



Geneva Community Unit School District #304  
Operations and Maintenance  
7 Year Capital Improvement Plan

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## Finance Advisory Committee

January 11, 2016





# Geneva Community Unit School District #304 Operations and Maintenance 7 Year Capital Improvement Plan

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# Geneva Community Unit School District #304 Operations and Maintenance 7 Year Capital Improvement Plan

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## Introduction

This report analyzes the existing facilities and their related conditions. It takes a look at the next seven years in which the highest priority needs will be addressed first. These priorities will be based on financial considerations such as cost and efficiencies, condition of existing facilities, code compliance, and the comfort and safety of our buildings. While it is difficult to imagine every possible scenario that our buildings face, I have compiled a comprehensive outlook of the present facilities based on current conditions. This report covers all buildings and grounds the District owns and estimates the funding required to maintain our properties at an optimal teaching and learning environment. Projected costs by building are included in the Appendix. The Seven Year Capital Improvement Plan is intended to provide the information needed to assist the District Board of Education and Administration with the decisions they will face with regard to future financial support of our buildings.

Respectfully Submitted,

Scott K. Ney  
Director of Facility Operations  
Geneva Community School District #304

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# Geneva High School





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# Geneva High School

## Building Summary

Originally built in 1958, the high school has undergone four major additions (1964, 1967, 1973, and 2001). The building is 390,331 square feet built on 10 acres and has a capacity of 1,800 students. The Master Facilities Plan from 2005 called for the high school to be expanded and renovated. Due to economic conditions, the \$85+ million project was put on hold. The athletic area to the northwest encompasses 37 acres and houses the athletic and P.E. fields for the high school.

In 2014-15 repairs to the damaged pavement and sidewalk sections were completed. The Center Street exterior doors were replaced. The tile flooring in the Auditorium/Commons hallways was replaced and new carpet was installed in the B and J classrooms. During the 2015-16 school year the GHS athletic areas received new tile flooring and the Board of Education approved the replacement of the steam lines leading from the Boiler plant to the High School. The replacement will occur during the summer of 2016.

Several additional capital improvements are needed in the next seven years. Based upon the architect's Space and Schedule study which anticipates additional capacity requirements, the District may need to **renovate** the existing high school or install one to two **mobile classrooms**. The **air handlers** (7) that serve the library, Mack Olson Gym, cafeteria, kitchen, auditorium and weight room are all over 40 years old and are in need of updating. Since they all are housed inside the building, the shells of the units are in good condition. We recommend replacing the bearings, shafts and motors to improve reliability and efficiency. Any new equipment will be installed with new **DDC controls** to continue the conversion of the high school from pneumatic controls. The **secondary heating pumps** are nearing the end of their life cycle and need to be replaced. They are in need of upgrading with **variable frequency drives** for optimal efficiency. **Flooring** has been an ongoing concern for several years. The existing carpet is at least 16 years old, and in some areas even older. The Fritz quartz tile that was installed in 2000 has not performed well. It is cracking throughout the building and has faded considerably. We are replacing small sections of flooring in phases due to budgeting restrictions. The **stage craft and cafeteria bathrooms** are over 41 years old and showing significant wear. We need to update the bathrooms which would include new flooring, update plumbing, fixtures, sinks and toilets. The **stage and house lighting in the auditorium** is starting to fail and the parts for the lighting panel are becoming obsolete and no longer available. We will need to update the entire lighting system. The **roof on the southwest side** of the building was installed in the 90's and the typical life cycle of a roof is 25 years. The roof will need to be replaced in the next two to three years. The **parking lots** were resurfaced the summer of 2013. Crack filling and seal coating will be needed in the next four to seven years. The **existing galvanized piping** is deteriorating throughout the building and has started leaking in several areas. We will need to replace the old piping with copper piping and provide new ball valves for adequate shut-off. The three **600 gallon PVI hot water heaters** will need to be replaced within the next seven years. The four Kewanee steam **boilers (installed 2000, 1967, 2 in 1957)** that supply heat to the high school are inefficient and becoming more costly to maintain. Kewanee stopped manufacturing all boilers and parts in 2001. Over the next several years, there will come a point when we will be unable to locate parts and therefore, we will not be able to repair these boilers. We need to replace the Kewanee boilers with a more efficient boiler system and locate this system at the high school. The **heating ventilation and air conditioning (HVAC)** equipment at 301 McKinley maintenance garage is nearing the end of its estimated service life according to ASHRAE. The **tennis courts** are starting to show

