

# **FACILITY CONDITION ASSESSMENT**

Williams ES | February 2022





## **Executive Summary**

Williams ES is located at 500 Mairo St in Austin, Texas. The oldest building is 44 years old (at time of 2020 assessment). It comprises 64,846 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 \$8,972,417. 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 Williams ES the ten-year need is \$16,410,397.

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 Williams ES facility has a 5-year FCA score of 35.24%.

# **Summary of Findings**

The table below summarizes the condition findings at Williams ES

Table 1: Facility Condition by Building

Number  Exterior Site	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	\$1,347,523	\$525,090	\$0	\$1,872,613	\$1,872,613	\$0	
Permanent	Building(s)				•			
166A	Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.	\$7,624,893	\$4,292,591	\$2,620,299	\$11,917,484	\$14,537,783	\$21,294,780	44.04%
	Sub Total for Permanent Building(s):	\$7,624,893	\$4,292,591	\$2,620,299	\$11,917,484	\$14,537,783	\$21,294,778	
	Total for Site:	\$8,972,417	\$4,817,681	\$2,620,299	\$13,790,098	\$16,410,397	\$21,294,778	35.24%

## **Facility Condition Assessment**





## **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.

M-A-P-P-S ©, Jacobs 2022



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

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

			Priority				
System	1	2	3	4	5	Total	% of Total
Site	\$0	\$0	\$0	\$0	\$1,341,068	\$1,341,068	14.95 %
Roofing	\$1,569,167	\$0	\$0	\$0	\$0	\$1,569,167	17.49 %
Structural	\$13,813	\$0	\$0	\$0	\$0	\$13,813	0.15 %
Exterior	\$0	\$1,641,904	\$0	\$0	\$0	\$1,641,904	18.30 %
Interior	\$0	\$0	\$190,030	\$30,247	\$0	\$220,277	2.46 %
Mechanical	\$0	\$782,760	\$198,174	\$31,645	\$0	\$1,012,579	11.29 %
Electrical	\$0	\$2,638	\$0	\$0	\$0	\$2,638	0.03 %
Plumbing	\$0	\$0	\$199,028	\$165,476	\$0	\$364,504	4.06 %
Fire and Life Safety	\$675,570	\$0	\$0	\$0	\$0	\$675,570	7.53 %
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Specialties	\$0	\$0	\$0	\$968	\$0	\$968	0.01 %
Crawlspace	\$0	\$0	\$0	\$0	\$2,129,927	\$2,129,927	23.74 %
Total:	\$2,258,551	\$2,427,301	\$587,232	\$228,337	\$3,470,996	\$8,972,417	

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

Exterior	-	\$1,641,904
Roofing	-	\$1,569,167
Site	_	\$1,341,068



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

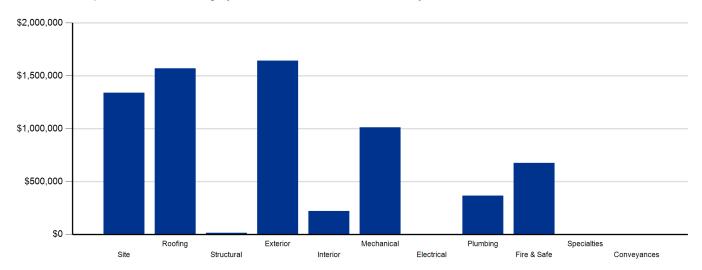


Figure 1: System Deficiencies



## **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)

		Life Cycle Capital Renewal Projections							
System	Year 1 2023	Year 2 2024	Year 3 2025	Year 4 2026	Year 5 2027	Total 1-5			
Site	\$0	\$0	\$0	\$209,887	\$291,924	\$501,811			
Roofing	\$0	\$0	\$0	\$0	\$0	\$0			
Exterior	\$0	\$0	\$126,562	\$0	\$0	\$126,562			
Interior	\$0	\$0	\$219,985	\$284,758	\$285,366	\$790,109			
Mechanical	\$0	\$0	\$0	\$0	\$492,152	\$492,152			
Electrical	\$0	\$0	\$0	\$54,524	\$0	\$54,524			
Plumbing	\$0	\$0	\$6,384	\$0	\$2,555,677	\$2,562,061			
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0			
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0			
Specialties	\$0	\$0	\$0	\$290,462	\$0	\$290,462			
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0			
Total	\$0	\$0	\$352,931	\$839,631	\$3,625,119	\$4,817,681			

