Cornell School District

Facility Assessment

December 2024

C·E·S·A 10
Cooperative Educational Service Agency

Prepared by:

CESA 10 Facilities Management

888.947.4701

facilities.cesa10.org

History

Established in Wisconsin in 1964, Cooperative Educational Service Agencies (CESAs) have a long history of partnering with school districts. CESA 10 Facilities Management Department is a nonprofit educational service agency providing facilities management services to local government and school district customers throughout the state of Wisconsin.

With decades of experience and expertise in managing institutional facility needs, CESA 10 has a unique position as a nonprofit educational service agency. This unique position helps to ensure customers benefit from our trusted and unbiased judgment and experience gained through the execution of hundreds of investment grade audits, school energy efficiency, construction, renovation and environmental projects, and other facilities services.

CESA 10 assists public entities in managing their facility needs in health, safety, energy efficiency, referendum and long-term planning, and construction management.

The department's main areas of concentration are:

- Investment Grade Audits, including Long-Term Comprehensive Plans
- Referendum Planning
- Construction Management
- Owner's Representative
- Environmental Health and Safety Consulting
- Environmental Project Consulting and Management

Executive Summary

At the request of the Cornell School District, CESA 10 technical experts performed a detailed on-site audit of its facilities. This audit provides the District with a comprehensive facilities maintenance and capital project plan, with identified problems, proposed solutions, and estimated costs. The recommendations in this report aim to improve failing and inefficient equipment, systems, and facilities and reduce energy consumption to ensure any taxpayer investment is managed within an appropriate payback period.

According to the 2021 State of our Schools report, public school districts in the U.S. only spend an average of $56 billion on their facilities' maintenance and operations annually. That's $27.6 billion short of what is recommended to maintain, operate, and renew facilities to provide healthy and safe 21-century learning environments for all children. Local districts know their available funding options often fall short of maintenance wants and needs. Therefore, it is imperative to engage in proper facilities planning.

Planning should include:

- Having an up-to-date master facilities plan
- Preparing annual District-wide maintenance, repair, and energy management plans
- Defining and disseminating benchmarks for facilities planning
- Analyzing existing and potential technical assistance and tools, environmental health and safety hazards, and ADA-compliance issues
- Establishing a District facilities planning designee or committee

Numerous priority improvement measures have been identified for consideration. Preventative measures are recommended to provide more consistent quality for the ever-aging facilities. These recommendations include documented seasonal inspections, robust preventative maintenance, expeditious corrective actions, and minor and major projects.

It is important to note the prices listed in the strategic plan are only for construction costs. There are additional costs related to construction management, architect/engineer fees, contingencies, permits, plans, and other material costs. Additionally, prices can fluctuate based on the types of materials chosen, the time of year construction occurs, and final project scopes. The recent worldwide pandemic also continues to impact material and labor costs.

The District has effectively utilized the existing buildings and equipment to the best of its available resources. The District can use this report to identify the highest priority facility improvement measures (FIMS) during corrective maintenance, minor project implementation, and capital planning. The recommendations included in this report are meant to help the District maximize capital investment impact, advance the learning environment, conserve energy, reduce operating and maintenance costs, improve occupant comfort, and increase safety and security where applicable.