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excessive and deep cracking on the courts. Over the last several years, we have had the courts patched and made suitable for play. We are getting to the point at which patching will no longer be an option and the courts are becoming unsafe. We will need to resurface the tennis courts within the next two to three years. These costs are shared with the Park District through an Intergovernmental Agreement. An additional **storage shed** will be needed in the athletic area of Burgess Field for gym and athletic storage. The **synthetic turf** has a typical life cycle of eight to twelve years based on usage. We are budgeting over the next several years to have the money available when the renewal maintenance is due.

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# Geneva High School



## Controls

Pneumatic to Digital conversion allowing for tighter control of temperature, setback features, alarming feature and will be computer based.



## Secondary Pumps (6)

Replace pumps that are nearing the end of their life cycle.

Variable Frequency Drives will greatly increase energy efficiency and lengthen the life of the pumps.



## Carpet

The carpet is starting to fray and cause trip hazards.

Carpet will need to be replaced.

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# Geneva High School



## Flooring

Existing quartz tile is cracking and has faded.

Replace tile in phases.



## Tennis Court Resurface

Cracks and patches throughout courts.



## Boiler Replacement

Breakdowns and repairs are becoming more frequent and costly.

Replace steam boilers with hot water boilers for energy efficiency.

Locate new boilers from boiler house to high school.



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# Geneva High School



## Cafeteria and Stage Craft Bathrooms

Bathrooms are 41 years old.

Showing significant wear.

Need to update.



## Steam Pipe Replacement

Insulated jacket failing around steam pipe.

Will continue to deteriorate.

Significant safety hazard.



## Hot Water Heaters

The three 600 gallon PVI water heaters are nearing the end of their life cycle.

Replacement will be needed within the next seven years.

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# Geneva Middle School North



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## Geneva Middle School North Building Summary

Originally opened in 2006, Geneva Middle School North was patterned after Geneva Middle School South and built to alleviate the overcrowding occurring at South due to the growth the District was experiencing. The school is a 2-story building with a small basement area for mechanical equipment. It is constructed of non-combustible building materials including masonry bearing walls, steel framing and pre-cast concrete. The total building consists of 198,000 square feet and is built on the 65-acre site shared with Middle School South. It has a student capacity of 1,100.

During the 2014-15 school year, sidewalk sections were installed at door #3 to extend the fire lane for more efficient student evacuation and the outdoor track was resurfaced. In 2015-16, concrete sidewalk sections were fixed and tree grates were filled in with concrete for student safety. Crack filling and seal-coating for the GMSN parking lot will occur spring 2016.

In February 2015, the Board approved the recommended request for Dahlquist & Lutzow Architects (DLA Ltd) to perform the 10 year Life Safety Survey for GMSN. DLA performed the site survey in April 2015 and provided the district with four “A” items that need immediate attention and 12 “B” items that need to be addressed over the next 2-3 years.

Additional projects to consider for GMSN after the Life Safety items are addressed are the conversion of the communication protocol **Direct Digital Controls** system from Lon to Bacnet. The **air conditioning system for the IT server room** is oversized for the heat load and continually cycles on and off, causing a condensation issue for that room and premature equipment failure. It is recommended a smaller tonnage system be installed in conjunction with the current system and if the server size increases as well as the heat load, the existing system will be there to handle the load. Additionally, the **LMC air handling unit** is undersized for cooling when the outside air temperature is above 80 degrees. The airflow needs to be increased and can be done without replacing the entire air handling unit by re-sheaving the pulleys on the shaft, adding 4-6 more VAV boxes with reheat coils and controls. Finally, the typical life cycle of a commercial hot water heater is 12 to 15 years. The two **300 gallon PVI hot water heaters** are original to the building and will need to be replaced within the next seven years. The **parking lot** will need to be seal coated within the next seven years.