M-A-P-P-S ©, Jacobs 2022



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

		Life Cycle Capital Renewal Projections						
System	Total 1-5	Year 6 2028	Year 7 2029	Year 8 2030	Year 9 2031	Year 10 2032	Total 6-10	Total 1-10
Site	\$501,811	\$0	\$0	\$0	\$0	\$0	\$0	\$501,811
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$126,562	\$0	\$0	\$0	\$0	\$214,727	\$214,727	\$341,289
Interior	\$790,109	\$623,350	\$0	\$8,066	\$159,089	\$37,226	\$827,731	\$1,617,840
Mechanical	\$492,152	\$0	\$0	\$94,014	\$0	\$166,834	\$260,848	\$753,000
Electrical	\$54,524	\$0	\$0	\$138,044	\$0	\$1,266,198	\$1,404,242	\$1,458,766
Plumbing	\$2,562,061	\$0	\$0	\$0	\$0	\$11,919	\$11,919	\$2,573,980
Fire and Life Safety	\$0	\$0	\$0	\$0	\$109,832	\$0	\$109,832	\$109,832
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$290,462	\$0	\$0	\$0	\$0	\$0	\$0	\$290,462
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$4,817,681	\$623,350	\$0	\$240,124	\$268,921	\$1,696,904	\$2,829,299	\$7,646,980

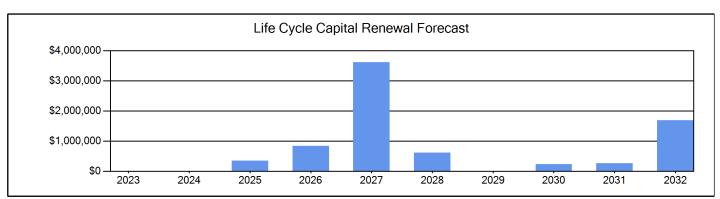


Figure 2: Ten Year Capital Renewal Forecast



#### **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 - (Total Repair Cost/ 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.



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 \$21,294,778. For planning purposes, the total 5-year need at the Williams ES is \$13,790,098 (Life Cycle Years 1-5 plus the FCA deficiency cost). The Williams ES facility has a 5-year FCA of 35.24%.

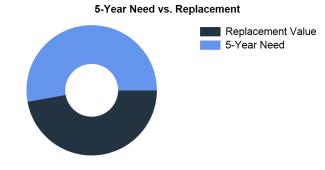


Figure 3: 5-Year FCA

M-A-P-P-S ©, Jacobs 2022



# Williams ES - Deficiency Summary Site Level Deficiencies

#### Site

Deficiency		Category	Qty UoM	Priority	Repair Cost	ID
PROGRAM DEFICI	ENCIES	ADA Compliance	463,554 EACH	5	\$795,913	2323
Note:	SECTION TWO: DROGRAM DEFICIENCIESSito/Exterior Improve	monte Estimated Cons	truction Cost for Site	Dlan Aros	P10 246 92¢	

Note: SECTION TWO: PROGRAM DEFICIENCIESSite/Exterior Improvements Estimated Construction Cost for Site Plan Area B10.346.82

Estimated Construction Cost Subtotal for Site/Exterior Improvements Excluding Division 110 346 82\$166.1.2REPORT COST SUMMARY Estimated Construction Cost Subtotal for Site/Exterior Improvements Excluding Division 110,346.82\$Interior Improvements

