



FACILITY CONDITION ASSESSMENT

Baldwin ES | February 2022



Executive Summary

Baldwin ES is located at 12200 Meridian Park Blvd in Austin, Texas. The oldest building is 10 years old (at time of 2020 assessment). It comprises 86,896 gross square feet.

The findings contained within this report are the result of an assessment of building systems and the conditions found on the site at the time of the visit. The assessment was performed by building professionals experienced in disciplines including architecture, mechanical, plumbing and electrical. The total current deficiencies for this site, in 2020 construction cost dollars, are estimated at \$3,030,274. A ten-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For Baldwin ES the ten-year need is \$8,468,456.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined to calculate a Facility Condition Assessment (FCA) score. A 5-year FCA was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCA calculation. The Baldwin ES facility has a 5-year FCA score of 84.75%.

Summary of Findings

The table below summarizes the condition findings at Baldwin ES

Table 1: Facility Condition by Building

Number	Building Name	Current Deficiencies	5-Year Life Cycle Cost	Yrs 6-10 Life Cycle Cost	Total 5 Yr Need (Yr 1-5 + Current Defs)	Total 10 Yr Need (Yr 1-10 + Current Defs)	Replacement Cost	5-Year FCA
Exterior Site								
	Exterior Site	\$0	\$0	\$168,293	\$0	\$168,293	\$0	
Permanent Building(s)								
187A	Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.	\$3,030,274	\$1,321,332	\$3,948,557	\$4,351,606	\$8,300,163	\$28,535,780	84.75%
Sub Total for Permanent Building(s):		\$3,030,274	\$1,321,332	\$3,948,557	\$4,351,606	\$8,300,163	\$28,535,778	
Total for Site:		\$3,030,274	\$1,321,332	\$4,116,850	\$4,351,606	\$8,468,456	\$28,535,778	84.75%

Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

Current Deficiencies: Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

Life Cycle Forecast: Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as they reach the end of serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each site to better identify significant deficiencies.

Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

Priority 1 – Mission Critical Concerns: Deficiencies or conditions that may directly affect the site's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

Priority 2 - Indirect Impact to Educational Mission: Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

Priority 3 - Short-Term Conditions: Deficiencies that are necessary to the site's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

Priority 4 - Long-Term Requirements: Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

Priority 5 - Enhancements: Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, replacing carpet, improved signage, or other improvements to the facility environment.

The following table summarizes this site's current deficiencies by building system and priority.

Table 2: System by Priority (Site & Permanent Buildings)

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Roofing	\$1,355,275	\$0	\$0	\$0	\$0	\$1,355,275	44.72 %
Structural	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Exterior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Interior	\$0	\$0	\$50,556	\$311,351	\$88,184	\$450,091	14.85 %
Mechanical	\$0	\$759,615	\$150,307	\$293,420	\$2,479	\$1,205,821	39.79 %
Electrical	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Plumbing	\$0	\$6,319	\$12,768	\$0	\$0	\$19,087	0.63 %
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Total:	\$1,355,275	\$765,935	\$213,630	\$604,771	\$90,663	\$3,030,274	

The building systems at the site with the most need include:

Roofing	-	\$1,355,275
Mechanical	-	\$1,205,821
Interior	-	\$450,091

The chart below represents the building systems and associated deficiency costs.