Facility Analysis

Conducted for the Cornell School District

Conducted on

December 4, 2024

School District Personnel

Dr. Paul M. Schley • Superintendent

Prepared by
CESA 10 Facilities Consultant

Luke Schultz & Lindsey Schreiner

Facility Improvement Measures

Cornell School District

Building System	General Description	Recommendation	Cost Estimate
Sanitary & Domestic Water Piping	The existing below-grade sanitary system is original and requires an update. Additionally, there is water infiltration into the building.	New sanitary piping updated; domestic water main distribution and branch lines replacement; update of various fixtures (showers, etc).	$3,500,000
Safety/ Security	The main entrance doesn't have a secure entrance. When guests are buzzed into the building they have access to go into the building.	It is recommended to create a secure office where guests must check in before entering the building. The current building layout would make this difficult to manage without significant renovation. Ideally, the office location and main entrance would be relocated to a new area within the building.	$1,650,000
Fire Alarm/ Fire Protection	The existing fire alarm system is not up to code and not functioning properly.	Update the existing fire alarm system as the controls are not functioning and are outdated. This will involve redoing and rewiring the entire system, including installing new conduit. (Fire Chief has given the District some time to resolve).	$850,000
Tuck Pointing	The building is due for a large tuck pointing project. Most of the expansion joints need to be recaulked as they are failed and water is getting into the building. The memorial wall as you enter the commons entrance needs to be addressed as it is leaning and has structural concerns. The crows nest is on the verge of collapse.	It is recommended to undertake a full building tuck-pointing project and recaulk all expansion joints. Additionally, review and replace the caulking around windows, doors, and other areas of the building. The Memorial wall should also be addressed, with structural concerns needing to be fixed.	$800,000

Facility Improvement Measures

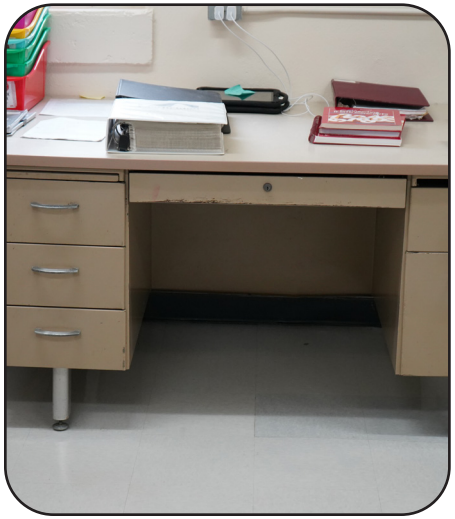
Cornell School District

Building System	General Description	Recommendation	Cost Estimate
IT	Security cameras should be updated, and the door systems (fobs/access control) need upgrading. CAT 5 wiring should be replaced with CAT 6, and the fire wall requires replacement. Additionally, some drops should be added in certain areas of the building, along with smart boards and tech ed curriculum items. The phone system is no longer supported and there are gaps in coverage of the PA system. The PA, clock, and phone systems should also be reviewed for integration into a more efficient system, including for the elementary section.	The district should update the cameras, door security, cabling district-wide, switches (10 years old and functioning but outdated), and PA/Clock/Phone system district-wide need to be updated for safety and security. The district is also in need of updating their smartboard/interactive TVs as well as computers.	$700,000
Roofing	Some roofing is in good condition;r the gym roof and the 1915 section, along with crows nest, van garage, metals shop, and storage areas, need to be replaced as they are past their useful life and warranty.	Update the gym roof and the 1915 (old section) with a 20 year warranty 60 mil EPDM roof.	$545,000
Controls	The building is operated by both pneumatic and Direct Digital Controls (DDC).	Pneumatic systems will need to be eliminated and replaced with new DDC (Direct Digital Control) systems as part of the upgrades.	$480,000
AHUs	Several AHUs need to be updated throughout the building.	The basement AHU and gym AHU are highly recommended but all of them should be updated.	$400,000

Facility Improvement Measures

Cornell School District

Building System	General Description	Recommendation	Cost Estimate
FF&E	There are several areas where FF&E (furniture, fixtures, and equipment) should be addressed. The kitchen tables are heavy and difficult to move or lift. In the IMC, consider adding movable, more comfortable seating and tables. Additionally, both teachers' desks and classroom desks should be updated.	As budget allows the furniture building wide should be addressed. The cost reflects updating most of the furniture in the building.	$365,000
Environmental	There has been environmental testing in the past and known asbestos and lead paint is in the building in several areas.	Recommend removing all the asbestos tile/mastic (flooring), and HVAC piping in the building. Also, recommended to remediate the lead paint in known areas. Cost includes all environmental remediation in the building.	$350,000
Windows	Most of the windows are not functional and have been screwed shut as they aren't operable.	Upgrade the non-wood framed windows to improve efficiency.	$345,000
Electrical	Current LED lighting is outdated and needs upgrading.	Recommend to update to new LED lighting with controls/sensors to be more efficient.	$335,000



Summary

Cornell School District	
Project	Estimated Cost
1-2 Year Needs	$12,980,500
3-5 Year Needs	$2,609,000
Total	$15,589,500