Construction Cost for Floor Plan Area 325,929.34\$ Estimated Construction Cost for Floor Plan Area 464,225.25\$

Construction Cost for Floor Plan Area 562,545.96\$ Estimated Construction Cost for Floor Plan Areas 6A & 6B (x2)213,178.07\$ Estimated Construction Cost for Floor Plan Area 787,328.17\$ Estimated Construction Cost Subtotal for Interior Improvements

Excluding Division 1453,206.79\$ Total Estimated Construction Cost Subtotal for Program Deficiency Improvements463,553.60

ADA Compliance 124,092 EACH \$213,064 2322 PUBLIC DEFICIENCIES

SECTION ONE: PUBLIC DEFICIENCIESSite/Exterior Improvements Estimated Construction Cost for Site Plan Area A16,006.28\$

Estimated Construction Cost Subtotal for Site/Exterior Improvements Excluding Division 116,006.28\$ Interior Improvements Construction Cost for Floor Plan Area 129,099.29\$ Estimated Construction Cost for Floor Plan Area 278,986.53\$

Construction Cost Subtotal for Interior Improvements Excluding Division 1108,085.83\$ Total Estimated Construction Cost Subtotal for Public

Deficiency Improvements124,092.11

TAS ACCESSIBILITY DEFICIENCIES ADA Compliance 193,416 EACH

Note: SECTION THREE: TAS ACCESSIBILITY DEFICIENCIESInterior Improvements Estimated Construction Cost for Floor Plan Area 861,033.45\$

Estimated Construction Cost for Floor Plan Area 929,985.71\$ Estimated Construction Cost for Floor Plan Area 1049,706.47\$ Estimated Construction Cost for Floor Plan Area 1135,346.22\$ Estimated Construction Cost for Floor Plan Area

Estimated Construction Cost Subtotal for TAS Improvements Excluding Division 1193,415.91\$ Total Estimated

Construction Cost Subtotal for TAS Deficiency Improvements193,415.91

Sub Total for System 3 items \$1,341,068

Structural

Deficiency	Category	Qty UoM	Priority	Repair Cost	ID
Structural Study Recommended	Deferred Maintenance	1 Job	1	\$6,455	6546

Structural study to detail scope of work based on the 2017 crawlspace deficiencies provided by AISD Note:

> Sub Total for System 1 items \$6,455

Sub Total for School and Site Level 4 items \$1,347,523

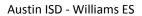
# Building: 166A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

#### Roofing

Deficiency		Category	Qty	UoM	Priority	Repair Cost	ID
AISD ROOFING P2	2	Capital Renewal	455,049	EACH	1	\$455,039	2319
AISD ROOFING P3	3	Capital Renewal	1,110,998	EACH	1	\$1,110,974	2320
AISD ROOFING P5	5	Capital Renewal	3,155	EACH	1	\$3,155	2321
		Sub Total for System	3	items		\$1,569,167	
Structural							
Deficiency		Category	Qty	UoM	Priority	Repair Cost	ID
Possible Structural	Condition Exists	Deferred Maintenance	1	Job	1	\$7,358	6013
Note:	Structural Deficiency, AISD Provided data						
		Sub Total for System	1	items		\$7,358	
Exterior							
Deficiency		Category	Qty	UoM	Priority	Repair Cost	ID
Aluminum Window	Replacement	Capital Renewal	16,464	SF	2	\$1,641,904	2623
Note:	42"x8'						
		Sub Total for System	1	items		\$1,641,904	
Interior							
Deficiency		Category	Qty	UoM	Priority	Repair Cost	ID
Interior Door Hardw	vare Replacement	Capital Renewal	128	Door	3	\$190,030	2621
Note:	Non ADA Hardware						
Toilet Partition Rep	lacement	Capital Renewal	15	Stall	4	\$30,247	606
Note:	Rusted, broken are original to building.						
		Sub Total for System	2	items		\$220,277	

