes reported. 2019 Assessment: No changes reported. No reported problems. 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$6,701	\$60,307	

Campus: Main
Bldg. No: 08
Building: Les Morford Instructional Building
Area: 11,184sf **Yr Built: 1969** **Floors: 1**

Use Types:
 55 % Auditorium
 45 % Classroom

Notes: 2015-Formerly called Instruction West
 2007-covered walkway to Ash Building added.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Floors	3	\$100,512	0	35	15	50	Offices - carpet replaced in 2002. 2007 Assessment: No changes. No reported problems. 2009-2013 Assessment: No changes reported. 2014 assessment: Office carpet due for replacement. 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. Office carpet due for replacement. 2018 Assessment: No changes reported. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Floors need a facelift
			\$0	\$35,179	\$15,077	\$50,256	
Bldg., Fire, ADA, Elevators	2	\$67,008	0	5	5	90	Unisex ADA toilet room added in 1999. 1999 - Building upgraded to meet ADA compliance. New fire alarm system 2007 assessment: No changes. No reported problems. 2009-2012 Assessment: No changes reported. 2013 assessment: Toilet rooms upgraded to meet ADA guidelines. (\$55,000) 2014-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: ADA issues in lecture halls remain. No other reported problems.
			\$0	\$3,350	\$3,350	\$60,307	
Immed. Site, Ext. Ltg., etc	3	\$100,512	0	5	10	85	No reported problems 2007 assessment: No changes. No reported problems.
			\$0	\$5,026	\$10,051	\$85,435	

2009-2016 Assessment: No changes reported. No reported problems.

2018 Assessment: No changes reported. No problems reported.
 Selected sidewalks replaced in 2017.

2019, 2021-2022 Assessment: No changes reported. No reported problems.

CRV Totals: 100 \$3,350,400 \$8,376 \$294,835 \$412,099 \$2,635,090 \$3,350,400

Priority Issues Data					0-5 Year Cumulative Data				
\$3,350,400	\$8,376	\$0	0.3%	GOOD	\$303,211	\$135,691	9.1%	\$67,008	FAIR
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING

Campus: Main
Bldg. No: 09
Building: Donald C. Burns Library and Admin.
Area: 28,720sf **Yr Built: 1966** **Floors: 2**

Use Types:
 60 % Administration
 40 % Library

Notes: 2015-Formerly called LRC/Admin Building
 Complete interior renovation in 1999.
 2019 - New writing lab completed at library

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$1,289,970	0	0	5	95	No reported problems 2007 assessment: No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Crack in concrete basement wall has been injected to prevent water leakage. Unsightly but not representative of structural deficiency. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$64,499	\$1,225,472	
Roof	5	\$429,990	0	0	80	20	Single ply EPDM, installed in 1999, No reported problems. 2007 assessment: No changes. No reported problems. 2009 -2010 Assessment: No changes reported. 2011 assessment: Roof inspected annually, no reported problems, but roof past half of expected life. 2012 -2014 assessment: Roof inspected, repaired as necessary. 2015 Assessment: No changes reported. 2016 Assessment: No changes reported. No known leaks, Projected roof membrane replacement from roof report: 2019 2018 Assessment: Roof replacement scheduled in 2024. 2019 Assessment: No changes reported. No reported problems. 2021 Assessment: No changes reported. No reported problems. Projected roof replacement in 2026. 2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$343,992	\$85,998	

Campus: Main
Bldg. No: 09
Building: Donald C. Burns Library and Admin.
Area: 28,720sf **Yr Built: 1966** **Floors: 2**

Use Types:
 60 % Administration
 40 % Library

Notes: 2015-Formerly called LRC/Admin Building
 Complete interior renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	5	\$429,990	0	0	10	90	Mostly original, in good condition 2007 assessment: No changes. No reported problems. 2009-2011 Assessment: No changes reported. 2012 assessment: Glass replaced on 3 offices in southwestern corner. 2013-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$42,999	\$386,991	
Cladding	6	\$515,988	5	0	20	75	No reported problems 2007 assessment: Brick screen wall surrounding chillers: brick at top of wall and at louvers are deteriorating - mortar loosening, some bricks loose, due for tuckpointing. 2009-2010 Assessment: No changes reported. 2011 assessment: No changes reported. Masonry at louvers still due for repair. 2012-2015 Assessment: No changes reported. Masonry at louvers still due for repair. 2016 assessment: Masonry at air louvers budgeted for repair in 2016. 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Stone repair work needed. No other reported problems or changes.
			\$25,799	\$0	\$103,198	\$386,991	

Campus: Main
Bldg. No: 09
Building: Donald C. Burns Library and Admin.
Area: 28,720sf **Yr Built: 1966** **Floors: 2**

Use Types:
 60 % Administration
 40 % Library

Notes: 2015-Formerly called LRC/Admin Building
 Complete interior renovation in 1999.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	25	\$2,149,950	0	5	25	70	<p>Replaced in 1999, No reported problems.</p> <p>Variable Frequency Drive controls failing, recently replaced.</p> <p>Library humidity requirements (low humidity) handled through overcooling of space.</p> <p>2007 assessment:No changes. No reported problems.</p> <p>2009 Assessment: 2008 - new reheat boiler installed to control building humidity (cost part of Doser Building reheat boiler install)</p> <p>2010 Assessment: Gas meter systems replaced by Consumers Energy.</p> <p>2011 assessment:No changes reported. No reported problems.</p> <p>2012 assessment: System controls upgraded to DDC as part of new energy management system. Dampers, actuators on control valves replaced as required.</p> <p>2013-2015 Assessment: No changes reported.</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: The HVAC system is a combination of central AHU with hot water heating and chilled water cooling which require upgrades to their respective controls. Chilled water is supplied by an outdoor air-cooled chille (1999) using 25% ethylene glycol. The current outdoor chiller appears in good condition and will continue to provide 10 years. There is evidence of high humidity in the lower level library where ceiling tiles are sagging. Recommend CO2 controls for demand ventilation and de-humidification reheat added to the lower level AHUs. VFDs are on all motors and should be controlled. The building is fully DDC controlled with the standard campus BEMS system. The current AHU systems need to expand with controls upgrades. Steam and condensate services enter in to the building and converted to hot water heating. The School is currently adding side stream filtration to the hot water circulation and distribution heating system to help improved water quality. Steam line improvements made in 2017.</p> <p>2019 Assessment: Entry heater replaced. No reported problems.</p> <p>2021-2022 Assessment: No changes reported. No reported problems.</p>

Campus: Main
Bldg. No: 09
Building: Donald C. Burns Library and Admin.
Area: 28,720sf **Yr Built: 1966** **Floors: 2**

Use Types:
 60 % Administration
 40 % Library

Notes: 2015-Formerly called LRC/Admin Building
 Complete interior renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$429,990	0	5	20	75	Some original roof drains, No reported problems 2007 assessment:No changes. No reported problems. 2009-2014 assessment:No changes reported. No reported problems. 2015 Assessment: No changes reported. No reported problems. 2016 assessment:lower level flooded during heavy rainstorm in 2016. Damage reported as minor. 2018 Assessment: The building is a 2-story fully sprinkled building. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Primary/Secondary	9	\$773,982	0	0	20	80	No reported problems 2007 assessment:No changes. No reported problems. 2009 Assessment:No changes reported. 2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity. 2011-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Power enters this building via a pad-mounted transformer on the north, fed from a S&C Electric pad-mounted primary switch with a PMH-6 configuration. 480/277V power is delivered from a main panel on the lower level north end that utilizes the "six disconnect rule" and has no single main switch or breaker. The fire alarm system is a newer National Time & Signal system, no issues found. The main electrical room seems to be lacking any emergency lighting. Recommend adding this for worker safety. 2019, 2021-2022 Assessment: No changes reported. No reported problems. 2022 Assessment:

Campus: Main
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Notes: 2015-Formerly called LRC/Admin Building
 Complete interior renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	4	\$343,992	0	10	15	75	No reported problems 2007 assessment: No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment:
			\$0	\$34,399	\$51,599	\$257,994	
Lighting	5	\$429,990	5	5	10	80	No reported problems 2007 assessment: No changes. No reported problems. 2009-2011 Assessment: No changes reported. 2012 assessment: Exterior lighting upgraded as part of ECM contract. 2013-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Lighting is a mixture of linear and compact fluorescent. Recommend switchover to LED technology as remodel work happens. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Lighting to be upgraded to LED over next five years.
			\$21,500	\$21,500	\$42,999	\$343,992	
Voice/Data	5	\$429,990	10	5	5	80	New 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$42,999	\$21,500	\$21,500	\$343,992	

Campus: Main
Bldg. No: 09
Building: Donald C. Burns Library and Admin.
Area: 28,720sf **Yr Built: 1966** **Floors: 2**

Use Types:
 60 % Administration
 40 % Library

Notes: 2015-Formerly called LRC/Admin Building
 Complete interior renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Ceilings	3	\$257,994	0	5	15	80	No reported problems 2007 assessment:No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: There is evidence of high humidity in the lower level library where ceiling tiles are sagging. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: No reported problems. Library needs a facelift.
Walls/Casework	2	\$171,996	0	5	15	80	No reported problems 2007 assessment:No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: No reported problems. Library needs a facelift.
Doors	2	\$171,996	0	5	15	80	Some doors on lower level original, working, but finish worn. 2007 assessment:No changes. No reported problems. 2009-2015 Assessment: No changes reported. 2016 Assessment: No changes reported. Lower level wood door finish due for replacement. Flood may have incerased deterioration. 2018 Assessment: No changes reported. 2019, 2021 Assessment: No changes reported. No reported problems.