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# Geneva Middle School North



## Lon Controller

Lon controls throughout the building.

Outdated and costly to repair.

Replace Lon to Bacnet.



## IT Server A/C

Oversized for heat load of space.

Cycles on and off continually causing condensation issues and premature equipment failure.

Replace with properly sized unit.



## LMC

AHU is undersized for space.

Only 2 VAV boxes serving the space.

Recommend increasing the capacity of the AHU and adding 4-6 VAV boxes with controls to increase comfort and control humidity.



## Hot Water Heaters

The two 300 gallon PVI water heaters are nearing the end of their life cycle.

Replacement will be needed within the next seven years.



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# Geneva Middle School South



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## Geneva Middle School South Building Summary

Constructed in 1993 and opened in 1994, Geneva Middle School South has undergone three (3) additions. Cafeteria expansion, additional classroom space, a third gymnasium and the Friendship Station Pre-School were added. The building is a 2-story building with a small basement area for mechanical equipment. It is constructed of non-combustible building materials including masonry bearing walls, steel framing and pre-cast concrete. The total building now consists of 246,253 square feet and is built on the 65-acre site shared with Middle School North. It has a student capacity of 1,281, including Friendship Station.

The referendum construction project of 2007-09 brought needed attention to several areas including ADA and building code requirements, roof replacement, security, and HVAC repairs. All carpet was replaced during the project. Technology improvements such as cabling, wireless access points and projectors were added. A key fob system and AI phone video entry system were added. The library furniture and shelving were replaced. The interior spaces were re-numbered and new signage for each space was added.

In 2014 the track was resurfaced and all cracked concrete sections were replaced.

In February 2015, the Board approved the recommended request for Dahlquist & Lutzow Architects (DLA Ltd) to perform the 10 year Life Safety Survey for GMSS. DLA performed the site survey in April 2015 and provided the district with six “A” items that need immediate attention and 12 “B” items that need to be addressed over the next 2-3 years.

Additional projects to consider for GMSS after the Life Safety items are addressed are the **contest gym flooring** is showing excessive wear and needs to be resurfaced and sealed. The **stage lighting** in the cafeteria is original to the building and starting to fail. We will need to update the entire lighting system within the next three years. The **fire lane** is starting to break down and will need to be seal coated this year to extend its life and resurfaced in the next two to three years. The **ceiling tile and grid** throughout the building is starting to show signs of wear and discoloration. Replacing the ceiling tile and grid should be completed in sections; we are recommending the first phase to be main office area, athletic and technology wings. The existing **temperature control** system (Lon) is outdated and costly to repair. It is scheduled to be converted to the ASHRAE standard Bacnet control. A new **hot water make-up air unit** needs to replace the gas-fired one for efficiency and freeze protection. Two **air handlers** equipped with **direct expansion (DX) cooling** are in need of cooling upgrades. It is proposed to add a **chiller** for efficiency and reliability, replacing old, inefficient and noisy roof-top DX units. The **hot water storage tank** is original to the building and will need to be replaced in the next seven years. The **parking lot** was resurfaced the summer of 2013 and will need to be crack filled and seal coated within the next five to seven years.

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## Geneva Middle School South



### **Fire Lane**

Pavement starting to show excessive cracking and breakdown.

Will need to be resurfaced.



### **Lon Controller**

Lon controls throughout the building.

Outdated and costly to repair.

Replace Lon to Bacnet.



### **Ceiling Tile**

Ceiling grid and tile are starting to show excessive discoloration and wear.

Replace ceiling grid and tile.