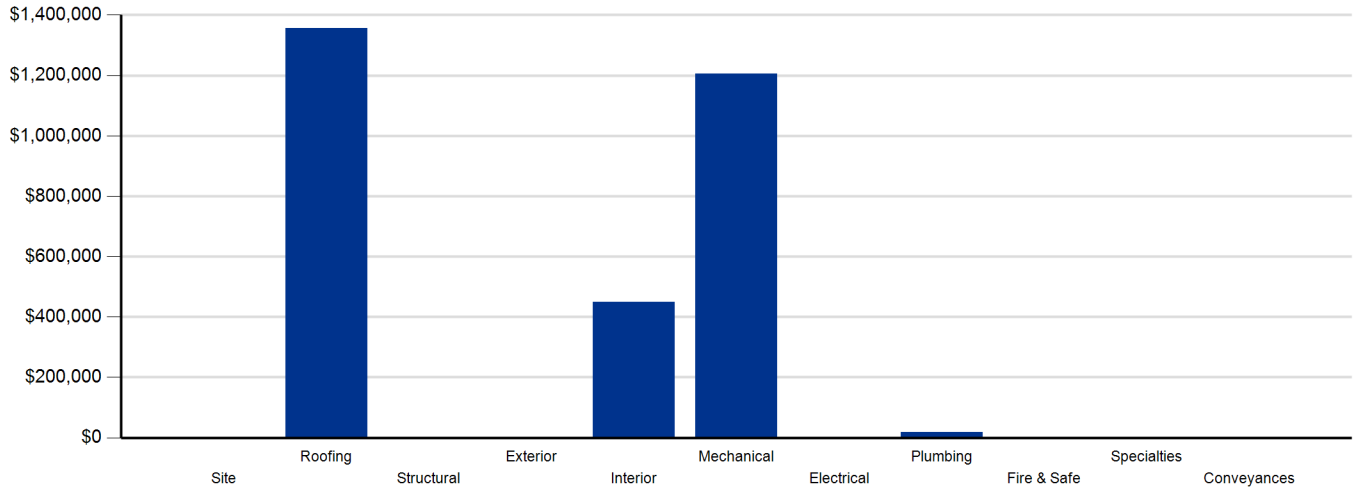


Figure 1: System Deficiencies

Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a ten-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might reach the end of its life before a planned construction project occurs.

The following tables show current deficiencies and the subsequent ten-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

Table 3a: Capital Renewal Forecast (Yrs 1-5)

System	Life Cycle Capital Renewal Projections					Total 1-5
	Year 1 2023	Year 2 2024	Year 3 2025	Year 4 2026	Year 5 2027	
Site	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$0	\$0
Interior	\$0	\$0	\$0	\$350,435	\$20,165	\$370,600
Mechanical	\$0	\$0	\$0	\$226,991	\$16,858	\$243,849
Electrical	\$0	\$0	\$0	\$68,818	\$0	\$68,818
Plumbing	\$0	\$0	\$0	\$40,087	\$273,294	\$313,381
Fire and Life Safety	\$0	\$0	\$144,841	\$200,008	\$0	\$344,849
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$144,841	\$886,339	\$310,317	\$1,341,497

Table 3b: Capital Renewal Forecast (Yrs 6-10)

System	Life Cycle Capital Renewal Projections						Total 6-10	Total 1-10
	Total 1-5	Year 6 2028	Year 7 2029	Year 8 2030	Year 9 2031	Year 10 2032		
Site	\$0	\$0	\$0	\$39,172	\$0	\$129,121	\$168,293	\$168,293
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$0	\$82,594	\$82,594	\$82,594
Interior	\$370,600	\$494,486	\$0	\$855,133	\$0	\$99,666	\$1,449,285	\$1,819,885
Mechanical	\$243,849	\$171,918	\$0	\$0	\$0	\$1,619,649	\$1,791,567	\$2,035,416
Electrical	\$68,818	\$0	\$0	\$0	\$0	\$1,685,179	\$1,685,179	\$1,753,997
Plumbing	\$313,381	\$0	\$0	\$0	\$0	\$124,231	\$124,231	\$437,612
Fire and Life Safety	\$344,849	\$0	\$0	\$0	\$0	\$0	\$0	\$344,849
Conveyances	\$0	\$0	\$0	\$0	\$0	\$7,985	\$7,985	\$7,985
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$1,341,497	\$666,404	\$0	\$894,305	\$0	\$3,748,425	\$5,309,134	\$6,650,631