2022 Assessment: No reported problems. Library needs a facelift.

Campus: Main

Bldg. No: 09

Building: Donald C. Burns Library and Admin.

Area: 28,720sf

Yr Built: 1966

Floors: 2

Use Types:

60 % Administration

40 % Library

Notes: 2015-Formerly called LRC/Admin Building

Complete interior renovation in 1999.

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Floors	3	\$257,994	0	10	15	75	<p>2005-Metal stairway tread pans rusting, paint chipping at nosings.</p> <p>2005-Upper level carpet discolored, wearing, easily soiled (due to light color). Due for replacement in 2-3 years.</p> <p>2007 assessment: Carpet discoloration continuing.</p> <p>2009 Assessment: No changes reported.</p> <p>2010 Assessment: Carpet worn and due for replacement.</p> <p>2011 assessment: No changes reported. Carpet continues to age and is due for replacement.</p> <p>2012 assessment: Risers on library steps cleaned and painted. No other changes.</p> <p>2013 assessment: Upper level carpet is at end of life and due for replacement. Seams are fraying, surface is worn. Stair risers are rusting again and due for repaint. Will likely be an ongoing maintenance issue.</p> <p>2014 assessment: Upper level carpet due for replacement.</p> <p>2015 assessment: Upper level carpet budgeted for replacement in 2015.</p> <p>2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems.</p> <p>2022 Assessment: No reported problems. Library needs a facelift.</p>
			\$0	\$25,799	\$38,699	\$193,496	

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Bldg. No: 09
Building: Donald C. Burns Library and Admin.
Area: 28,720sf **Yr Built: 1966** **Floors: 2**

Use Types:
 60 % Administration
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Notes: 2015-Formerly called LRC/Admin Building
 Complete interior renovation in 1999.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Bldg., Fire, ADA, Elevators	2	\$171,996	0 \$0	5 \$8,600	10 \$17,200	85 \$146,197	Sprinkler - new. New alarm system. Handrails in stairs may not meet code, should be reviewed. 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018-2019, 2021-2022 Assessment: No changes reported. No reported problems.
Immed. Site, Ext. Ltg., etc	4	\$343,992	5 \$17,200	5 \$17,200	10 \$34,399	80 \$275,194	Building partially below grade - lower level open on 3 sides with stone retaining walls. 2007 Assessment: Original stone site walls deteriorating. Water infiltration into mortar causing stones to loosen, mortar to deteriorate. Walls due for repair and tuckpointing. 2009 Assessment: No changes reported. 2010 Assessment: Stone site wall deterioration continuing. 2011 assessment: No changes reported. Stone site wall deterioration continuing. 2012 assessment: No changes reported. 2013 assessment: Deterioration at both north and south site walls continues. Mortar is failing and many stones are loose or have fallen. Repair of existing walls not likely to prevent return of problem. Vertical stone walls and sloped retaining walls are due for replacement. 2014 Assessment: No changes reported. Site wall continues to deteriorate. 2015 assessment: Stone site walls and retaining walls due for replacement. 2016 assessment: lower level site flooded extensively during heavy rainstorm in 2016, some water entered building. Stone retaining walls continue to deteriorate; issues may have accelerated due to flooding. Direct buried steam line replacement work may be disturbing site wall further. 2018 Assessment: Some retaining wall repair was completed in 2017.

2019 Assessment: No changes reported. No reported problems.

2021 Assessment: No changes reported. No reported problems.

2022 Assessment: No changes reported. No reported problems.

CRV Totals: 100 \$8,599,800 \$107,498 \$288,093 \$1,629,662 \$6,574,547 \$8,599,800

Priority Issues Data					0-5 Year Cumulative Data				
\$8,599,800	\$107,498	\$0	1.3%	GOOD	\$395,591	\$0	4.6%	\$171,996	FAIR
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	S/YR MAINTAIN	RATING

Campus: Main
 Bldg. No: 10
 Building: Pole Barn
 Area: 1,800sf

Yr Built: 1998 Floors: 1

Use Types:
 100% Storage

Notes:

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	30	\$50,880	0	0	0	100	No reported problems 2007 assessment: No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Wood frame with metal panel roof structure on concrete slab-on-grade. 2019, 2021 - 2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$0	\$50,880	
Roof	15	\$25,440	0	60	0	40	Asphalt shingles, No reported problems 2007 assessment: No changes. No reported problems. 2009 Assessment: No changes reported. 2010 Assessment: No changes reported. 2011- 2014 assessment: Roof inspected, repaired as necessary. 2015 Assessment: No changes reported. Projected roof membrane replacement from roof report: 2022 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Roof needs to be replaced in next five years.
			\$0	\$15,264	\$0	\$10,176	
Glazing	0	\$0	0	0	0	100	N/A 2014 - 2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$0	\$0	\$0	

Campus: Main
 Bldg. No: 10
 Building: Pole Barn
 Area: 1,800sf

Yr Built: 1998 Floors: 1

Use Types:
 100% Storage

Notes:

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Cladding	20	\$33,920	0 \$0	0 \$0	10 \$3,392	90 \$30,528	metal siding, No reported problems 2007 assessment:No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Metal panel cladding. 2019, 2021-2022 Assessment: No changes reported. No reported problems.
HVAC	5	\$8,480	0 \$0	0 \$0	0 \$0	100 \$8,480	has gas hookup for future addition of heater. 2007 assessment:No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016, 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Plumbing/Drainage	0	\$0	0 \$0	0 \$0	0 \$0	100 \$0	N/A 2014 - 2015 Assessment: No changes reported. 2016, 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
 Bldg. No: 10
 Building: Pole Barn
 Area: 1,800sf

Yr Built: 1998 Floors: 1

Use Types:
 100% Storage

Notes:

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Primary/Secondary	4	\$6,784	0 \$0	0 \$0	0 \$0	100 \$6,784	minimal 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Distribution	4	\$6,784	0 \$0	0 \$0	0 \$0	100 \$6,784	minimal 2007 assessment: No changes. No reported problems. 2009-2016 Assessment: No changes reported. No reported problems. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Lighting	4	\$6,784	0 \$0	0 \$0	10 \$678	90 \$6,106	minimal, No reported problems 2007 assessment: No changes. No reported problems. 2009-2014 assessment: no changes reported. No reported problems. 2015 assessment: Lighting upgraded. 2016, 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Voice/Data	0	\$0	0 \$0	0 \$0	0 \$0	100 \$0	N/A 2014 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Ceilings	0	\$0	0 \$0	0 \$0	0 \$0	100 \$0	N/A 2014 - 2016 Assessment: No changes reported. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.

Walls/Casework	0	\$0	0	0	0	100	N/A
			\$0	\$0	\$0	\$0	
							2014 - 2016 Assessment: No changes reported.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Doors	10	\$16,060	0	0	20	80	4 overhead doors, 1 man door, No reported problems
			\$0	\$0	\$3,212	\$12,848	
							2007 assessment: No changes. No reported problems.
							2009-2012 assessment: No changes reported. No reported problems.
							2013 Assessment: New weather seals installed at existing overhead doors.
							2014 - 2016 assessment: exterior man door replaced.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Floors	4	\$6,784	0	0	0	100	Concrete floor
			\$0	\$0	\$0	\$6,784	
							2007 assessment: No changes. No reported problems.
							2009-2016 Assessment: No changes reported. No reported problems.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Bldg., Fire, ADA, Elevators	2	\$3,392	0	0	0	100	No reported problems
			\$0	\$0	\$0	\$3,392	
							2007 assessment: No changes. No reported problems.
							2009-2016 Assessment: No changes reported. No reported problems.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
Immed. Site, Ext. Ltg., etc	2	\$3,392	0	0	0	100	No reported problems
			\$0	\$0	\$0	\$3,392	
							2007 assessment: No changes. No reported problems.
							2009-2016 Assessment: No changes reported. No reported problems.
							2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.
CRV Totals:	100	\$169,600	\$0	\$15,264	\$7,282	\$146,154	\$168,700