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# Harrison Street Elementary School





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# Harrison Street Elementary School

## Building Summary

Originally opened in 1928, Harrison Street Elementary School has had seven additions. The original building was constructed of non-combustible construction except for the roof which is wood framing. The original structure is two stories plus a basement, and the additions are all one story. All the additions were constructed of fire resistant construction, with masonry bearing walls. The building is equipped with a standby 80 kW natural gas emergency generator supplying power to emergency lighting/exit signs, fire alarm system, fob system, boilers, heating pumps, sump pumps and the new digital temperature control system.

It was completely renovated in 2009 to upgrade the HVAC, plumbing, lighting, ceilings, ceramic tile/carpet, restrooms, technology, roof, windows, concrete repairs, an addition to the sprinkler system, and aesthetics. ADA requirements were addressed to including a new elevator and a chair lift for the stage. All blackboards were replaced with whiteboards. The classrooms and library were outfitted with new furniture and bookcases. The entire building was repainted and several doors were replaced. A key fob system was added as well as an AI phone video entry system. The two playgrounds were combined and equipment replaced, and the kindergarten playground area was landscaped to be used as a teaching and play area. The building sits on 10 acres, has 90,684 square feet of space and a capacity of 550 students.

**Tuck-pointing** was repaired this year to address the cracked and missing mortar joints.

The building is in excellent shape and only in need of a few upgrades. Many of the **fifteen (15) cabinet unit heaters** are older and will need replacing as fans fail. Several **air handling units** should be either rebuilt or replaced including the library unit, the art room and the teacher's workroom/conference room area. The **radiant heat** in the glass hallway (kindergarten wing) should be replaced to provide proper heating to that space. The **boiler pumps were** installed in 1999 and are nearing the end of their estimated service life according to ASHRAE. They are in need of upgrading with **variable frequency drives** for optimal efficiency. The **parking lot** will need to be crack filled and seal coated within the next three to five years.

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# Harrison Street Elementary School



## **Cabinet Unit Heaters**

15 units are over 35 years old.

Replace with energy efficient units.



## **Air Handling Unit**

Needs rebuilding or possible replacement.

New motor, shaft, bearings and controls needed.



## **Boiler Pumps**

Pumps nearing end of life cycle.

Need to replace with energy efficient design and variable frequency drives for increased energy efficiency.

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## Western Avenue Elementary School



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## Western Avenue Elementary School

### Building Summary

Built in 1964, Western Elementary School is a 62,832 square foot, one-story building built on 14.18 acres. It has undergone two additions and has a student capacity of 561. The original building was constructed of cavity wall construction consisting of block and brick, with 1" cavity insulation. The additions were constructed of similar cavity walls. The windows are uniform throughout the building consisting of fixed panels with 1" insulated glass, fixed panels glazed with an aluminum insulating panel and a small operating hopper sash. There is a small mechanical mezzanine located on the roof. The exterior brick is in good condition. The building was originally constructed with asbestos containing material and much of it was abated or encapsulated. The building is equipped with a 60 kW natural gas emergency generator supplying power to the emergency lighting and exit signs, the key fob system and the new digital temperature control system.

The building was completely renovated in 2009 to upgrade the HVAC, plumbing, lighting, ceiling, flooring, restrooms, technology, sprinkler/fire alarm system, roof, concrete repairs, and ADA requirements including a new chair lift for the stage. All blackboards were replaced with whiteboards. The library received partial replacement of bookcases. The entire building was repainted and many doors were replaced. A key fob system was installed as well as an AI phone video entry system. The playground was replaced.

The library received a layout remodel in 2015.

The building is in excellent shape and only in need of a few mechanical and interior improvements. Several **interior doors** are damaged and starting to show excessive wear. Several **cabinet unit heaters** are old and in need of replacing. The **gym AHU** is aging and needs to be rebuilt with a new motor, bearings and shaft. The **chiller** and the **condensing unit** for the chiller need to be replaced. The **chilled water and secondary boiler pumps** are nearing the end of their life cycle and need to be replaced. They are in need of upgrading with **variable frequency drives** for optimal efficiency. The **gym roof** was installed in the early 2000s and the typical life cycle of a roof is 25 years. The roof will need to be replaced in the next six to seven years. The **parking lot** will need to be crack-filled and seal coated within the next three to five years.