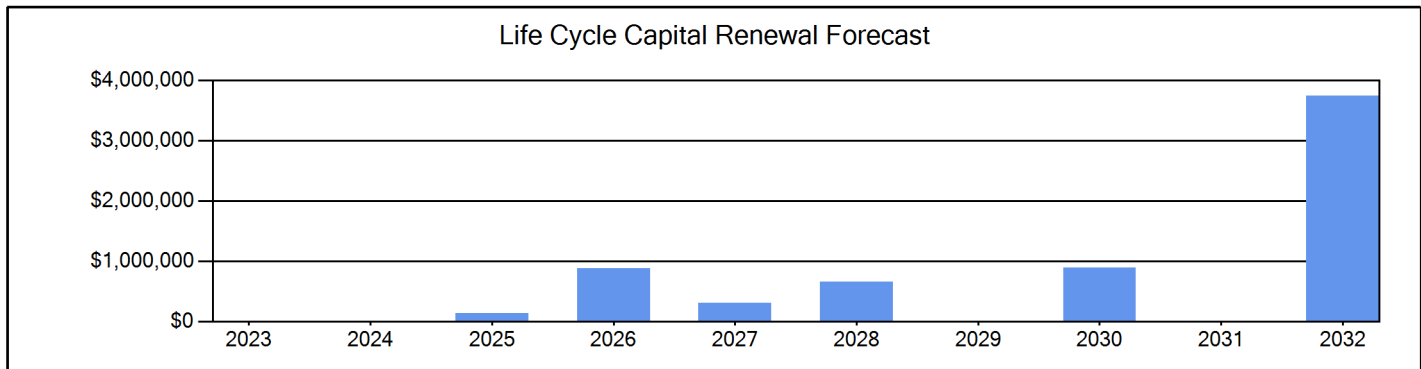


Figure 2: Ten Year Capital Renewal Forecast

Facility Condition Assessment Score

The Facility Condition Assessment Score (FCAS) is used throughout the facility condition assessment industry as a general indicator of a building’s health. The FCAS is used to benchmark the relative condition of a group of sites. The FCAS is derived by dividing the total repair cost, site-related repairs, by the total replacement cost and subtracting it from 100. A facility with a lower FCAS percentage has more need, or higher priority, than a facility with a lower FCAS. It should be noted that costs in the New Construction category are not included in the FCAS calculation.

$$FCAS = 100 - (\text{Total Repair Cost} / \text{Replacement Cost})$$

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A 5-year FCAS was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCAS calculation.

- Very Unsatisfactory (0-35)
- Unsatisfactory (36-50)
- Average (51-65)
- Satisfactory (66-80)
- Very Satisfactory (81-100)

Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair sites with a FCAS of 35 percent or greater. This is due to efficiency gains with facilities that are more modern and the value of the building at the end of the analysis period. It is important to note that the FCAS at which a facility should be considered for replacement is typically debated and adjusted based on property owners and facility managers approach to facility management. Of course, FCAS is not the only factor used to identify buildings that need renovation, replacement, or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making campus facility decisions.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today’s estimated cost of construction in the Austin area. The estimated replacement cost for this facility is \$28,535,778. For planning purposes, the total 5-year need at the Baldwin ES is \$4,351,606 (Life Cycle Years 1-5 plus the FCA deficiency cost). The Baldwin ES facility has a 5-year FCA of 84.75%.

5-Year Need vs. Replacement

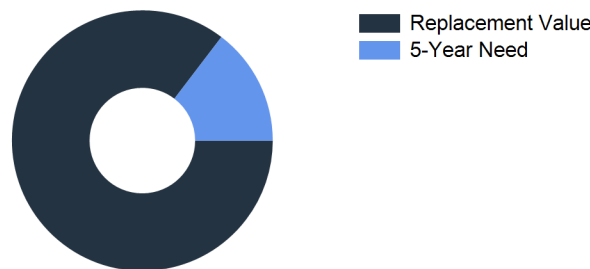


Figure 3: 5-Year FCA

Baldwin ES - Deficiency Summary

Building: 187A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
AISD ROOFING P4	Capital Renewal	1,340,830	EACH	1	\$1,340,801	5719
AISD ROOFING P5	Capital Renewal	14,475	EACH	1	\$14,475	5720
Sub Total for System		2	items		\$1,355,275	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Door Hardware Replacement Note: Damaged Location: Building Wide	Capital Renewal	29	Door	3	\$43,054	5983
Interior Door Replacement Note: Difficult to Operate and Close Location: Building Wide	Capital Renewal	4	Door	3	\$7,502	5985
Acoustical Ceiling Tile Replacement Note: Difficult to Maintain/ Soft /Grime Location: Kitchen	Capital Renewal	1,738	SF	4	\$5,869	5977
Carpet Flooring Replacement Note: Stained and Heavy Wear and Tear Location: Building Wide	Capital Renewal	4,345	SF	4	\$55,008	5981
Metal Interior Door Replacement Note: Stained /Color marks Location: Building Wide	Capital Renewal	25	Door	4	\$72,345	5984
Toilet Partition Replacement Note: Loose Bracket/Adjust Door Panel Location: Boys Restroom	Capital Renewal	2	Stall	4	\$4,033	5980
Vinyl Composition Tile Replacement Note: Worn and Broken	Capital Renewal	21,289	SF	4	\$174,095	5982
Interior Ceiling Repainting Note: Chipping and Peeling Location: Building Wide	Deferred Maintenance	8,690	SF	5	\$18,098	5978
Interior Wall Repainting (Bldg SF) Note: Peeling/Mising/ Paint to Match Location: Building Wide	Capital Renewal	15,641	SF	5	\$70,086	5979
Sub Total for System		9	items		\$450,091	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Chiller HVAC Component Replacement	Capital Renewal	1	Ea.	2	\$104,497	5991
Copper Tube Boiler Replacement	Capital Renewal	2	Ea.	2	\$194,871	5988
Exterior Chiller Replacement	Capital Renewal	2	Ea.	2	\$382,771	5990
HVAC VAV Box Replacement	Capital Renewal	20	Ea.	2	\$77,477	6000
Circulation Pump Replacement	Capital Renewal	2	Ea.	3	\$28,763	5998
Circulation Pump Replacement	Capital Renewal	2	Ea.	3	\$23,121	5999
Kitchen Exhaust Hood Replacement	Capital Renewal	2	Ea.	3	\$22,383	6001
Replace Variable Frequency Drive	Capital Renewal	3	Ea.	3	\$31,874	5992
Replace Variable Frequency Drive	Capital Renewal	2	Ea.	3	\$17,635	5993
Replace Variable Frequency Drive	Capital Renewal	2	Ea.	3	\$15,117	5994
Replace Variable Frequency Drive	Capital Renewal	2	Ea.	3	\$11,415	5995
Circulation Pump Replacement	Capital Renewal	3	Ea.	4	\$20,550	5996
Circulation Pump Replacement	Capital Renewal	1	Ea.	4	\$6,850	5997
Existing Controls Are Obsolete	Capital Renewal	86,895	SF	4	\$234,375	5989
Kitchen Air/Exhaust Replacement	Capital Renewal	3	Ea.	4	\$31,645	6002