Priority Issues Data					0-5 Year Cumulative Data				
\$169,600	\$0	\$0	0.0%	GOOD	\$15,264	\$0	9.0%	\$3,427	FAIR
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING

Campus: Main
Bldg. No: 11
Building: Power Plant
Area: 3,840sf

Yr Built: 1966 **Floors: 1**

Use Types:
 100% Power House

Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$368,220	0	5	5	90	Concrete - no reported problems 2007 assessment:No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems 2018 Assessment: Shrinkage cracks visible in floors – not due to settlement – not critical. Storage shed behind building has substantial settlement, cracks in block, near end of life. Structural steel frame, with concrete buttresses. 2021-2022 Assessment: No changes reported. No reported problems.
			\$0	\$18,411	\$18,411	\$331,398	
Roof	3	\$73,644	0	40	0	60	Replaced in 1998, No reported problems 2007 assessment:No changes. No reported problems. 2009 Assessment:No changes reported. 2010 Assessment:No changes reported. 2011 Assessment: Roof inspected annually, no reported problems, but roof nearing end of expected life. 2012-2014 assessment: Roof inspected, repaired as necessary. 2015 assessment: Proposed roof membrane replacement in 2022, per roof report. 2016 Assessment: No changes reported. No reported problems 2018 Assessment: No changes reported. No reported problems. 1-1/2" steel deck on steel joists. Built-up roof, with insulation. 2019, 2021 Assessment: No changes reported. No reported problems 2022 Assessment: Replace roof in next 5 years.
			\$0	\$29,458	\$0	\$44,186	

Campus: Main
Bldg. No: 11
Building: Power Plant
Area: 3,840sf

Yr Built: 1966 **Floors: 1**

Use Types:
 100% Power House

Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	1	\$24,548	0	10	0	90	Very few windows original. OK 2007 assessment:No changes. No reported problems. 2009 Assessment: 2008-windows replaced due to forklift damage. 2010-2016 Assessment:No changes reported. No reported problems. 2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems
			\$0	\$2,455	\$0	\$22,093	
Cladding	5	\$122,740	0	5	5	90	Concrete due for repainting. 2007 assessment: Building repainted. 2009-2014 assessment:No changes reported. No reported problems. 2015 assessment: Exterior paint beginning to peel. Building is due for repaint. 2016 Assessment: No changes reported. No reported problems 2018 Assessment: No changes reported. No reported problems. Insulated metal panels. 2019, 2021-2022 Assessment: No changes reported. No reported problems
			\$0	\$6,137	\$6,137	\$110,466	

Campus: Main
Bldg. No: 11
Building: Power Plant
Area: 3,840sf

Yr Built: 1966 **Floors: 1**

Use Types:
 100% Power House

Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	30	\$736,440	0	5	10	85	Boilers replaced 1987. 2 boilers, cycled to run every other month to prolong life. Additional load on system may require running both boilers at once. Main steam valves replaced in 2001. 2005-two new condensate pumps and receiver installed (\$2,000) New flow meter scheduled for installation in 2006 (\$7,200) 2007 assessment: Flow meter replaced. Section of steam loop replaced between Instruction West and Ash Building. Past condensate leaks caused excessive water loss from system. Replacement of steam line appears to have resolved problem. 2009 Assessment: 2009-de-aerator installed (\$45,000) 2010 Assessment: Gas meter systems replaced by Consumers Energy. 2011 assessment: Boilers tested in November 2011. No reported problems. 2012 assessment: Boiler system controls upgraded as part of ECM contract. New LonWorks DDC Energy Management System installed for campus (\$600,000). 2013-2014 assessment:No changes reported. 2015 assessment: Boiler valves replaced. Blowdown added. Boilers nearing 30 years old. Inspected and reported in good condition. College should start budgeting for replacement. 2016 assessment: direct buried steam and condensate lines deteriorating, undergoing replacement. College is evaluating switching from central steam to hot water boilers in each building.
			\$0	\$36,822	\$73,644	\$625,974	

Campus: Main
Bldg. No: 11
Building: Power Plant
Area: 3,840sf

Yr Built: 1966 **Floors: 1**

Use Types:
 100% Power House

Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC (continued)	30	\$736,440	0	5	10	85	<p>2018 Assessment:</p> <p>A central steam boiler plant is served by two (2) Cleaver Brooks steam boilers rated at 5,230 MBH natural gas input. Boilers are 1980's vintage operating to provide the school campus with 100% backup heating capacity. The steam boiler system and its accessories have been routinely maintained with water / condensate control and chemical treatment. Therefore, this plant is in fairly good condition and will continue to function for the School District to supply steam heat. Recent new improvements and equipment investments through capital expense have allowed the plant to be reliable and continued operations. We expect an additional 10 to 20 years of continuing Steam generation and distribution to campus buildings. The campus steam heating captures 100% of its building condensate at each building and their steam use to minimize water make-up and chemicals needs at the boiler plant. We estimate the make-up water at 200 GPD based on the recorded water meter. The boiler-feed water system was replaced and upgraded in 2009 and in good condition Well water is softened with a new water softener for improved lasting equipment life. Maintenance records indicate blowdown once per week to purge solids for on-going quality control of steam. A recent steam trap replacement and maintenance program was financed with a Consumers Energy rebate program. Steam & condensate distribution pipe was replaced in 2000. The current 70 psig steam pressure provides about 340F heating BTU temperatures to the building with minimal steam pipe losses in the distribution piping system. We recommend HVAC control improvements and to be incorporated into the Campus BEMS (Building Energy Management System). Current BEMS hardware is manufactured by Snieder using Tridium software as represented by Grand Valley Automation (GVA). The current boilers are dual fuel fired with #2 oil as backup to the natural gas valve train.</p> <p>2019 Assessment: Tubes redone on the boilers. No problems reported.</p> <p>2021-2022 Assessment: No changes reported. No reported problems.</p>

Campus: Main
Bldg. No: 11
Building: Power Plant
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Yr Built: 1966 **Floors: 1**

Use Types:
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Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	8	\$196,384	0	10	10	80	2004 new electrical service to power plant lift station installed (two lift stations for campus), improved reliability. 2007-2014 Assessment: No changes reported. 2015 Assessment: New frequency drive added to well pump to improve water pressure. No reported problems 2016, 2018, 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: No changes reported. No reported problems.
			\$0	\$19,638	\$19,638	\$157,107	
Primary/Secondary	10	\$245,480	0	5	15	80	OK. Some original 2007 assessment:No changes. No reported problems. 2009 Assessment:No changes reported. 2010 assessment: Campus primary service conductors upgraded to 8360V by Consumers Energy to provide additional capacity. 2011-2016 Assessment: No changes reported. No reported problems.
			\$0	\$12,274	\$36,822	\$196,384	

Campus: Main
Bldg. No: 11
Building: Power Plant
Area: 3,840sf

Yr Built: 1966 **Floors: 1**

Use Types:
 100% Power House

Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Primary/Secondary (continued)	10	\$245,480	0	0	15	85	<p>2018 Assessment:</p> <p>Exterior north side of building has the main primary utility switch and switchgear. Based on the primary voltage of the transformers on campus, the primary system is operating at 8320V.</p> <p>The main primary utility switch appears to feed directly into the power plant building and also to a nearby MCC-owned pad-mounted switch, an S&C Electric PMH-9. It is presumed that this PMH-9 feeds the Maintenance Building and North Instructional Building, while the primary loops through and feeds south to the rest of the campus.</p> <p>The Power Plant itself contains a primary unit substation with a single main switch, Square D HVL, 15kV, 600A.</p> <p>The unit substation contains two transformers: one 225kVA with a 480/277V, three-phase secondary and the other 15kVA with a 240/120V, single-phase secondary. The final section of the substation consists of an I-line style distribution panel. Replacement parts for the unit substation are still readily available. Recommend a scheduled outage for cycling of all switches, tightening of all connections, and cleaning throughout.</p> <p>The boiler room is lacking Emergency Power Off buttons, which are now required by code. Recommend adding these for safety.</p> <p>The existing fire alarm system within the building is antiquated and no longer compliant with current life safety code. Recommend replacement.</p> <p>There are various vintages of energy monitoring spread throughout campus. Recommend that this equipment be re-instated and some regular monitoring/reporting of power usage is established as a useful tool in future energy savings projects to reduce the power bill for the campus.</p> <p>2019, 2021, 2022 Assessment: No changes reported. No reported problems</p>
			\$0	\$0	\$36,822	\$208,658	