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# Western Avenue Elementary School



## Cabinet Unit Heaters

9 units are over 20 years old.

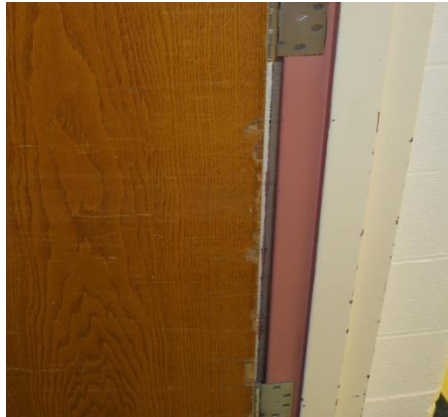
Replace with energy efficient units.



## Chiller

27 year old chiller is inefficient and repairs are becoming more frequent.

Replace with new efficient chiller.



## Interior Doors

Several doors in the building are damaged and in need of replacement.



## Chilled Water and Boiler Secondary Pumps

Pumps nearing end of life cycle.

Need to replace with energy efficient design and variable frequency drives for increased energy efficiency.

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## Mill Creek Elementary School



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## Mill Creek Elementary School Building Summary

Originally built in 1995, this 92,015 square foot building is built on 17.6 acres. It has a student capacity of 564. The building is a split-level design. It was constructed of non-combustible materials. The interior structure is columns and beams and exterior masonry bearing wall construction. Roofs are steel joists with steel trusses.

A 28,775 square foot addition was added in 2006, providing a five classroom wing, music/band rooms, a second wood floor gym and much needed storage. The building was partly renovated during the last referendum construction project.

The foundation settling issue and the leaking problem from the 2006 addition have been addressed and fixed. Code related issues like fire rated doors, emergency lighting and drainage issues were also addressed. The building temperature control system was upgraded to digital and several mechanical issues were completed. A key fob system and AI Phone video entry system were installed.

The parking lot adjacent to the fifth grade wing was reconfigured to be the primary pick-up and drop off location for students and parents in 2015. The reconfiguration was suggested by the Kane County Sherriff's Department to address safety concerns that were occurring on Brundige's pick-up side.

Overall, Mill Creek is in excellent condition and only in need of a couple minor upgrades. The **variable frequency drives** on the air handling units are older and repair costs are increasing. The **temperature controls** should be converted to the ASHRAE Standard Bacnet controls from the outdated and costly Lon Controls. The **mechanical cooling** for the office area is currently served off a large air handling unit that also serves the main classroom wing. Since most of the cooling season occurs when the students are on summer break, cooling the office space is costly and inefficient. We propose adding a separate, small air handling unit to serve the office area and re-ducting the office area off of the main classroom area. **Primary and secondary boiler pumps** are original to the building. They are in need of upgrading with variable frequency drives for optimal efficiency. The eighty-five gallon A.O Smith **hot water heater** was installed in 2002 and is nearing the end of its expected life cycle. The **front parking lot** will need to be crack filled and seal coated in the next two to three years. The **Simplex 4020 fire panel** will need to be replaced; it is original to the building and starting to have escalating repair costs and consistent breakdowns.



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# Mill Creek Elementary School



## Lon Controller

Lon controls throughout the building.

Outdated and costly to repair.

Replace Lon to Bacnet.



## Variable Frequency Drive (VFD)

VFDs have started failing this year.

All units need replacing.



## Primary and Secondary Boiler Pumps

Original to the building.

Need replacing with energy efficient design and variable frequency drives for increased energy efficiency.



## Fire Alarm System

Simplex fire alarm system needs to be updated.

Escalating repair costs and consistent breakdowns.