M-A-P-PS ©, Jacobs 2022



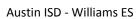




#### Mechanical

		Category	Qty	UoM	Priority	Repair Cost	ID
Air Cooled Condense	r Replacement	Capital Renewal	1	Ea.	2	\$20,817	668
Note:	Chiller CH-2: 100 Ton Trane chiller with remote condenser. Equ	uipment uses R-22 and is obsol	lete.				
Location:	Roof						
Air Handler HVAC Co	omponent Replacement	Capital Renewal	2	Ea.	2	\$86,327	680
Note:	Unit is beyond useful life and needs to be replaced						
Location:	Mechanical Room						
Air Handler HVAC Co	omponent Replacement	Capital Renewal	2	Ea.	2	\$58,029	681
Note:	Unit is beyond useful life and needs to be replaced						
Location:	Mechanical Room						
Chiller HVAC Compo	nent Replacement	Capital Renewal	1	Ea.	2	\$104,497	667
Note:	Chiller CH-2: 100 Ton Trane with remote condenser equipment	t uses R-22 Refrigerant and is o	bsolete.				
Location:	Mechanical Room						
Ductwork Replaceme	ent (SF Basis)	Capital Renewal	64,846	SF	2	\$513,090	682
Location:	Throughout building						
Circulation Pump Rep	placement	Capital Renewal	2	Ea.	3	\$28,763	679
Note:	Pump is beyond useful life and needs to be replaced.						
Location:	Mechanical Room						
Energy Recovery Uni	t Replacement	Capital Renewal	8	Ea.	3	\$107,997	675
Note:	These Energy Recovery Ventilators (ERV) are beyond useful life	e and need to be replaced.					
Location:		·					
Large Diameter Exha	uusts/Hoods Replacement	Capital Renewal	7	Ea.	3	\$56,254	688
Note:	Exhaust Fan is beyond useful life and needs to replaced					, ,	
Location:							
Testing And Balancin	na	Deferred	1,512	SF	3	\$5,161	678
. coming / ma Danamon	9	Maintenance	.,0.2	<b>.</b>	ŭ	φο, . σ .	0.0
Note:	Room is too cold HVAC system needs to be balanced.						
Location:	MP-6 Music room						
Kitchen Air/Exhaust F	Replacement	Capital Renewal	3	Ea.	4	\$31,645	686
Note:	Exhaust Fan is beyond useful life and needs to replaced						
Location:	Roof						
		Sub Total for System	10	items		\$1,012,579	
Electrical							
Deficiency		Category	Qty	UoM	Priority	Repair Cost	ID
Electrical Transforme	r Repair	Deferred		KVA	2	\$573	651
	- P					•	
		Maintenance					
Note:	Cabinet is Rusted	Maintenance	,				
		Maintenance  Capital Renewal		Ea.	2	\$1,837	2616
Motor Control Center		Capital Renewal Deferred	1		2 2	\$1,837 \$229	2616 650
Motor Control Center Switchgear Repair	Replacement	Capital Renewal	1	Ea.			
Motor Control Center Switchgear Repair Note:	Replacement  Cabinet Rusted	Capital Renewal Deferred	1	Ea.			
Motor Control Center Switchgear Repair	Replacement  Cabinet Rusted	Capital Renewal Deferred	1	Ea.			
Motor Control Center Switchgear Repair Note:	Replacement  Cabinet Rusted	Capital Renewal Deferred	1	Ea.			
Motor Control Center Switchgear Repair Note:	Replacement  Cabinet Rusted	Capital Renewal Deferred Maintenance	1	Ea. Ea.		\$229	
Motor Control Center Switchgear Repair Note: Location:	Replacement  Cabinet Rusted	Capital Renewal Deferred Maintenance	1 1	Ea. Ea.		\$229	
Motor Control Center Switchgear Repair  Note: Location:  Plumbing  Deficiency	Replacement  Cabinet Rusted	Capital Renewal Deferred Maintenance Sub Total for System	1 1 <b>3</b> Qty	Ea. Ea. items	2	\$229 \$2,638	650
Motor Control Center Switchgear Repair  Note: Location:  Plumbing  Deficiency	Replacement  Cabinet Rusted	Capital Renewal Deferred Maintenance Sub Total for System Category	1 1 <b>3</b> Qty	Ea. Ea. items	2 Priority	\$229 \$2,638 Repair Cost	650 ID
Motor Control Center Switchgear Repair  Note: Location:  Plumbing  Deficiency  Toilet Replacement Note:	Replacement  Cabinet Rusted  Exterior	Capital Renewal Deferred Maintenance Sub Total for System Category	1 1 <b>3</b> Qty	Ea. Ea. items	2 Priority	\$229 \$2,638 Repair Cost	650 ID