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FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
001	Sanitary and Domestic Water Piping	The existing below-grade sanitary system is original and requires an update. Additionally, there is water infiltration into the building.	New sanitary piping updated; main distribution and branch lines replacement; update of various fixtures (showers, etc).	1-2 Year	$3,500,000
002	Safety/Security	The main entrance doesn't have a secure entrance. When guests are buzzed into the building they have access to go into the building.	It is recommended to create a secure office where guests must check in before entering the building. The current building layout would make this difficult to manage without significant renovation. Ideally, the office location and main entrance would be relocated to a new area within the building.	1-2 Year	$1,650,000
003	Fire Alarm/Fire Protection	The existing fire alarm system is not up to code and not functioning properly.	Update the existing fire alarm system as the controls are not functioning and are outdated. This will involve redoing and rewiring the entire system, including installing new conduit. (Fire Chief has given the District some time to resolve).	1-2 Year	$850,000
004	Tuck Pointing	The building is due for a large tuck pointing project. Most of the expansion joints need to be recaulked as they are failed and water is getting into the building. The memorial wall as you enter the commons entrance needs to be addressed as it is leaning and has structural concerns. The crows nest is on the verge of collapse.	It is recommended to undertake a full building tuck-pointing project and recaulk all expansion joints. Additionally, review and replace the caulking around windows, doors, and other areas of the building. The Memorial wall should also be addressed, with structural concerns needing to be fixed.	1-2 Year	$800,000

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FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
005	IT	Security cameras should be updated, and the door systems (fobs/access control) need upgrading. CAT 5 wiring should be replaced with CAT 6, and the fire wall requires replacement. Additionally, some drops should be added in certain areas of the building, along with smart boards and tech ed curriculum items. The phone system is no longer supported and there are gaps in coverage of the PA system. The PA, clock, and phone systems should also be reviewed for integration into a more efficient system, including for the elementary section.	The district should update the cameras, door security, cabling district-wide, switches (10 years old and functioning but outdated), and PA/Clock/Phone system district-wide need to be updated for safety and security. The district is also in need of updating their smartboard/interactive TVs as well as computers.	1-2 Year	$700,000
006	Roofing	Some roofing is in good condition;r the gym roof and the 1915 section, along with crows nest, van garage, metals shop, and storage areas, need to be replaced as they are past their useful life and warranty.	Update the gym roof and the 1915 (old section) with a 20 year warranty 60 mil EPDM roof.	1-2 Year	$545,000
007	Controls	The building is operated by both pneumatic and Direct Digital Controls (DDC).	Pneumatic systems will need to be eliminated and replaced with new DDC (Direct Digital Control) systems as part of the upgrades.	1-2 Year	$480,000
008	AHUs	Several AHUs need to be updated throughout the building.	The basement AHU and gym AHU are highly recommended but all of them should be updated.	1-2 Year	$400,000
009	FF&E	There are several areas where FF&E (furniture, fixtures, and equipment) should be addressed. The kitchen tables are heavy and difficult to move or lift. In the IMC, consider adding movable, more comfortable seating and tables. Additionally, both teachers' desks and classroom desks should be updated.	As budget allows the furniture building wide should be addressed. The cost reflects updating most of the furniture in the building.	1-2 Year	$365,000

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FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
010	Environmental	There has been environmental testing in the past and known asbestos and lead paint is in the building in several areas.	Recommend removing all the asbestos tile/mastic (flooring), and HVAC piping in the building. Also, recommended to remediate the lead paint in known areas. Cost includes all environmental remediation in the building.	1-2 Year	$350,000
011	Windows	Most of the windows are not functional and have been screwed shut as they aren't operable.	Upgrade the non-wood framed windows to improve efficiency.	1-2 Year	$345,000
012	Electrical	Current LED lighting is outdated and needs upgrading.	Recommend to update to new LED lighting with controls/sensors to be more efficient.	1-2 Year	$335,000
013	Flooring	There are several different types of flooring systems in the school. Some areas are worse than others but in general, most of the flooring should be updated.	Most of the carpet areas are outdated and past useful life. The majority of the 12x12 tile in the hallways and classrooms is cracking. Recommend as budget allows to update a majority of the flooring in the building.	1-2 Year	$325,000
014	Bathroom Updates	Several bathrooms have plumbing issues that need to be addressed; 2 of which are locked due to ongoing issues. A majority of the fixtures, counters, and partitions should be updated as they are outdated and rusting. The walls and floors should be updated as well with new paint and look at an epoxy flooring that is more user-friendly to keep clean. Several of the bathrooms are not ADA compliant as well but the cost to update is not feasible.	It is recommended, at the very least, to update the fixtures, partitions, counters, install new flooring, and repaint the walls.	1-2 Year	$270,000
015	Electrical	Several Bulldog electrical panels throughout the building need to be updated.	Update existing electrical panels.	1-2 Year	$235,000