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# Heartland Elementary School



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## Heartland Elementary School

### Building Summary

Built in 2002, this 77,447 square foot building sits on 11 acres. It has a student capacity of 550. The building footprint is similar to Mill Creek Elementary School. The building is a split level design, constructed of non-combustible materials. The interior structure is columns and beams and the exterior is masonry bearing wall construction. The roofs are steel joists and trusses. The building is equipped with a standby 100 kW natural gas generator supplying power to emergency lighting and exit signs, fire alarm system, fob system, intercom system, heating pumps, sump pumps, and the digital temperature control system.

The building is in excellent shape and there are only a couple of deficiencies that need to be addressed. The **two chilled water pumps** need **variable frequency drives (VFD)**. This will greatly increase energy efficiency and lengthen the life of the pumps. The **carpet** will need to be replaced in the near future due to age, wear and extensive staining. The **air handling unit (AHU)** that controls the server room is nearing the end of its life cycle and will need to be replaced in the next two to four years. The **parking lot** will need to be crack filled and seal coated in the next two to four years.

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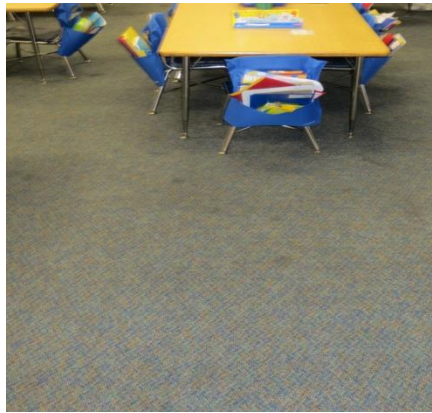
# Heartland Elementary School



## **Air Handling Unit**

Air handling unit is nearing the end of its life cycle.

Will need to be replaced in the next two to four years.



## **Carpet Replacement**

Carpet is starting to show wear and staining that we are unable to remove.

Life cycle of carpet is 12-20 years.

Carpet will need to be replaced.



## **Chilled Water Pumps (2) – Add VFD**

Variable Frequency Drives will greatly increase energy efficiency and lengthen the life of the pumps.



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# Williamsburg Elementary School





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## Williamsburg Elementary School Building Summary

Built in 2008, this 104,000 square foot building is built on 14 acres. It has a student capacity of 550. This state of the art building is built with non-combustible building materials. The HVAC and lighting systems are energy efficient.

The building is in excellent shape with the **parking lot** needing to be crack filled and seal coated in the next two to four years.

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# Fabyan Elementary School



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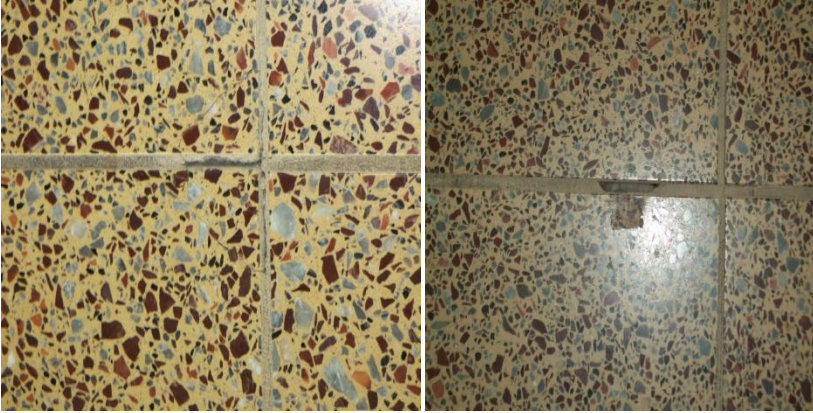
## Fabyan Elementary School Building Summary

Built in 2009, this 104,000 square foot building sits on 11 acres. It has a student capacity of 550. This state of the art building is built with non-combustible building materials. The HVAC and lighting systems are energy efficient.

The building is in excellent shape except for a couple of items. The **Terrazzo floor tile** is in need of repair or replacement. The tile is cracking because it did not properly bond to the floor. The district received money from a performance bond of \$138,000 to repair all flooring issues. The floor tile has been replaced in phases over the course of three years. The floor tile has been replaced with carpet on the first and second floors. The final phase of tile replacement on the ground floor is scheduled to be completed summer 2016. The **parking lot** will need to be crack filled and seal coated this year to extend the life of the pavement.