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency Toilet Replacement Note: Location:	Replacement  Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced	Capital Renewal Deferred Maintenance Sub Total for System Category	1 1 3 3 Qty 38	Ea. Ea. items	2 Priority	\$229 \$2,638 Repair Cost	650 ID
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency Toilet Replacement Note: Location:	Replacement  Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced	Capital Renewal Deferred Maintenance  Sub Total for System  Category Capital Renewal	1 1 3 3 Qty 38	Ea. Ea. items UoM Ea.	Priority 3	\$2,638  Repair Cost \$192,257	650 ID 664
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency Toilet Replacement Note: Location: Urinal Replacement Note:	Replacement  Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced Restrooms	Capital Renewal Deferred Maintenance  Sub Total for System  Category Capital Renewal	1 1 3 3 Qty 38	Ea. Ea. items UoM Ea.	Priority 3	\$2,638  Repair Cost \$192,257	650 ID 664
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency Toilet Replacement Note: Location: Urinal Replacement Note: Location:	Replacement  Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced Restrooms  Fixture are beyond useful life and need to be replaced	Capital Renewal Deferred Maintenance  Sub Total for System  Category Capital Renewal	1 1 3 3 Qty 38 5	Ea. Ea. items UoM Ea.	Priority 3	\$2,638  Repair Cost \$192,257	650 ID 664
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency  Toilet Replacement Note: Location:  Urinal Replacement Note: Location:	Replacement  Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced Restrooms  Fixture are beyond useful life and need to be replaced Restrooms rvice Sink Replacement	Capital Renewal Deferred Maintenance  Sub Total for System  Category Capital Renewal  Capital Renewal	1 1 3 3 Qty 38 5	Ea. Ea.  items  UoM Ea.	Priority 3	\$2,638  Repair Cost \$192,257	ID 664 665
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency Toilet Replacement Note: Location: Urinal Replacement Note: Location: Custodial Mop Or Se Note:	Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced Restrooms  Fixture are beyond useful life and need to be replaced Restrooms  rixture are beyond useful life and need to be replaced Restrooms  rvice Sink Replacement Fixture are beyond useful life and need to be replaced	Capital Renewal Deferred Maintenance  Sub Total for System  Category Capital Renewal  Capital Renewal	1 1 3 3 Qty 38 5	Ea. Ea.  items  UoM Ea.	Priority 3	\$2,638  Repair Cost \$192,257	ID 664 665
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency Toilet Replacement Note: Location: Urinal Replacement Note: Location: Custodial Mop Or Se Note: Location:	Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced Restrooms  Fixture are beyond useful life and need to be replaced Restrooms  rvice Sink Replacement Fixture are beyond useful life and need to be replaced Janitors Closet	Capital Renewal Deferred Maintenance  Sub Total for System  Category Capital Renewal  Capital Renewal  Capital Renewal	1 1 3 3 Qty 38 5 3	Ea.  items  UoM  Ea.  Ea.	Priority 3 3	\$2,638  Repair Cost \$192,257  \$6,771  \$2,388	ID 664 665 663
Motor Control Center Switchgear Repair  Note: Location:  Plumbing Deficiency Toilet Replacement Note: Location: Urinal Replacement Note: Location: Custodial Mop Or Se Note: Location:	Cabinet Rusted Exterior  Fixture are beyond useful life and need to be replaced Restrooms  Fixture are beyond useful life and need to be replaced Restrooms  rixture are beyond useful life and need to be replaced Restrooms  rvice Sink Replacement Fixture are beyond useful life and need to be replaced	Capital Renewal Deferred Maintenance  Sub Total for System  Category Capital Renewal  Capital Renewal	1 1 3 3 Qty 38 5 3	Ea. Ea.  items  UoM Ea.	Priority 3	\$2,638  Repair Cost \$192,257	ID 664 665