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FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
016	Locker Rooms	The locker rooms in the basement could use a facelift with new paint, flooring, bathroom fixtures and partitions. The current shower areas should be looked at to add privacy curtains and update the shower heads. The current shower room is not ADA compliant and the entrance to the shower areas should be widened.	The locker room should be updated with new paint, flooring, shower heads, fixtures/partitions, and the entrance to the shower rooms should be updated.	1-2 Year	$225,000
017	EIFs	It is recommended that, as the windows are updated, consideration be given to removing the EIFS. Recaulking attempts have been unsuccessful.	The EIFS is failing and, recaulking attempts have been unsuccessful. Full replacement necessary. The cost reflects transitioning from EIFS to metal panels.	1-2 Year	$220,000
018	Exterior Doors	Several exterior doors, along with their frames, need to be updated due to rust and being past their useful life. Additionally, a few doors around the shop area lack hardware for outside access. Weatherstripping on the shop garage doors should also be addressed or replaced	Update the exterior doors around the building and add hardware to those that are missing it. Replace the weatherstripping around the garage shop doors, and ensure that any exterior doors not being updated also receive new weatherstripping.	1-2 Year	$215,000
019	Painting	Interior painting should be done in the majority of the building. Certain areas have holes in the walls where significant sheetrock patching is needed as well.	Recommend to paint the main travel areas at the mimumum with school colors for better branding. As budget allows most of the classrooms should be included as well. There are several holes in the walls around the building as well that should be patched up before painting.	1-2 Year	$215,000
020	Entrance Canopies	There are a few entrance canopies around the building that are in rough shape and need to be updated.	The main entrance on the south end of the building and canopies over the two gym entrances should be updated. The structure itself is starting to fall a part and the lighting fixtures need updating.	1-2 Year	$195,000

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FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
021	Lockers	The lockers in the hallway should be updated with certain areas being worse than others.	Update lockers as budget allows and cost estimate to update all of them.	1-2 Year	$173,000
022	Interior Doors	There are several doors throughout the building that should be updated. Several have holes in them or are broken in certain areas. Most of the doors are past their useful life.	Update as many doors as the budget allows. For updated classroom doors, ensure they have minimal or no window space for safety purposes.	1-2 Year	$145,000
023	Safety/Security	Crows nest area needs to be addressed (no fire escape, electrical AHU is turned off, asbestos flooring, lead paint, windows, walls, etc.).	At a minumum the environmental concerns should be removed in this area.	1-2 Year	$85,000
025	Water Heaters	Several water heaters have reached the end of their useful life.	Update existing Voyager water heaters to more efficient units.	1-2 Year	$78,000
026	Condensing Units	Update existing condensing units that are past there useful life.	Update units that are outside on the ground and on the roof.	1-2 Year	$65,000
027	Modine Heater	The Tech Ed area should update the Modine heater to ensure optimal performance and efficiency.	Update the heating system in the Tech Ed area to improve comfort and efficiency.	1-2 Year	$53,000
028	Exhaust Fans	Existing exhaust fans are past useful life.	Update exhaust fans on the roof.	1-2 Year	$45,000
029	Water Filling Stations	The bubblers throughout the building should be updated to bottle fill.	There are several drinking fountains around the building and they do not have bottle fill stations. Recommend to update all fountains with bottle fill options.	1-2 Year	$30,000
030	FACE Room	The equipment and counters in the FACE area are outdated. The counters are missing portions of the laminate counter and for safety purposes and cleanliness, they should be updated.	Recommend to update the equipment (ovens/microwaves) and replace countertops at the mimumum and as budget allows look at replacing the casework.	1-2 Year	$30,000
031	Roofing	Elevation changes on roof sections need ladders installed for safety concerns.	Install ladders for employees to get from one section to the next. Remove ladders on the roof.	1-2 Year	$16,000
032	Electrical	Add electrical outlets to the IMC.	Add outlets for charging in the IMC.	1-2 Year	$13,000
033	Parking Lot	The parking lot on the east side of the building should be crack sealed to help lengthen the life.	Crack seal east parking lot.	1-2 Year	$13,000

