



FACILITY CONDITION ASSESSMENT

Norman Sims ES | February 2022



Executive Summary

Norman Sims ES is located at 4001 Tannehill Ln in Austin, Texas. The oldest building is 50 years old (at time of 2020 assessment). It comprises 58,519 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 \$1,616,085. 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 Norman Sims ES the ten-year need is \$3,500,065.

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 Norman Sims ES facility has a 5-year FCA score of 87.23%.

Summary of Findings

The table below summarizes the condition findings at Norman Sims 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	\$6,938	\$0	\$0	\$6,938	\$6,938	\$0	
Permanent Building(s)								
150A	Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.	\$1,609,148	\$695,782	\$924,713	\$2,304,930	\$3,229,643	\$14,676,410	84.30%
150B	Stand-Alone Classroom Building	\$0	\$141,282	\$122,203	\$141,282	\$263,485	\$4,540,649	96.89%
Sub Total for Permanent Building(s):		\$1,609,148	\$837,064	\$1,046,916	\$2,446,212	\$3,493,128	\$19,217,056	
Total for Site:		\$1,616,085	\$837,064	\$1,046,916	\$2,453,149	\$3,500,065	\$19,217,056	87.23%

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	\$483	\$483	0.03 %
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Structural	\$6,455	\$0	\$0	\$0	\$0	\$6,455	0.40 %
Exterior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Interior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Mechanical	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Electrical	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
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	\$1,609,148	\$1,609,148	99.57 %
Total:	\$6,455	\$0	\$0	\$0	\$1,609,630	\$1,616,085	

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

Structural	-	\$6,455
Site	-	\$483
Interior	-	\$0

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

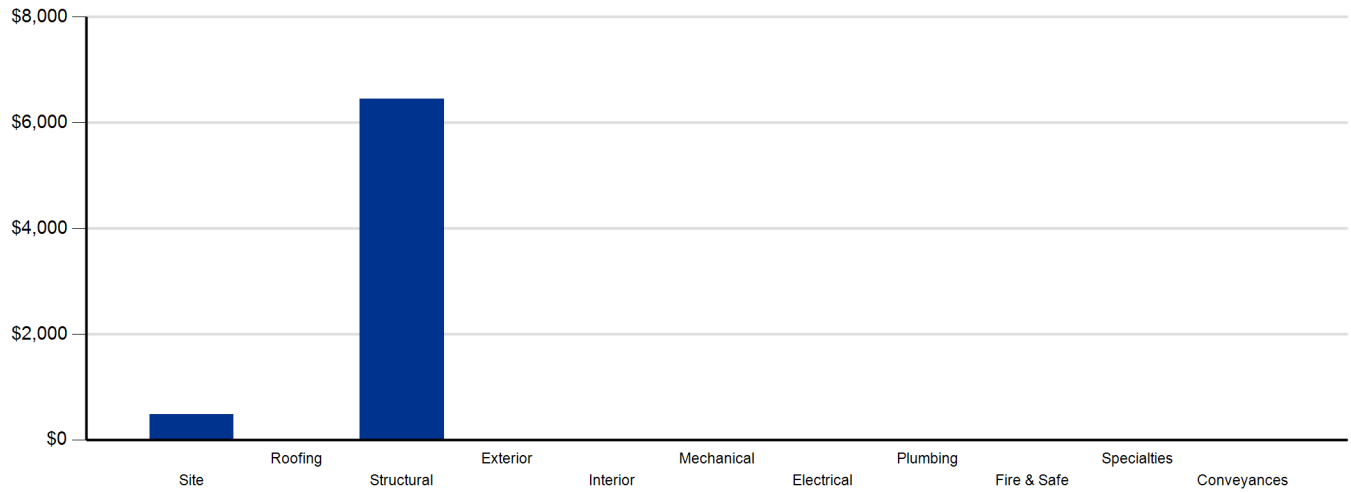


Figure 1: System Deficiencies

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	\$835,131	\$835,131
Interior	\$0	\$0	\$0	\$0	\$0	\$0
Mechanical	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0	\$0
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$835,131	\$835,131

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	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$835,131	\$0	\$0	\$0	\$0	\$0	\$0	\$835,131
Interior	\$0	\$0	\$215,962	\$91,065	\$0	\$185,903	\$492,930	\$492,930
Mechanical	\$0	\$0	\$0	\$0	\$0	\$532,376	\$532,376	\$532,376
Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0	\$21,610	\$21,610	\$21,610
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$835,131	\$0	\$215,962	\$91,065	\$0	\$739,889	\$1,046,916	\$1,882,047