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Remove Abandoned Equipment	Deferred Maintenance	2	Ea.	5	\$2,479	6003
Sub Total for System		16	items		\$1,205,821	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Water Heater Replacement	Capital Renewal	5	Ea.	2	\$6,319	5986
Gas Water Heater Replacement	Capital Renewal	2	Ea.	3	\$12,768	5987
Sub Total for System		2	items		\$19,087	
Sub Total for Building 187A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.		29	items		\$3,030,274	
Total for Campus		29	items		\$3,030,274	

Baldwin ES - Life Cycle Summary Yrs 1-10

Site Level Life Cycle Items

Site

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fences and Gates	Fencing - Chain Link (8-10 Ft)	500	LF	\$39,172	8
Parking Lot Pavement	Asphalt	89	CAR	\$129,121	10
Sub Total for System		2	items	\$168,294	
Sub Total for Building -		2	items	\$168,294	

Building: 187A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Operating Windows	Aluminum - Windows per SF	508	SF	\$50,661	10
Exterior Operating Windows	Aluminum - Windows per SF	60	SF	\$5,984	10
Exterior Entrance Doors	Steel - Insulated and Painted	7	Door	\$25,949	10
Sub Total for System		3	items	\$82,594	

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	78,206	SF	\$350,435	4
Compartments and Cubicles	Toilet Partitions	10	Stall	\$20,165	5
Tile Flooring	Ceramic Tile	1,738	SF	\$30,706	6
Tile Flooring	Quarry Tile	1,738	SF	\$47,511	6
Interior Swinging Doors	Wooden Door	104	Door	\$195,062	6
Interior Door Supplementary Components	Door Hardware	149	Door	\$221,207	6
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	72,123	SF	\$243,542	8
Carpeting	Carpet	4,345	SF	\$55,008	8
Resilient Flooring	Vinyl Composition Tile Flooring	52,137	SF	\$426,361	8
Interior Swinging Doors	Metal Door (Steel)	45	Door	\$130,222	8
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	1,738	SF	\$5,869	10
Suspended Plaster and	Painted ceilings	8,690	SF	\$18,098	10
Athletic Flooring	Athletic/Sport Flooring	3,041	SF	\$46,653	10
Resilient Flooring	Rubber Tile Flooring	1,303	SF	\$19,698	10
Wood Flooring	Wood Flooring - All Types	434	SF	\$9,348	10
Sub Total for System		15	items	\$1,819,885	