Campus: Main
 Bldg. No: 11
 Building: Power Plant
 Area: 3,840sf

Yr Built: 1966 Floors: 1

Use Types:
 100% Power House

Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	5	\$122,740	0	5	10	85	No reported problems 2007 assessment: No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems 2018 Assessment: The configuration of the existing primary power distribution system can only be surmised based on the initial walk-through. Additional research is need to fully understand the system and how it might be expanded in the future if the need arises. A one-line diagram of this system likely exists somewhere from when first constructed or when buildings were added, though such a drawing is not known. 2019, 2021, 2022 Assessment: No changes reported. No reported problems
			\$0	\$6,137	\$12,274	\$104,329	
Lighting	5	\$122,740	0	20	0	80	No reported problems 2007, 2009, 2010 Assessment: No changes. No reported problems. 2011 assessment: Lighting replaced with high-bay fluorescent fixtures. 2013-2016 Assessment: No changes reported. No reported problems 2018 Assessment: Emergency egress lighting and exit signs appear to be absent from the building entirely. Recommend adding both for safety reasons. Lighting is T8 fluorescent, low priority to switch to LED based on lower use/occupancy of this building compared to instructional buildings. MCC has replaced much of the original site lighting locations with LED in recent years. Many areas of the campus remain darker than recommended and future site work should consider additional pole locations to increase the feeling of safety and security for all. The existing site lighting is controlled via a master photocell with contactors placed around campus to perform the switching. 2019, 2021 Assessment: No changes reported. No reported problems
			\$0	\$24,548	\$0	\$98,192	

2022 Assessment: Replace lighting in next five years

Campus: Main
Bldg. No: 11
Building: Power Plant
Area: 3,840sf

Yr Built: 1966 **Floors: 1**

Use Types:
 100% Power House

Notes: 2005- Proposed renovations in 2006-2007 may require some heating system equipment and/or operation changes.
 2005-Water tower due for draining/inspecting and repaint

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Voice/Data	2	\$49,096	0 \$0	0 \$0	5 \$2,455	95 \$46,641	Only for energy management system - No reported problems 2007 assessment: No changes. No reported problems. 2009-2022 Assessment: No changes reported. No reported problems
Ceilings	2	\$49,096	0 \$0	30 \$14,729	0 \$0	70 \$34,367	Break room only, balance open to deck 2007 assessment: No changes. No reported problems. 2009-2021 Assessment: No changes reported. No reported problems 2022 Assessment: Replace ceilings in next five years
Walls/Casework	3	\$73,644	0 \$0	20 \$14,729	0 \$0	80 \$58,915	No reported problems 2007 assessment: No changes. No reported problems. 2009-2015 Assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. Concrete block partition walls. 2019, 2021 Assessment: No changes reported. No reported problems 2022 Assessment: Refinish walls and casework in the next five years.
Doors	3	\$73,644	5 \$3,682	20 \$14,729	0 \$0	75 \$55,233	Man doors deteriorated, due for replacement. 2007 assessment: No changes. 2009-2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems 2018 Assessment: Rusting on exterior doors - Need replacement.

2019, 2021 Assessment: No changes reported. No reported problems

2022 Assessment: Replace doors in the next five years.

Floors	3	\$73,644	0	30	0	70	No reported problems
			\$0	\$22,093	\$0	\$51,551	

2007 assessment:No changes. No reported problems.

2009-2016 Assessment: No changes reported. No reported problems

2018 Assessment: Concrete slab-on-grade. Vinyl tile in office and bathroom.

2019, 2021 Assessment: No changes reported. No reported problems

2022 Assessment: Replace floors in the next five years.

Bldg., Fire, ADA, Elevators	2	\$49,096	5	0	10	85	No fire alarm.
			\$2,455	\$0	\$4,910	\$41,732	

2007 - 2022 Assessment:No changes. No reported problems.

Immed. Site, Ext. Ltg., etc	3	\$73,644	0	0	10	90	Site OK
			\$0	\$0	\$7,364	\$66,280	

2007 - 2022 assessment:No changes. No reported problems.

CRV Totals: 100 \$2,454,800 \$6,137 \$222,159 \$181,655 \$2,044,848 \$2,454,800

Priority Issues Data					0-5 Year Cumulative Data				
\$2,454,800	\$6,137	\$0	0.3%	GOOD	\$228,296	\$43,363	9.3%	\$49,096	FAIR
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING

Campus: Main
 Bldg. No: 12
 Building: Ash Building
 Area: 28,800sf

Yr Built: 2007

Floors: 2

Use Types:

40 % Lab
 25 % Classroom
 25 % Admin
 10 % Audit

Notes: Connected to Instruction East

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	16	\$1,385,344	0	5	5	90	Steel structure. Slab on grade, partially below grade on 2 sides of lower level. 2007-New construction, under warranty 2009-2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems 2018 Assessment: Signs of moisture migration to interior at grade level. Possible issue with flashing at grade level. Signs of water leakage in server room at conduit entry points. 2019 Assessment: No changes reported. No reported problems 2021 Assessment: No changes reported. No reported problems. 2022 Assessment:
			\$0	\$69,267	\$69,267	\$1,246,810	
Roof	4	\$346,336	0	5	5	90	White EPDM, fully adhered (Carlisle) 2007-New construction, under warranty 2009 Assessment:No changes reported. 2010 Assessment: Minor roof leaks repaired under warranty. 2011 assessment:No changes reported. Roof inspected annually, no reported problems. 2012-2014 assessment:No changes reported. 2015 assessment: Roof report indicated no issues. 2016 Assessment: No changes reported. No reported problems 2018 Assessment: No changes reported. No reported problems. Roof replacement scheduled in 2035. 2019 Assessment: No changes reported. No reported problems 2021 Assessment: No changes reported. No reported problems.
			\$0	\$17,317	\$17,317	\$311,702	

2022 Assessment:

Campus: Main
 Bldg. No: 12
 Building: Ash Building
 Area: 28,800sf

Yr Built: 2007

Floors: 2

Use Types:

40 % Lab
 25 % Classroom
 25 % Admin
 10 % Audit

Notes: Connected to Instruction East

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes	
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years		
Glazing	5	\$432,920	0	0	0	100	Aluminum frame storefront system typical. Minimal curtain wall.	
			\$0	\$0	\$0	\$432,920	2007-New construction, under warranty	
								2009-2021 Assessment: No changes reported. No reported problems
								2022 Assessment:
Cladding	6	\$519,504	0	0	0	100	Brick on block backup metal siding on block backup	
			\$0	\$0	\$0	\$519,504	2007-New construction, under warranty	
								2009-2021 Assessment: No changes reported. No reported problems
								2022 Assessment:
HVAC	25	\$2,164,600	0	5	5	90	Building on central steam loop. Heat exchanger provides HW for perimeter heating.	
			\$0	\$108,230	\$108,230	\$1,948,140	(1) interior AHU with steam coil and chilled water coil. New air cooled Trane chiller connected to existing chiller for Instruction East Building to provide cooling to both buildings.	
							Heat provided by single steam coil in AHU. Perimeter heat provided by HW radiant panels. Distribution provided through VAV boxes (no reheat coils).	
							DDC controls connected to existing DDC system in Instruction East Building.	
							2007-New construction, under warranty	
							2009 Assessment: 2009-Chillers still being balanced for proper operation (cool summer complicated adjustments)	
							2010 Assessment: Heat recovery wheel not turning when inspected by facilities department. May be turned off by safety interlock system. Issue being investigated by college. Chillers balanced. Dedicated ventilation system added for spectrometer in lab. Gas meter systems replaced by Consumers Energy.	
							2011 assessment: Heat recovery wheel repaired. No reported problems.	
							2012 assessment: Actuator controls replaced with LonWorks DDC as part of energy management system under ECM contract.	
							2013-2015 Assessment: No changes reported. No reported problems	
				2016 Assessment: No changes reported. No reported problems				

2018 Assessment: The HVAC system is a combination of central AHU/ERU and appear relatively new and in good condition.

Chilled water is supplied by an outdoor air-cooled chiller using 25% ethylene glycol.

The current outdoor chiller is in good condition and will continue to provide 10 to 20 years.

The building is fully DDC controlled with the standard campus BEMS system.

Steam and condensate services both enter in to the building and converted to hot water heating.

The present classroom unit ventilators do no perform well in providing comfort & noise control.

Recommend horizontal units to be replaced with improved floor mounted vertical type to provide the proper ventilation and reused the existing air distribution & control systems.