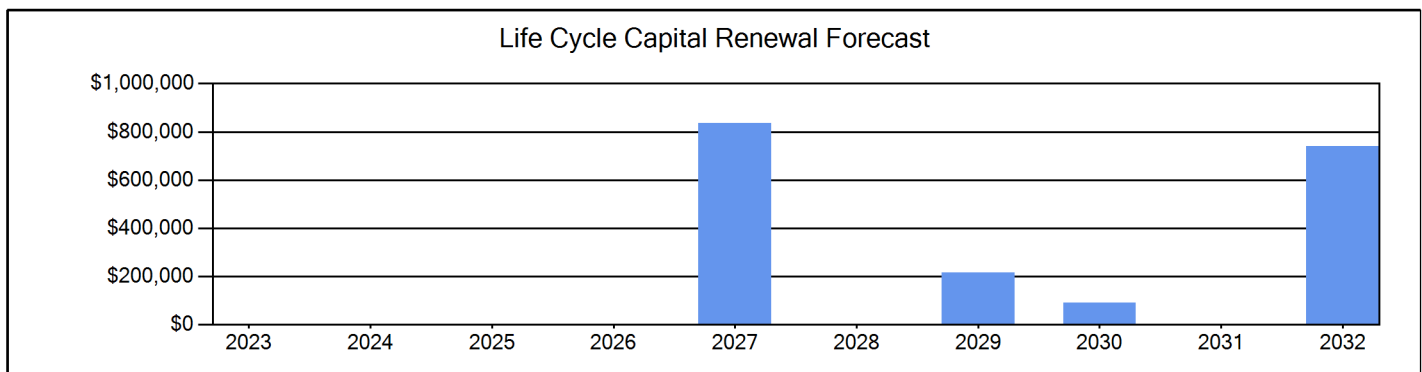


Figure 2: Ten Year Capital Renewal Forecast

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 \$19,217,056. For planning purposes, the total 5-year need at the Norman Sims ES is \$2,453,149 (Life Cycle Years 1-5 plus the FCA deficiency cost). The Norman Sims ES facility has a 5-year FCA of 87.23%.

5-Year Need vs. Replacement

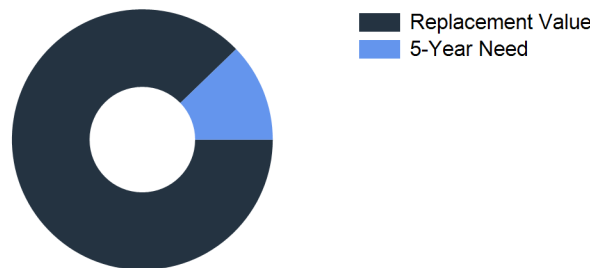


Figure 3: 5-Year FCA

Norman Sims ES - Deficiency Summary

Site Level Deficiencies

Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Site Signage Replacement	Capital Renewal	2	Ea.	5	\$483	3792
Note:	One (1) missing ADA parking sign at accessible parking space and one(1) missing preferred parking sign in southwest parking lot adjacent to Tannehill Lane.					
Sub Total for System		1	items		\$483	

Structural

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Structural Study Recommended	Deferred Maintenance	1	Job	1	\$6,455	6624
Note:	Structural study to detail scope of work based on the 2017 crawlspace deficiencies provided by AISD					
Sub Total for System		1	items		\$6,455	
Sub Total for School and Site Level		2	items		\$6,938	