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Decentralized Cooling	Condenser - Inside Air Cooled (5 ton)	3	Ea.	\$29,918	4
Decentralized Cooling	Fan Coil - Water Cool/Water Heat (3 Ton)	40	Ea.	\$135,603	4
Note: Fan Rumble/Vibratio - FCU -1-5 Thru 10 and FCU-2- 13,19)					
Decentralized Cooling	Computer Room A/C (15 ton)	1	Ea.	\$43,693	4
Air Distribution	Make-up Air Unit	2	Ea.	\$17,777	4
Decentralized Cooling	Ductless Split System (2 Ton)	3	Ea.	\$14,241	5
Decentralized Cooling	Fan Coil - D/X only (5 Ton)	1	Ea.	\$2,617	5
HVAC Air Distribution	AHU 10,000 CFM Interior	2	Ea.	\$171,918	6
Heat Generation	Boiler - Copper Tube (2400 MBH)	2	Ea.	\$194,871	10
Heating System Supplementary Components	Controls - DDC (Bldg,SF)	86,895	SF	\$234,375	10
Central Cooling	Chiller - Outdoor Air Cooled (175 Tons)	2	Ea.	\$382,771	10
Central Cooling	Chiller - Indoor Water Cooled (100 Ton)	1	Ea.	\$104,497	10
Other HVAC Distribution Systems	VFD (25 HP)	3	Ea.	\$31,874	10
Other HVAC Distribution Systems	VFD (20 HP)	2	Ea.	\$17,635	10
Other HVAC Distribution Systems	VFD (15 HP)	2	Ea.	\$15,117	10
Other HVAC Distribution Systems	VFD (10 HP)	2	Ea.	\$11,415	10
Facility Hydronic Distribution	4-Pipe System	86,895	SF	\$210,258	10
Facility Hydronic Distribution	Pump - 5HP	3	Ea.	\$20,550	10
Facility Hydronic Distribution	Pump - 5HP	1	Ea.	\$6,850	10
Facility Hydronic Distribution	Pump- 25HP (Ea.)	2	Ea.	\$28,763	10
Facility Hydronic Distribution	Pump- 10HP (Ea.)	2	Ea.	\$23,121	10

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
HVAC Air Distribution	AHU 15,000 CFM Interior	1	Ea.	\$113,856	10
HVAC Air Distribution	AHU 10,000 CFM Interior	1	Ea.	\$85,959	10
HVAC Air Distribution	AHU 10,000 CFM Interior	1	Ea.	\$85,959	10
Exhaust Air	Roof Exhaust Fan - Small	15	Ea.	\$29,395	10
Exhaust Air	Kitchen Exhaust Hoods	2	Ea.	\$22,383	10
Sub Total for System		25	items	\$2,035,412	

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Audio-Video Systems	PA Communications No Head Unit (Bldg SF)	86,895	SF	\$61,511	4
Note: PA in room 301 and 208 were reported to be in need of repair or replacement					
Distributed Systems	Public Address System Head End Unit	1	Ea.	\$7,307	4
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	44	Ea.	\$91,651	10
Lighting Fixtures	Light Fixtures (Bldg SF)	86,895	SF	\$1,593,528	10
Sub Total for System		4	items	\$1,753,996	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Restroom Lavatory	13	Ea.	\$35,312	4
Plumbing Fixtures	Sink - Service / Mop Sink	6	Ea.	\$4,775	4
Plumbing Fixtures	Showers	1	Ea.	\$1,306	5
Plumbing Fixtures	Toilets	48	Ea.	\$242,851	5
Plumbing Fixtures	Urinals	2	Ea.	\$2,708	5
Plumbing Fixtures	Refrigerated Drinking Fountain	12	Ea.	\$26,429	5
Plumbing Fixtures	Classroom Lavatory	2	Ea.	\$5,129	10
Domestic Water Equipment	Water Heater - Electric - 5 to 10 gallon	5	Ea.	\$6,319	10
Domestic Water Equipment	Water Heater - Gas - 100 Gallon	2	Ea.	\$12,768	10
Plumbing Fixtures	Classroom Lavatory	39	Ea.	\$100,015	10
Sub Total for System		10	items	\$437,612	

Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	86,895	SF	\$137,973	3
Fire Detection and Alarm	Fire Alarm Panel	1	Ea.	\$6,868	3
Security System Component	Security Alarm System	86,895	SF	\$200,008	4
Sub Total for System		3	items	\$344,849	

Conveyances

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Elevators	Passenger elevator cab finishes	1	Ea.	\$7,985	10
Sub Total for System		1	items	\$7,985	
Sub Total for Building 187A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.		61	items	\$6,482,333	
Total for: Baldwin ES		63	items	\$6,650,627	

Supporting Photos

General Site Photos



Nicks and peeling paint in classrooms



Deficient wood stage



Restroom partition wall at end of life



Vinyl composition tile flooring at end of life



Stairwell railing missing paint and is aged



Missing paint on walls



Obstructed electrical panels