# **Plumbing**

. iaiiia							
Deficiency		Category	Qty	UoM	Priority	Repair Cost	ID
Replace classroom la	avatory	Capital Renewal	42	Ea.	4	\$107,709	661
Note:	Fixtures are beyond the useful life and need to replaced.						
Restroom Lavatories	Plumbing Fixtures Replacement	Capital Renewal	16	Ea.	4	\$43,461	662
Note:	Fixture are beyond useful life and need to be replaced						
Location:	Throughout building						
		Sub Total for System	6	items		\$364,504	
Fire and Life S	Safety						
Deficiency		Category	Qty	UoM	Priority	Repair Cost	ID
Fire Sprinkler System	n Replacement (SF Basis)	Capital Renewal	64,846	SF	1	\$675,570	689
Note:	Missing						
Location:	Building Wide						
		Sub Total for System	1	items		\$675,570	
Specialties							
Deficiency		Category	Otv	UoM	Priority	Repair Cost	ID
Repair Cabinetry In C	Nasses/Lahs	Deferred		Room	4	\$968	618
rtopan Gabillouy III c	7.00000/ E000	Maintenance		1100111		φοσο	010
Note:	Damaged Cabinet hardware						
Location:	Teacher's lounge						
		Sub Total for System	1	items		\$968	
Crawlspace							
Deficiency		Category	Qtv	UoM	Priority	Repair Cost	ID
-	FICIENCIES - Estimate and Info by AISD	Deferred	538,098		5	\$632,185	6535
0	2,7102	Maintenance	000,000		ŭ	φουΣ, . σσ	0000
Note:	SOIL/DRAINAGE BELOW BUILDING - Improe drainage - 6443	1 GSF					
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred	66,478	Ea.	5	\$78,102	6536
Mark	DEDINETED CON DETAINEDS 1 4500 LE	Maintenance					
Note:	PERIMETER SOIL RETAINERS - replace - 1592 LF	5.4		_	_	<b>*</b> * * * * * * * * * * * * * * * * * *	
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred Maintenance	358,732	Ea.	5	\$421,457	6537
Note:	CRAWL SPACE ACCESS/VENTILATION - improve ventilation -	- 64431 GSF					
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred	13,919	Ea.	5	\$16,353	6538
	,	Maintenance	,			,	
Note:	CRAWL SPACE ACCESS/VENTILATION - repair acess - 5 EA						
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred	89,683	Ea.	5	\$105,364	6539
Nata	CTANDADD FOUNDATIONS	Maintenance					
Note:	STANDARD FOUNDATIONS - repair column - 5 ea	Defermed	440 707		-	£400.470	05.40
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred Maintenance	110,797	Ea.	5	\$130,170	6540
Note:	SPECIAL FOUNDATIONS - repair permiter - 1592 LF						
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred	89,683	Ea.	5	\$105,364	6541
	·	Maintenance					
Note:	SUSPENDED FLOOR BEAMS - repair beams - 64431 GSF						
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred	448,415	Ea.	5	\$526,821	6542
Nata	CHOPENIDED ELOOD CLADO accesis eleb bettere CAACA COE	Maintenance -					
Note:	SUSPENDED FLOOR SLABS - repair slab bottom - 64431 GSF		07.500		-	<b>#44.450</b>	05.40
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred Maintenance	37,582	Ea.	5	\$44,153	6543
Note:	CRAWL SPACE, EXPOSED PIPES - Replace rusted pipes and	repairs, repair insulation and I	eaks - 1 ls				
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred	37,582		5	\$44,153	6544
	·	Maintenance	•			•	
Note:	CRAWL SPACE, EXPOSED DUCTWORK - replace rusted duct	work - 1 LS					
CRAWL SPACE DEF	FICIENCIES - Estimate and Info by AISD	Deferred Maintenance	21,965	Ea.	5	\$25,806	6545
Note:	CRAWL SPACE, EQUIPMENT - Replace rusted juntion box and						
		Sub Total for System	11	items		\$2,129,927	
Sub Total for Buildi	ng 166A - Main building includes Administration Offices, Clas	ssrooms, Cafeteria, & Gym.	39	items		\$7,624,893	