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Facilities Management Department

FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
034	Exterior Signage	The exterior signage should be updated for better visibility, particularly for parking. Entrances to the building need to be updated to clearly direct guests. Classroom windows on the outside should have room numbers labeled with reflective numbering, allowing law enforcement to easily see them at night when illuminated by streetlights.	For security purposes, the numbers on the exterior classroom windows should be added right away. Signage on the building entrances and parking lots should be updated.	1-2 Year	$12,000
035	Gym	There are structural cracks in a few areas of the gym that should be assessed by a structural engineer.	Get a recommendation from a structural engineer to review the cracks in the corners of the gym.	1-2 Year	$2,500
036	Add AC	The building has AC in a few small sections that are being controlled by a few condensing units around the	Recommend adding AC to the entire building with a chiller rather than several condensing units.	3-5 Year	$950,000
037	Unit Ventilators	The existing unit ventilators are operational; however, there is no capacity to add cooling coils to the current units. Additionally, sourcing replacement parts has become increasingly difficult.	Update existing unit ventilators with the ability to add cooling in the future. The new units should also be tied into the new DDC system.	3-5 Year	$530,000
038	Boilers	The existing boilers consist of one condensing boiler and one standard boiler, both of which are over 15 years old.	Install two new condensing boilers that will be more efficient.	3-5 Year	$485,000

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FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
039	Gym	The storm drains are cast iron and should be updated. Painting the gym area would significantly improve its appearance. The east side wooden doors are in poor condition, and the flooring near these doors, where the rubber ramp meets the wood floor, should be updated. While the bleachers are still operational, sourcing parts has become difficult due to their age. The basketball backboards and stanchions are outdated, with some lacking the ability to be raised, and the existing winches are also aged.	Update the storm drains to PVC piping. Paint the gym to improve its appearance. Replace the flooring with rubber ramps by the east doors. Install new basketball backboards and stanchions, along with new winches.	3-5 Year	$205,000
040	Kitchen Area	The freezer doors open in the wrong direction and should be reversed. The kitchen layout needs to be adjusted as the current setup lacks sufficient space; consider opening it up for better flow. Some sinks are not being used due to space constraints, and items are stored in front of them. Electrical GFIs are not installed and should be updated. The fire protection system also needs to be updated. Additionally, the cooler and freezer evaporators have reached the end of their life.	The GFI outlets should be addressed right away along with the fire protection. The flow in the kitchen is tight and depending on budget opening this space up could be beneficial in many ways. If budget allows the kitchen hood should be updated and remove the wall in the middle of the kitchen under the hood to allow more flexibility with the space. Replace cooler and freezer evaporators.	3-5 Year	$190,000
041	Weight Room	The weight room equipment is outdated and in need of upgrading. Modernizing equipment is essential for ensuring student safety.	It is recommended to invest in replacements of all equipment.	3-5 Year	$150,000
042	Ceiling Tiles	The 2x2 tiles around the building are starting to curl and bow, likely due to humidity issues.	Recommend updating ceiling tiles througout the building.	3-5 Year	$75,000

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FIM Code	Building System	General Description	Recommendation	Priority	Cost Estimate
043	VFDs	Existing VFDs (Variable Frequency Drives) will need to be updated to accommodate the changes and enhancements made during the boiler updates.	New VFDs (Variable Frequency Drives) will need to be installed as part of the boiler updates to ensure proper operation and efficiency.	3-5 Year	$24,000