2019 Assessment: No changes reported. No reported problems

2021 Assessment: No changes reported. No reported problems.

2022 Assessment:

Campus: Main
 Bldg. No: 12
 Building: Ash Building
 Area: 28,800sf

Yr Built: 2007

Floors: 2

Use Types:

40 % Lab
 25 % Classroom
 25 % Admin
 10 % Audit

Notes: Connected to Instruction East

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$432,920	0	0	0	100	Under slab drainage system (due to high water table) Acid waste system (plastic piping) from chemistry lab to acid dilution tank in janitor's closet. Waterless urinals in 2 men's toilet rooms. 2007-New construction, under warranty 2009-2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems 2018 Assessment: The Ash Building is a 2-story classroom building fully sprinkled. 2019, 2021 Assessment: No changes reported. No reported problems 2022 Assessment:
Primary/Secondary	8	\$692,672	0	0	0	100	Primary power provided from Instruction East Building. Main service to campus upgraded due to new construction. Small transformers in each electrical closet. 2007-New construction, under warranty 2009 Assessment:No changes reported. 2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity. 2011-2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems 2018 Assessment: Power to this building is served by the unit substation in the Smith Instructional building via an add-on switch. Panels in the Ash building are Square D NF and NQOD and all appear to be in good condition. 2019, 2021 Assessment: No changes reported. No reported problems 2022 Assessment:

Campus: Main
 Bldg. No: 12
 Building: Ash Building
 Area: 28,800sf

Yr Built: 2007

Floors: 2

Use Types:

40 % Lab
 25 % Classroom
 25 % Admin
 10 % Audit

Notes: Connected to Instruction East

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	5	\$432,920	0	0	0	100	2007-New construction, under warranty 2009-2021 Assessment: No changes reported. No reported problems 2022 Assessment:
			\$0	\$0	\$0	\$432,920	
Lighting	5	\$432,920	0	10	5	85	All fluorescent. Linear direct/indirect pendant fixtures in classrooms and labs. Recessed 1x4 typical in corridors, minimal recessed cans and specialty fixtures. Recessed 2x4 in offices. 2007-New construction, under warranty 2009-2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems 2018 Assessment: Exterior canopy lighting regularly fills with insects. Recommend replacement with new, sealed LED modules. Exterior wall packs are compact fluorescent with battery packs. While previously appropriate, these are not the best solution for exterior lighting in northern climate, as it is difficult to start in cold weather with light output significantly reduced. Recommend replacement with LED wall packs. Interior lighting is primarily a mixture of T8 and compact fluorescent technology. The various compact fluorescent sources in the building can present maintenance complications. Recommend a switchover to LED as budget allows. 2019 Assessment: No changes reported. No reported problems 2021 Assessment: No changes reported. No reported problems. 2022 Assessment:
			\$0	\$43,292	\$21,646	\$367,982	
Voice/Data	4	\$346,336	0	0	0	100	2007-New construction, under warranty 2009-2021 Assessment: No changes reported. No reported problems 2022 Assessment:
			\$0	\$0	\$0	\$346,336	

Campus: Main
 Bldg. No: 12
 Building: Ash Building
 Area: 28,800sf

Yr Built: 2007

Floors: 2

Use Types:
 40 % Lab
 25 % Classroom
 25 % Admin
 10 % Audit

Notes: Connected to Instruction East

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes	
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years		
Ceilings	3	\$259,752	0	0	10	90	2x2 lay-in ceilings typical throughout.	
			\$0	\$0	\$25,975	\$233,777	Minimal gypsum ceilings in corridors	
								2007-New construction, under warranty
								2009-2021 Assessment: No changes reported. No reported problems
						2022 Assessment:		
Walls/Casework	3	\$259,752	0	0	10	90	Painted gypsum board on metal studs typical.	
			\$0	\$0	\$25,975	\$233,777		
								2007-New construction, under warranty
								2009 Assessment:No changes reported.
						2010 Assessment:No changes reported.		
						2011 assessment: Main corridor repainted where damaged and scuffed by students.		
						2012-2021 Assessment: No changes reported. No reported problems		
						2022 Assessment:		

Campus: Main
 Bldg. No: 12
 Building: Ash Building
 Area: 28,800sf

Yr Built: 2007

Floors: 2

Use Types:

40 % Lab
 25 % Classroom
 25 % Admin
 10 % Audit

Notes: Connected to Instruction East

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Doors	2	\$173,168	0 \$0	0 \$0	10 \$17,317	90 \$155,851	<p>Exterior: Aluminum frame full-lite doors. (1) Hollow metal door. Interior: Solid score wood typical. (1) sliding aluminum frame full-lite door system in computer lab. (5) aluminum frame full-lite doors. (2) hollow metal doors at stairwells.</p> <p>2007-New construction, under warranty</p> <p>2009-2021 Assessment: No changes reported. No reported problems</p> <p>2022 Assessment:</p>
Floors	3	\$259,752	0 \$0	0 \$0	10 \$25,975	90 \$233,777	<p>Porcelain tile - corridors. Sheet vinyl - chemistry lab. Carpet tile - offices, classrooms. VCT - nursing lab, biology lab.</p> <p>2007-New construction, under warranty</p> <p>2009 Assessment: 2009-Grout in lower level east corridor cracked, repaired twice. Cause under investigation.</p> <p>2010 Assessment: Floor crack issue appears to have resolved.</p> <p>2011-2021 Assessment: No changes reported. No reported problems</p> <p>2022 Assessment:</p>
Bldg., Fire, ADA, Elevators	3	\$259,752	0 \$0	0 \$0	10 \$25,975	90 \$233,777	<p>Hydraulic passenger elevator. Fully sprinklered. New, ADA compliant fire alarm, exit signage and emergency lighting.</p> <p>2007-New construction, under warranty</p> <p>2009-2021 Assessment: No changes reported. No reported problems</p> <p>2022 Assessment:</p>
Immed. Site, Ext. Ltg., etc	3	\$259,752	0 \$0	0 \$0	10 \$25,975	90 \$233,777	<p>(6) pole mounted site lights at west sidewalk only. Building mounted recessed exterior lighting. New sidewalks poured as part of construction.</p> <p>2007-New construction, under warranty</p>

2009-2021 Assessment: No changes reported. No reported problems

2022 Assessment:

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	

CRV Totals: 100 \$8,658,400 \$0 \$238,106 \$363,653 \$8,056,641 \$8,658,400

Priority Issues Data					0-5 Year Cumulative Data				
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	S/YR MAINTAIN	RATING
\$8,658,400	\$0	\$0	0.0%	GOOD	\$238,106	\$0	2.8%	\$174,844	GOOD

Campus: Main
 Bldg. No: 13
 Building: Maintenance Building
 Area: 8,000sf

Yr Built: 2007 Floors: 1

Use Types:
 100% Storage

Notes: Pole barn building with 3 offices.
 2016-Replacement value corrected to match construction type.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	15	\$67,080	0	0	0	100	Typical pole-barn type construction. Load-bearing wood frame structure, prefabricated roof trusses. 6" concrete floor slab. 2007-New construction, under warranty 2009-2022 Assessment: No changes reported. No reported problems
Roof	10	\$44,720	0	0	80	20	Asphalt shingles. 2007-New construction, under warranty 2009 Assessment:No changes reported. 2010 Assessment:No changes reported. 2011 assessment:No changes reported. Roof inspected annually, no reported problems. 2012-2015 assessment: No changes reported. No reported problems. 2016 Assessment: No changes reported. No reported problems. Projected shingle replacement, per roof report: 2030 2018 Assessment: Roof replacement scheduled for 2025. 2019 Assessment: No changes reported. No reported problems. 2021-2022 Assessment: No changes reported. No reported problems.

Campus: Main
 Bldg. No: 13
 Building: Maintenance Building
 Area: 8,000sf

Yr Built: 2007 Floors: 1

Use Types:
 100% Storage

Notes: Pole barn building with 3 offices.
 2016-Replacement value corrected to match construction type.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	2	\$8,944	0 \$0	0 \$0	0 \$0	100 \$8,944	Minimal windows - (7) vinyl clad sliders in office areas. 2007-New construction, under warranty 2009-2022 Assessment: No changes reported. No reported problems
Cladding	15	\$67,080	0 \$0	0 \$0	0 \$0	100 \$67,080	prepainted metal siding with blown-in cellulose insulation 2007-New construction, under warranty 2009-2022 Assessment: No changes reported. No reported problems
HVAC	15	\$67,080	0 \$0	0 \$0	0 \$0	100 \$67,080	(3) stand alone electric in-wall heaters/AC units in offices. Gas-fired radiant heaters in shop area. 2007-New construction, under warranty 2009 Assessment: No changes reported. 2010 Assessment: Gas meter systems replaced by Consumers Energy. 2011 assessment: No changes reported. No reported problems. 2012 assessment: Energy Management System upgraded as part of ECM contract. 2013-2018 Assessment: No changes reported. No reported problems 2019 Assessment: Replace two heaters. No reported problems. 2021-2022 Assessment: No changes reported. No reported problems.
Plumbing/Drainage	5	\$22,360	0 \$0	0 \$0	0 \$0	100 \$22,360	Minimal plumbing - 1 toilet room, work sink, hose bibbs. Linear floor drain with oil separator in shop area. 2007-New construction, under warranty 2009-2022 Assessment: No changes reported. No reported problems