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## Fabyan Elementary School



### Floor Tile

Terrazzo tile repair/replacement.

Tile did not properly bond to the floor and is cracking.

Final phase of replacing all ground floor tile will begin the summer of 2016.



### Parking Lot

Several areas are starting to show cracking.

Crack filling and seal coating will be needed this year to extend the life of the pavement.



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## Coultrap Educational Services Center



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## Coultrap Educational Services Center Building Summary

Built in 1916, this 28,400 square foot building has had 3 additions and sits on 1.7 acres. Fourth Street School began as an elementary building, housed the original Friendship Station pre-school, and now serves as the District's Administration Center. During the last referendum several upgrades to the building were made including IT server upgrades, several office modifications and the Intervention Coordinators office was added. With the demolition of Coultrap Elementary school in 2013, Fourth Street Administration building was renamed to Coultrap Educational Services Center. The offices were reorganized and updated in 2014-15 for better work flow.

The building is generally in good shape except for some aesthetic and minor maintenance upgrades.

**Resurfacing the parking lot** will need to take place within the next three years. **Tuck-pointing** will need to be done to address the cracking mortar joints. The heating system works well, but the **fan** is older and needs replacing, along with the **variable frequency drive (VFD)**, which hasn't worked for years. The building is cooled with **fan coil units** which were installed in 1996. These units are reaching the end of their life cycle and need to be replaced. The Quincy **air compressor** that operates the pneumatic HVAC control system is twenty years old and is near the end of its life and will need to be replaced in the next seven years. The seventy-five gallon A.O Smith **hot water heater** was installed in 1996 and is at the end of its expected life cycle and will need to be replaced. The **existing galvanized piping** is deteriorating and has excessive amount of rust. We will need to replace the old piping with copper piping and provide new ball valves for adequate shut-off. There is no **emergency back-up generator** for the building, although the server room is equipped with a standby emergency power supply system that was recently installed. The **Notifier 5000 fire alarm systems will need to be updated** to meet current NFPA code requirements.

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# Coultrap Educational Services Center



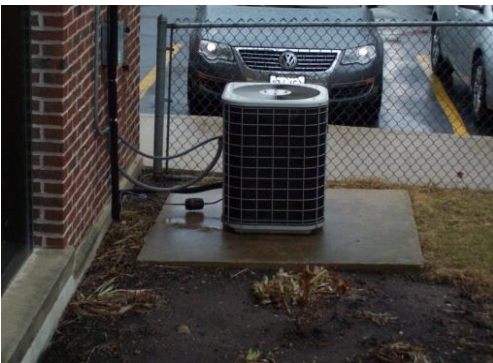
## **Tuck-pointing**

Mortar joints are cracking and will need to be repaired.



## **Fire Alarm System**

Notifier 5000 fire alarm panel will need to be updated to meet current NFPA code requirements.



## **Fan Coil Condensing Unit**

The entire building is cooled with fan coil units.

Several are beginning to fail and most will need to be replaced in the next two to seven years.



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## Coultrap Educational Services Center



### Air Compressor

Twenty years old and needs to be replaced.



### VFD and Fan for the Furnace

VFD doesn't work and the fan for the furnace is at least 37 years old.



### Parking lot

Several areas with extreme cracking.  
Resurfacing will be needed.



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# Keslinger Transportation Building



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## Keslinger Transportation Building Building Summary

The Keslinger Transportation Facility was opened in 2004. The 44,350 square foot building is constructed on 7.9 acres. This facility houses 47 of the District's buses, three bus service bays and the grounds shop for the western part of the District. The bus bays are not heated but are equipped with plug-ins for the heater core for cold weather starting. The service bays are heated. In addition, there are office and dispatch facilities as well as a large conference area for training and meetings. The building is equipped with a small kitchen area and restroom facilities for the staff and drivers.