# Williams ES - Life Cycle Summary Yrs 1-10 Site Level Life Cycle Items

#### Site

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Playfield Areas	ES Playgrounds		2	Ea.	\$44,696	4
Fences and Gates	Fencing - Chain Link (4 Ft)		3,500	LF	\$165,191	4
Parking Lot Pavement	Concrete		98	CAR	\$241,665	5
Roadway Pavement	Concrete Driveways		1,440	SF	\$17,976	5
Pedestrian Pavement	Sidewalks - Concrete		2,850	SF	\$32,283	5
		Sub Total for System	5	items	\$501,810	
Electrical						
Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Parking Lot Lighting	Pole Lighting		4	Ea.	\$23,279	4
		Sub Total for System	1	items	\$23,279	
		Sub Total for Building -	6	itome	\$525.080	

#### Building: 166A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

#### Exterior

		Sub Total for System	4 items	\$341,289	
Exterior Window Wall	Storefront / Curtain Wall (Bldg SF)		6,485 SF	\$156,816	10
Exterior Wall Veneer	Metal Panel - Bldg SF basis		16,212 SF	\$57,911	10
Exterior Entrance Doors	Storefront Doors - Glass/Aluminum		2 Door	\$7,938	3
Exterior Entrance Doors	Steel - Insulated and Painted		32 Door	\$118,624	3
Uniformat Description	LC Type Description		Qty UoM	Repair Cost Re	maining Life

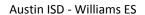
#### Interior

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	5	8,361	SF	\$197,071	3
Tile Flooring	Ceramic Tile		1,297	SF	\$22,914	3
Wall Painting and Coating	Painting/Staining (Bldg SF)	6	3,549	SF	\$284,758	4
Suspended Plaster and	Painted ceilings		4,539	SF	\$9,453	5
Tile Wall Finish	Ceramic Tile wall		1,297	SF	\$10,767	5
Resilient Flooring	Vinyl Composition Tile Flooring	3	2,423	SF	\$265,146	5
Acoustical Suspended Ceilings	Ceilings - Acoustical Grid System	5	8,361	SF	\$243,029	6
Carpeting	Carpet		6,485	SF	\$82,101	6
Interior Swinging Doors	Wooden Door		159	Door	\$298,220	6
Compartments and Cubicles	Toilet Partitions		4	Stall	\$8,066	8
Resilient Flooring	Vinyl Composition Tile Flooring	1	9,454	SF	\$159,089	9
Compartments and Cubicles	Toilet Partitions		15	Stall	\$30,247	10
Wood Flooring	Wood Flooring - All Types		324	SF	\$6,979	10
		Sub Total for System	42	itomo	\$4 647 042	