Campus: Main
 Bldg. No: 13
 Building: Maintenance Building
 Area: 8,000sf

Yr Built: 2007 Floors: 1

Use Types:
 100% Storage

Notes: Pole barn building with 3 offices.
 2016-Replacement value corrected to match construction type.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Primary/Secondary	5	\$22,360	0 \$0	0 \$0	0 \$0	100 \$22,360	2007-New construction, under warranty 2009 Assessment:No changes reported. 2010 assessment: Campus primary service upgraded by Consumers Energy to provide additional capacity. 2011-2022 Assessment: No changes reported. No reported problems
Distribution	4	\$17,888	0 \$0	0 \$0	0 \$0	100 \$17,888	2007-New construction, under warranty 2009-2022 Assessment: No changes reported. No reported problems
Lighting	4	\$17,888	0 \$0	0 \$0	0 \$0	100 \$17,888	Fluorescent ceiling mounted fixtures typical. Recessed fluorescent in offices. 2007-New construction, under warranty 2009-2011 assessment:No changes reported. No reported problems. 2012 assessment: Lighting upgraded as part of ECM contract. 2013-2021 Assessment: No changes reported. No reported problems 2022 Assessment: LED lighting replacement completed
Voice/Data	3	\$13,416	0 \$0	0 \$0	0 \$0	100 \$13,416	Minimal 2007-New construction, under warranty 2009-2022 Assessment: No changes reported. No reported problems
Ceilings	4	\$17,888	0 \$0	0 \$0	0 \$0	100 \$17,888	Prepainted metal ceiling in shop area. Lay-in ceiling in office areas. 2007-New construction, under warranty 2009-2022 Assessment: No changes reported. No reported problems

Campus: Main
 Bldg. No: 13
 Building: Maintenance Building
 Area: 8,000sf

Yr Built: 2007 Floors: 1

Use Types:
 100% Storage

Notes: Pole barn building with 3 offices.
 2016-Replacement value corrected to match construction type.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Walls/Casework	5	\$22,360	0 \$0	30 \$6,708	0 \$0	70 \$15,652	Painted gypsum board walls between offices and shop areas. 2007-New construction, under warranty 2009-2021 Assessment: No changes reported. No reported problems 2022 Assessment: Add hallway in the next five years.
Doors	4	\$17,888	0 \$0	30 \$5,366	0 \$0	70 \$12,522	(1) overhead door in shop area. (1) Hollow metal exterior door. Hollow metal interior doors with lites. 2007-New construction, under warranty 2009-2021 Assessment: No changes reported. No reported problems 2022 Assessment: Replace overhead doors in next five years.
Floors	4	\$17,888	0 \$0	30 \$5,366	0 \$0	70 \$12,522	Concrete floor in shop area. Carpet in offices. 2007-New construction, under warranty 2009-2021 Assessment: No changes reported. No reported problems 2022 Assessment: Add hallway in next five years.

Campus: Main

Bldg. No: 13

Building: Maintenance Building

Area: 8,000sf

Yr Built: 2007

Floors: 1

Use Types:

100% Storage

Notes: Pole barn building with 3 offices.

2016-Replacement value corrected to match construction type.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Bldg., Fire, ADA, Elevators	2	\$8,944	0	0	0	100	No fire alarm system. No sprinkler system.
			\$0	\$0	\$0	\$8,944	
							2007-New construction, under warranty
							2009-2022 Assessment: No changes reported. No reported problems
Immed. Site, Ext. Ltg., etc	3	\$13,416	0	0	0	100	Exterior lighting: wall packs Exterior paving: asphalt drive and parking.
			\$0	\$0	\$0	\$13,416	
							2007-New construction, under warranty
							2009-2022 Assessment: No changes reported. No reported problems

CRV Totals: 100 \$447,200 \$0 \$17,441 \$35,776 \$393,983

Priority Issues Data					0-5 Year Cumulative Data				
\$447,200	\$0	\$0	0.0%	GOOD	\$17,441	\$0	3.9%	\$8,944	GOOD
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	S/YR MAINTAIN	RATING

Campus: Greenville

Bldg. No: 14

Building: Ash Technology and Learning Center

Area: 19,495sf

Yr Built: 2001

Floors: 1

Use Types:

10 % Auditorium

50 % Technology Lab

30 % Classroom

10 % Admin

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	16	\$961,648	0	0	5	95	Some CMU walls showing cracking - 2003 2007 assessment: Cracking continuing at door frames - especially in center corridor. 2009-2015 Assessment: No changes reported. No reported problems 2016 assessment: minor grout cracking from settlement continues 2018 Assessment: Building in good structural condition, no deficiencies noted. 2019 Assessment: Building in good structural condition, no deficiencies noted. 2021 - 2022 Assessment: No changes reported. No reported problems.
Roof	5	\$300,515	0	10	60	30	Fully adhered EPDM roof. 2007 assessment: No changes. No reported problems. 2010 Assessment: No changes reported. 2011 assessment: No changes reported. 2012 assessment: No changes reported. 2013 assessment: Minor leaks at equipment curbs - repaired. 2014 assessment: Roof inspected, multiple flashing, membrane tears and punctures repaired as necessary. Projected roof membrane replacement, per roof report: 2022 2016 Assessment: No changes reported. No reported problems 2018 Assessment: No changes reported. No reported problems. 2019 Assessment: No changes reported. No reported problems. 2021 - 2022 Assessment: No changes reported. No reported problems.

Campus: Greenville

Bldg. No: 14

Building: Ash Technology and Learning Center

Area: 19,495sf

Yr Built: 2001

Floors: 1

Use Types:

10 % Auditorium

50 % Technology Lab

30 % Classroom

10 % Admin

Notes:

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Glazing	5	\$300,515	0 \$0	0 \$0	5 \$15,026	95 \$285,489	<p>2004-Window at rear of building not recaulked after block wall repair.</p> <p>2004-Some caulk deterioration at sills, needs replacement.</p> <p>2005-Sills have negative slope. Caulk deterioration continuing, allowing water into wall cavity.</p> <p>2007 assessment: No changes.</p> <p>2009 Assessment: window sills recaulked as required to control water infiltration</p> <p>2010-2022 Assessment: No changes reported. No reported problems</p>
Cladding	5	\$300,515	0 \$0	2 \$6,010	5 \$15,026	93 \$279,479	<p>See structural notes for CMU info.</p> <p>Some sealant joints delaminating.</p> <p>Masonry due for resealing in 2006 - verify with specifications.</p> <p>Water infiltration at sills causing efflorescence of block.</p> <p>2007 assessment:No changes. Masonry not resealed.</p> <p>2009 Assessment:No changes reported.</p> <p>2010 Assessment: Masonry due for resealing.</p> <p>2011 assessment: Masonry scheduled for resealing in 2012.</p> <p>2012 assessment: Exterior masonry washed and resealed.</p> <p>2013-2022 Assessment: No changes reported. No reported problems</p>

Campus: Greenville

Bldg. No: 14

Building: Ash Technology and Learning Center

Area: 19,495sf

Yr Built: 2001

Floors: 1

Use Types:

10 % Auditorium

50 % Technology Lab

30 % Classroom

10 % Admin

Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
HVAC	24	\$1,442,472	0	15	0	85	(2) HW boilers. Rooftop AHUs loud in corridors
			\$0	\$216,371	\$0	\$1,226,101	
							<p>2007 assessment: One boiler retubed due to excessive corrosion. Second boiler-no reported problems. DDC controls - one panel board does not restart properly after power failures. Uninterruptable power supply added to prevent loss of power.</p> <p>2009 Assessment: DDC panel board replaced.</p> <p>2010 Assessment: Gas meter systems replaced by Consumers Energy.</p> <p>2011 assessment:No changes reported. No reported problems.</p> <p>2012 assessment: HVAC noise reduced through installation of noise isolation. New actuators on control valves and dampers installed as part of ECM contract.</p> <p>2013 assessment: Compressor on RTU #4 (over conference room) replaced. Entire HVAC system now on college-wide building automation system.</p> <p>2014 assessment:No changes reported. No reported problems.</p> <p>2015 assessment: Compressor on RTU #3 replaced.</p> <p>2016 Assessment: No changes reported. No reported problems. Typical maintenance only.</p> <p>2018 Assessment: The HVAC system consist of packaged gas-fired heating with DX cooling RTUs which appear relatively new and in good condition. Central hot water heating boiler and pumps provide zone control via 2-way valves. The building is fully DDC controlled with the standard campus BEMS system. The domestic hot water boiler is in good condition. Classroom's ceiling air distribution provide food comfort, ventilation & noise control.</p> <p>2019 Assessment: No changes reported. No reported problems.</p> <p>2021 Assessment: Replaced a rooftop unit. No other changes reported. No reported problems.</p>