Building: 150A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

Crawlspace

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	69,596	Ea.	5	\$81,765	6625
Note:	SOIL/DRAINAGE BELOW BUILDING - Improve water intrusion, piping repaired in "Exposed Piping" section - 1 IS					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	161,274	Ea.	5	\$189,473	6626
Note:	PERIMETER SOIL RETAINERS - replace soil retainers & cover w/soil - 2069 LF					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	313,461	Ea.	5	\$368,270	6627
Note:	CRAWL SPACE ACCESS/VENTILATION - Increase ventilation, clean debris from areaway grates - 56300 SF					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	34,798	Ea.	5	\$40,882	6628
Note:	CRAWL SPACE ACCESS/VENTILATION - repair access hatches - 5 EA					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	81,454	Ea.	5	\$95,696	6629
Note:	STANDARD FOUNDATIONS - repair mild honeycombing, spalling & exposed/corroded reinforcement - 58519 GSF					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	46,078	Ea.	5	\$54,135	6630
Note:	SPECIAL FOUNDATIONS - repair mild honeycombing - 2069 LF					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	40,727	Ea.	5	\$47,848	6631
Note:	SUSPENDED FLOOR BEAMS - repair honeycombing & (1) large spall w/corroded/exposed reinforcement - 58519 GSF					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	203,635	Ea.	5	\$239,241	6632
Note:	SUSPENDED FLOOR SLABS -repair slab cracks, spalling at pc channels & corroded/exposed reinforcement - 58519 GSF					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	214,078	Ea.	5	\$251,510	6633
Note:	CRAWL SPACE, EXPOSED PIPES - Replace rusted and broken piping, repair pipe insulation and hangers - 1 LS					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	89,083	Ea.	5	\$104,659	6634
Note:	CRAWL SPACE, EXPOSED DUCTWORK - Replace torn and degraded duct insulation - 1 LS					
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	115,477	Ea.	5	\$135,668	6635
Note:	CRAWL SPACE, INSULATION - replace rigid insulation =Bldg B only - 13827					
Sub Total for System		11	items		\$1,609,148	
Sub Total for Building 150A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.		11	items		\$1,609,148	
Total for Campus		13	items		\$1,616,085	

Buildings with no reported deficiencies

150B - Stand-Alone Classroom Building

Norman Sims ES - Life Cycle Summary Yrs 1-10

Building: 150A - 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	925	SF	\$92,247	5
Exterior Operating Windows	Aluminum - Windows per SF	144	SF	\$14,361	5
Exterior Operating Windows	Aluminum - Windows per SF	3,168	SF	\$315,935	5
Exterior Operating Windows	Aluminum - Windows per SF	1,435	SF	\$143,108	5
Exterior Entrance Doors	Steel - Insulated and Painted	32	Door	\$118,624	5
Exterior Operating Windows	Aluminum - Windows per SF	96	SF	\$9,574	5
Sub Total for System		6	items	\$693,849	

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	35,753	SF	\$160,206	7
Carpeting	Carpet	5,810	SF	\$73,556	8
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	31,284	SF	\$105,638	10
Suspended Plaster and	Painted ceilings	11,173	SF	\$23,269	10
Compartments and Cubicles	Toilet Partitions	6	Stall	\$12,099	10
Sub Total for System		5	items	\$374,768	

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heat Generation	Boiler - Cast Iron - Steam (1275 MBH)	2	Ea.	\$87,463	10
Central Cooling	Chiller - Outdoor Air Cooled (175 Tons)	2	Ea.	\$382,771	10
Facility Hydronic Distribution	Pump - 5HP	4	Ea.	\$27,399	10
Facility Hydronic Distribution	Pump- 10HP (Ea.)	2	Ea.	\$23,121	10
HVAC Air Distribution	VAV Boxes / Terminal Device	3	Ea.	\$11,622	10
Sub Total for System		5	items	\$532,375	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment	Water Heater - Electric - 80 gallon	1	Ea.	\$4,460	10
Domestic Water Equipment	Water Heater - Electric - 52 gallon	1	Ea.	\$2,684	10
Domestic Water Equipment	Water Heater - Electric - 66 gallon	1	Ea.	\$4,041	10
Domestic Water Equipment	Water Heater - Gas - 100 Gallon	1	Ea.	\$6,384	10
Sub Total for System		4	items	\$17,569	

Sub Total for Building 150A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

20 items \$1,618,561

Building: 150B - Stand-Alone Classroom Building

Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Operating Windows	Aluminum - Windows per SF	48	SF	\$4,787	5
Exterior Operating Windows	Aluminum - Windows per SF	1,220	SF	\$121,667	5
Exterior Entrance Doors	Steel - Insulated and Painted	4	Door	\$14,828	5
Sub Total for System		3	items	\$141,282	

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	12,443	SF	\$55,756	7
Carpeting	Carpet	1,383	SF	\$17,509	8
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	12,443	SF	\$42,017	10
Suspended Plaster and	Painted ceilings	1,383	SF	\$2,880	10
Sub Total for System		4	items	\$118,162	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment	Water Heater - Electric - 66 gallon	1	Ea.	\$4,041	10
Sub Total for System		1	items	\$4,041	

Sub Total for Building 150B - Stand-Alone Classroom Building

8 items \$263,485

Total for: Norman Sims ES

28 items \$1,882,046

Supporting Photos

General Site Photos



Air handling unit name plate



Unit heater is aged



Water heater



Restroom



Mop sink is worn



Rooftop fan system



Main entry