Mechanicai						
Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)		64,846	SF	\$100,339	5
Facility Hydronic Distribution	2-Pipe System (Cold)		64,846	SF	\$115,956	5
Facility Hydronic Distribution	2-Pipe Water System (Hot)		64,846	SF	\$275,857	5
Heat Generation	Boiler - Electric (1515 MBH)		1	Ea.	\$60,804	8
Other HVAC Distribution Systems	VFD (5 HP)		1	Ea.	\$4,393	8
Other HVAC Distribution Systems	VFD (15 HP)		2	Ea.	\$15,117	8
Facility Hydronic Distribution	Pump - 5HP		2	Ea.	\$13,700	8
Central Cooling	Chiller - Indoor Water Cooled (100 Ton)		1	Ea.	\$104,497	10
Facility Hydronic Distribution	Pump- 25HP (Ea.)		2	Ea.	\$28,763	10
Exhaust Air	Kitchen Exhaust Hoods		3	Ea.	\$33,574	10
		Sub Total for System	10	items	\$753,000	
Electrical						

Uniformat Description	LC Type Description	Qty UoM	Repair Cost Remaining Life
Lighting Fixtures	Canopy Mounted Fixtures (Fa.)	15 Fa	\$31 245 4







#### Electrical

Uniformat Description		LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Electrical Service		Switchgear - Main Dist Panel (1200 Amps)		1	Ea.	\$38,387	8
	Note:	Blast and Repair					
Electrical Service		Transformer (112.5 KVA)		1	Ea.	\$9,908	8
Electrical Service		Transformer (112.5 KVA)		1	Ea.	\$9,908	8
Electrical Service		Transformer (45 KVA)		2	Ea.	\$11,838	8
Power Distribution		Distribution Panels (400 Amps)		1	Ea.	\$16,905	8
Power Distribution		Panelboard - 120/208 100A		4	Ea.	\$11,128	8
Power Distribution		Panelboard - 120/208 225A		1	Ea.	\$5,500	8
Power Distribution		Panelboard - 277/480 400A		2	Ea.	\$27,782	8
Power Distribution		Panelboard - 277/480 100A		1	Ea.	\$6,688	8
Lighting Fixtures		Light Fixtures (Bldg SF)		64,846	SF	\$1,189,181	10
	Note:	1x4 Lights, 2x2 Lights and 2x4 Lights					
Power Distribution		Power Wiring		64,846	SF	\$77,017	10
			Sub Total for System	12	items	\$1,435,486	
Plumbing							
Uniformat Description		LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment		Water Heater - Gas - 100 Gallon	, , , , , , , , , , , , , , , , , , , ,	1	Ea.	\$6,384	3
Domestic Water Equipment		Backflow Preventers - 2 in. (Ea.)		1	Ea.	\$2,092	5
Domestic Water Equipment		Gas Piping System (BldgSF)		64,846	SF	\$2,248,552	5
Domestic Water Piping		Domestic Water Piping System (Bldg.SF)		64,846	SF	\$233,039	5
Sanitary Sewerage Piping		Sanitary Sewer Piping		64,846	SF	\$71,994	5
Plumbing Fixtures		Non-Refrigerated Drinking Fountain		5	Ea.	\$11,919	10
			Sub Total for System	6	items	\$2,573,980	
Fire and Life Safety							
Uniformat Description		LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm		Fire Alarm		64,846	SF	\$102,964	9
Fire Detection and Alarm		Fire Alarm Panel		1	Ea.	\$6,868	9
			Sub Total for System	2	items	\$109,832	
Specialties							
Uniformat Description		LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Casework		Fixed Cabinetry	1	33	Room	\$290,462	4
			Sub Total for System	1	items	\$290,462	
Sub Total for Building 166	SA - Ma	ain building includes Administration Offices, Cla	ssrooms, Cafeteria, & Gym.	48	items	\$7,121,890	
_		·	Total for: Williams ES	54	items	\$7,646,978	
						. ,,	

M\*A\*P\*P\*S ©, Jacobs 2022 13



# **Supporting Photos**

#### **General Site Photos**



Rusted pipes



Damaged ceiling diffuser



Stained vinyl composite tile



Damaged ceiling diffuser and acoustical ceiling tile



Damaged Casework



Stained acoustical ceiling tiles

# **Facility Condition Assessment**

Austin ISD - Williams ES





Damaged hardware

M\*A\*P\*P\*S ©, Jacobs 2022 15