2022 Assessment: Campus-wide BMS system upgraded with new hardware
Replace all rooftop units in next five years.

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50 % Technology Lab

30 % Classroom

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Notes:

System	CRV of System		Pet. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$300,515	0	0	0	100	<p>Irrigation system pump has frozen in past winters. Year-end draining program implemented to resolve problem.</p> <p>Shut-off valve to catering kitchen dishwasher leaks, currently turned off.</p> <p>2007 assessment: No changes. No reported problems.</p> <p>2009-2015 Assessment: No changes reported. No reported problems</p> <p>2016 Assessment: No changes reported. No reported problems</p> <p>2018 Assessment: The MTEC Building is a 2-story classroom building fully sprinkled.</p> <p>2019, 2021 Assessment: No changes reported. No reported problems.</p> <p>2022 Assessment: Water-coolers upgraded to auto, no-touch</p>
Primary/Secondary	8	\$480,824	0	0	0	100	<p>2007 assessment: No reported problems.</p> <p>2009-2015 Assessment: No changes reported. No reported problems</p> <p>2016 Assessment: No changes reported. No reported problems</p> <p>2018 Assessment: Power to the building is delivered via a utility-owned pad-mounted transformer on the west side. This delivers 208/120V, three-phase power to a 1200A main distribution panel utilizing the "six disconnect rule" and therefore containing no single main service disconnect. The main panel is a Cutler-Hammer PRL4, which is still available and maintainable. The fire alarm system is a Simplex 4010 with no issues found.</p> <p>2019, 2021 - 2022 Assessment: No changes reported. No reported problems.</p>
Distribution	5	\$300,515	0	0	0	100	<p>2007 assessment: No reported problems.</p> <p>2009-2015 Assessment: No changes reported. No reported problems</p> <p>2016 Assessment: No changes reported. No reported problems</p> <p>2018 Assessment: Panelboards throughout are Eaton/Cutler-Hammer and appear to be in good condition.</p>

2019, 2021 - 2022 Assessment: No changes reported. No reported problems.

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Notes:

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Lighting	5	\$300,515	0	5	10	85	2007 assessment: Ballasts prone to excessive failure replaced, problem resolved. 2009-2016 Assessment: No changes reported. No reported problems 2018 Assessment: Lighting throughout the building is primarily T8 fluorescent, with classrooms containing direct/indirect fixtures on a multi-level switching scheme. Some exit signs were noted as no longer being illuminated. These are likely past their life and should be fixed or replaced. 2019, 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Lights to be changed to LED over the next five years.
			\$0	\$15,026	\$30,052	\$255,438	
Voice/Data	5	\$300,515	0	0	0	100	2007 assessment: No reported problems. 2009-2021 Assessment: No changes reported. No reported problems 2022 Assessment: Building Access controls upgraded with new servers
			\$0	\$0	\$0	\$300,515	
Ceilings	3	\$180,309	0	0	0	100	Some stained ceiling tiles in corridor outside M112, likely roof related, but no known recent leaks. 2007 assessment: Damaged ceiling tiles replaced. No reported problems. 2009-2022 Assessment: No changes reported. No reported problems
			\$0	\$0	\$0	\$180,309	
Walls/Casework	4	\$240,412	0	0	5	95	2005-water damage to cabinets in catering kitchen from dishwasher leak 2007 - 2011 assessment: No changes. 2012 assessment: Minor renovations performed to relocate interior partitions to modify classroom sizes. 2013-2022 assessment: No changes reported. No reported problems.
			\$0	\$0	\$12,021	\$228,391	
Doors	2	\$120,206	0	0	0	100	2007 assessment: No reported problems. 2009-2012 assessment: No changes reported. No reported problems.
			\$0	\$0	\$0	\$120,206	

2013 assessment:

All classroom door hardware be changed to lockdown type for security.

2014-2022 Assessment: No changes reported. No reported problems

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Notes:

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Floors	3	\$180,309	0 \$0	0 \$0	10 \$18,031	90 \$162,278	<p>2003-concrete floor showing cracks</p> <p>2004-tile at entry lobby cracking, some loose grout, cracked tile at concrete control joints (recurring problem).</p> <p>2005-tile replaced and repaired as necessary. Control joints added at crack location.</p> <p>2005-water damage to VCT in catering kitchen from dishwasher leak</p> <p>2007 assessment:No changes. No reported problems.</p> <p>2009 Assessment: Minor settlement cracking continuing, repaired as required.</p> <p>2010 Assessment: No changes reported. Cracking in grout repaired as required.</p> <p>2011 assessment: No changes reported. Cracking in grout repaired as required.</p> <p>2012 assessment: No changes reported. Cracking in grout repaired as required.</p> <p>2013 assessment: Floor slab cut and underlying issue causing floor cracking resolved. Floor fully repaired.</p> <p>2014-2022 Assessment: No changes reported. No reported problems</p>
Bldg., Fire, ADA, Elevators	2	\$120,206	0 \$0	0 \$0	0 \$0	100 \$120,206	<p>2007 assessment:No changes. No reported problems.</p> <p>2009-2022 Assessment: No changes reported. No reported problems</p>
Immed. Site, Ext. Ltg., etc	3	\$180,309	0 \$0	2 \$3,606	2 \$3,606	96 \$173,097	<p>2007 assessment:No changes. No reported problems.</p> <p>2009-2013 assessment:No changes reported. No reported problems.</p> <p>2014 assessment: Parking lot lighting scheduled for upgrade to LED.</p> <p>2015 assessment: parking lot lighting upgraded.</p> <p>2016 assessment: concrete block screenwall and dumpster enclosure due for tuckpointing.</p> <p>2018, 2019, 2021-2022 Assessment: No changes reported. No reported problems.</p>

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	

CRV Totals: 100 \$6,010,300 \$0 \$271,065 \$322,152 \$5,417,083 \$6,010,300

Priority Issues Data					0-5 Year Cumulative Data				
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING
\$6,010,300	\$0	\$0	0.0%	GOOD	\$271,065	\$0	4.5%	\$120,206	GOOD

Campus: Greenville
 Bldg. No: 15
 Building: Braman Center
 Area: 16,585sf

Yr Built: 2012

Floors: 1

Use Types:
 50 % Technology Lab
 50 % Classroom

Notes: New construction, completed in 2013
 2019 - Welding lab renovation and robotics lab renovation completed.

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Structure	18	\$938,232	0 \$0	0 \$0	0 \$0	100 \$938,232	<p>Steel frame structure, concrete slab-on-grade.</p> <p>2013 assessment - building complete, under warranty.</p> <p>2014 - 2015 Assessment: No changes reported. No reported problems</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: Building in good structural condition, no deficiencies noted.</p> <p>2019 - 2022 Assessment: No changes reported. No reported problems.</p>
Roof	6	\$312,744	0 \$0	0 \$0	0 \$0	100 \$312,744	<p>White EPDM roof membrane.</p> <p>2013 assessment - building complete, under warranty.</p> <p>2014 - 2015 Assessment: No changes reported. No reported problems</p> <p>2016 Assessment: No changes reported. No reported problems. Projected roof membrane replacement from roof report: 2024</p> <p>2018, 2019, 2021, 2022 Assessment: No changes reported. No reported problems.</p>
Glazing	3	\$156,372	0 \$0	0 \$0	0 \$0	100 \$156,372	<p>Aluminum framed fixed windows and clerestory. Some construction issues reported regarding clerestory, causing water infiltration.</p> <p>2013 assessment - building complete, under warranty.</p> <p>2014 Assessment: No changes reported.</p> <p>2015 assessment: Past leaks in clerestory caused water infiltration into receiving area. Issue reported as resolved.</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: No changes reported. No reported problems.</p> <p>2019 Assessment: Modified glazing at new welding lab No reported problems</p>

2021 - 2022 Assessment: No changes reported. No reported problems.

Campus: Greenville
 Bldg. No: 15
 Building: Braman Center
 Area: 16,585sf

Yr Built: 2012

Floors: 1

Use Types:
 50 % Technology Lab
 50 % Classroom

Notes: New construction, completed in 2013

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Cladding	15	\$781,860	0 \$0	0 \$0	0 \$0	100 \$781,860	Brick with metal panels at areas with windows. 2013 assessment - building complete, under warranty. 2014 - 2015 Assessment: No changes reported. No reported problems 2016 - 2022 Assessment: No changes reported. No reported problems.
HVAC	15	\$781,860	0 \$0	0 \$0	20 \$156,372	80 \$625,488	2 condensing boilers, ground mounted DX chillers, 1 air handler for entire building. System on DDC controls and college-wide system. 2013 assessment - building complete, under warranty. 2014 - 2015 Assessment: No changes reported. No reported problems 2016 assessment: exhaust system added for new welding equipment. 2018 Assessment: The HVAC system consist of shop rooms make-up air and exhaust appear relatively new and in good condition. RTUs provide the necessary HVAC using hot water boiler for zone control reheats. Central hot water heating boiler and pumps provide zone control via 2-way valves and the boiler appears to be in good condition. The building is fully DDC controlled with the standard campus BEMS system. The domestic hot water boiler is in good condition. The IT Data room is served by spit AC condensing units. Shop classrooms should have the ventilation verified and add controls to help meet current demands and shut-off airflow when not occupied. 2019 Assessment: Upgrades at renovated welding lab. No reported problems. 2021 Assessment: Plan to add rooftop unitat welding lab. No other reported problems. 2022 Assessment: Two 12-ton rooftop units added for welding labs. No reported problems. HVAC BMS has been upgraded.

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Yr Built: 2012

Floors: 1

Use Types:
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 50 % Classroom

Notes: New construction, completed in 2013

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Plumbing/Drainage	5	\$260,620	0 \$0	0 \$0	0 \$0	100 \$260,620	<p>2013 assessment - building complete, under warranty.</p> <p>2014 - 2015 Assessment: No changes reported. No reported problems</p> <p>2016 assessment: Compressed air system added for lab/shop use.</p> <p>2018 Assessment: The Braman building fully sprinkled.</p> <p>2019, 2021 Assessment: No changes reported. No reported problems.</p> <p>2022 Assessment: Watercoolers upgraded to auto, no-touch. No reported problems.</p>
Primary/Secondary	5	\$260,620	0 \$0	0 \$0	0 \$0	100 \$260,620	<p>208 3-phase service</p> <p>2013 assessment - building complete, under warranty.</p> <p>2014 - 2015 Assessment: No changes reported. No reported problems</p> <p>2016 Assessment: No changes reported. No reported problems.</p> <p>2018 Assessment: Power to the building is delivered via a utility-owned pad-mounted transformer on the southwest side. This delivers 208/120V, three-phase power to a 800A main distribution panel with 800A main breaker. The main panel is Square D I-line, which is still available and maintainable. Power delivery to the building is a mixture of branch panelboards and overhead bus, depending on the use of the room. Future planning should include a careful look at each room to ensure that the power is as flexible as possible for the anticipated use. The fire alarm consists of a Notifier system, no issues noted.</p> <p>2019 Assessment: Transformers and panelboards relocated as part of the renovation project.</p> <p>2021, 2022 Assessment: No changes reported. No reported problems.</p>

Campus: Greenville
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 Area: 16,585sf

Yr Built: 2012 Floors: 1

Use Types:
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 50 % Classroom

Notes: New construction, completed in 2013

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Distribution	4	\$208,496	0	35	0	65	2013 assessment - building complete, under warranty. 2014 Assessment: No changes reported. 2015 assessment: Step-up transformer added to power new CNC equipment. Distribution panel, disconnects and bus ducts added. Total cost approx. \$60,000. 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: No changes reported. No reported problems. 2019 Assessment: Distribution panels revised in welding lab renovation. No reported problems. 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: Increase distribution capacity for switch gear equipment
			\$0	\$72,974	\$0	\$135,522	
Lighting	4	\$208,496	0	5	10	85	Predominantly fluorescent fixtures throughout. 2013 assessment - building complete, under warranty. 2014 - 2015 Assessment: No changes reported. No reported problems 2016 Assessment: No changes reported. No reported problems. 2018 Assessment: Lighting is a mix of T8 and compact fluorescent. The compact fluorescent in particular should be considered for replacement due to stocking issues and general inefficiency as compared to current LED technology. 2019 Assessment: Lighting changes in welding lab and robotics lab renovation 2021 Assessment: No changes reported. No reported problems. 2022 Assessment: No reported problems. Replace lights with LED bulbs in next five years.
			\$0	\$10,425	\$20,850	\$177,222	

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Yr Built: 2012

Floors: 1

Use Types:
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 50 % Classroom

Notes: New construction, completed in 2013

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Voice/Data	3	\$156,372	0 \$0	0 \$0	0 \$0	100 \$156,372	2013 assessment - building complete, under warranty. 2014 - 2021 Assessment: No changes reported. No reported problems 2022 Assessment: Building access control has been upgraded with new servers
Ceilings	4	\$208,496	0 \$0	0 \$0	0 \$0	100 \$208,496	Combination of lay-in and open to deck in corridors & some labs, gypsum in toilet rooms. 2013 assessment - building complete, under warranty. 2014 - 2015 Assessment: No changes reported. No reported problems 2018 Assessment: 2019 Assessment: Ceiling removed in robotics lab. 2021 - 2022 Assessment: No changes reported. No reported problems.
Walls/Casework	5	\$260,620	0 \$0	0 \$0	0 \$0	100 \$260,620	Painted drywall typical, with tile wainscots. Tile in toilet rooms. 2013 assessment - building complete, under warranty. 2014 - 2022 Assessment: No changes reported. No reported problems
Doors	4	\$208,496	0 \$0	0 \$0	0 \$0	100 \$208,496	Exterior doors - aluminum full-lite doors at entries, painted hollow metal at service entries. Interior doors - hollow metal. 2013 assessment - building complete, under warranty. 2014 - 2022 Assessment: No changes reported. No reported problems

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Yr Built: 2012

Floors: 1

Use Types:
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 50 % Classroom

Notes: New construction, completed in 2013

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	
Floors	4	\$208,496	0	0	10	90	Corridors - porcelain tile; classrooms - carpet; labs - concrete; toilet rooms-porcelain tile. Mix of carpet, sheet goods and concrete. 2013 assessment - building complete, under warranty. 2014 Assessment: No changes reported. 2015 assessment: carpet removed as needed for repurposing rooms for industrial equipment. 2016 assessment: carpet being damaged from change in building use - worn, stained from industrial equipment, dirt, grease. 2018 Assessment: No changes reported. No reported problems. 2019 Assessment: Floor finish changes in welding and robotics labs 2021 - 2022 Assessment: No changes reported. No reported problems.
Bldg., Fire, ADA, Elevators	2	\$104,248	0	0	0	100	Building is fully sprinkled. 2013 assessment - building complete, under warranty. 2014 - 2022 Assessment: No changes reported. No reported problems
Immed. Site, Ext. Ltg., etc	3	\$156,372	0	0	35	65	2013 assessment - building complete, under warranty. 2014 - 2021 Assessment: No changes reported. No reported problems 2022 Assessment: Site lighting improvements needed in next 5-10 years.

Campus: Greenville
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 Area: 16,585sf

Yr Built: 2012 Floors: 1

Use Types:
 50 % Technology Lab
 50 % Classroom

Notes: New construction, completed in 2013

System	CRV of System		Pct. of system value to budget for repair/replacement:				System/Component Notes
	%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	

CRV Totals: 100 \$5,212,400 \$0 \$83,398 \$252,801 \$4,876,200 \$5,212,400

Priority Issues Data					0-5 Year Cumulative Data				
CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	\$/YR MAINTAIN	RATING
\$5,212,400	\$0	\$0	0.0%	GOOD	\$83,398	\$0	1.6%	\$104,248	GOOD

Bldg. No: 16				100% Storage															
Building: Greenville Pole Barn																			
Area: 4,900sf		Yr Built: 1970		Floors: 1															
		CRV of System		Pct. of system value to budget for repair/replacement:															
System		%	\$	Immediate	1-5 Years	6-10 Years	11+ Years	System/Component Notes											
HVAC		2	\$4,412	0	0	0	100	N/A											
				\$0	\$0	\$0	\$4,412												
								2014 assessment: Gas fired infrared heater added.											
								2015 - 2022 Assessment: No changes reported. No reported problems											
Plumbing/Drainage		0	\$0	0	0	0	100	N/A											
				\$0	\$0	\$0	\$0												
								2018, 2019, 2021, 2022 Assessment: No changes reported. No reported problems.											
Primary/Secondary		0	\$0	0	0	0	100	N/A											
				\$0	\$0	\$0	\$0												
								2014 assessment:											
								Power extended to building to support limited lighting and heater.											
								2015 - 2022 Assessment: No changes reported. No reported problems											
Lighting		0	\$0	0	0	0	100	N/A											
				\$0	\$0	\$0	\$0												
								2018, 2019, 2021, 2022 Assessment: No changes reported. No reported problems.											

CRV Totals:	100	\$220,600	\$0	\$0	\$4,853	\$215,747	\$220,600						
Priority Issues Data						0-5 Year Cumulative Data							
	\$220,600	\$0	\$0	0.0%	GOOD	\$0	\$0	0.0%	\$4,412	GOOD			
	CRV	DMB	EXCESS	FCI	RATING	DMB	EXCESS	FCI	S/YR MAINTAIN	RATING			