The **parking lot** was crack filled and seal coated in the summer of 2015 to extend the life of the parking lot.

The **heating ventilation and air conditioning (HVAC)** equipment is original to the building and nearing the end of its estimated service life according to ASHRAE. This includes the three Lennox split systems that serves the offices and conference area, along with three Bananza make-up air units that serve the three service bays. The sixty gallon A.O Smith **hot water heater** is nearing the end of its expected life cycle and will need to be replaced. The **lighting** will need upgrades to replace the inefficient metal halide fixtures in the service and ground shop bays, with new high output fluorescent T-8 fixtures. The **carpet** in the building is starting to show wear and will need to be replaced. **Resurfacing** will be needed within the next two to three years. There is not an **emergency back-up generator** to operate the heating systems, lift station ejector pumps, emergency lighting, and access controls.

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# Keslinger Transportation Building



## Parking Lot

Pavement starting to crack and breakdown.

Resurfacing will be needed in the next two to three years.



## Carpet Replacement

The carpet is starting to show wear and we are unable to remove stains.

Carpet will need to be replaced.



## Lighting Upgrades

Replace inefficient mercury vapor lighting with high output T-8 lighting in service bays and ground shop for energy savings.

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# Keslinger Transportation Building



## HVAC Split System

The 3 Lennox split systems are nearing their ASHRAE recommended service life.

Replacement will be needed within the next seven years.



## Hot Water Heater

The 60 gallon A.O Smith water heater is nearing the end of its life cycle.

Replacement will be needed within the next two to five years.



## Air Handling Unit

The three Bananza make-up air units are nearing their ASHRAE recommended service life.

Replacement will be needed within the next seven years.



## Completed Capital Improvement Plan Projects 2015-16

Projects Approved			
Project	Budget	Cost	Variance
GHS Athletic Areas – Tile Flooring	\$175,000.00 (includes \$50,000 ISBE Maintenance Grant)	\$132,783.00 (\$137,173.50 payment less credit of \$4,390.50)	\$42,217.00
GMSN – Concrete Sidewalk Sections/Tree Grates	\$7,000.00	\$6,750	\$250.00
HSS Tuck-Pointing	\$10,000.00	\$9,817	\$183.00
Projects Partially Approved			
GMSN – Crack Filling, Seal-Coating & Striping	\$15,000 budgeted	\$16,918.84	(\$1,918.84)
Bus Garage – Crack Filling Pavement, Seal-Coating & Striping	\$15,000 budgeted	\$7,637.80	\$7,362.20
Sub-Total	\$222,000	\$173,906.64	\$48,093.36
Projects Added by Facility Task Force Committee			
MCS Parking Reconfiguration	(500 5110)	\$24,248.60	(\$24,248.60)
Net Effect	\$222,000	\$198,155.24	\$23,844.76
Projects Not Approved because of Budget Constraints			
Project	Budget	Cost	Variance
GHS Academic Area – Carpet Replacement	Asked for \$75,000 Fall 2014	None	0
GMSS – Contest Gym Flooring	Asked for \$25,000 Fall 2014	None	0
WAS Interior Doors	Asked for \$15,000 Fall 2014	None	0
FES Floor Tile (\$50K carry from 2014-15)	Asked for \$100,000 Fall 2014	None	0
CESC – Asbestos Abatement	Asked for \$50,000 Fall 2014	None	0

# Capital Improvement Plan Projects 2016-17

## 20E 300 2540 5110

### GHS – Academic Areas

Steam Pipe Replacement	\$193,150.00
Mobile Classrooms	
Utilities and School Systems	\$224,400.00
Two Units and Installation	\$525,600.00
VFD's and Secondary Pumps(6)	\$100,500.00
Carpet Replacement	
Office Areas	\$ 93,165.00
LMC	\$ 73,795.00
Classrooms	<u>\$183,040.00</u>
<b>SUBTOTAL</b>	<b>\$1,393,650.00</b>

## 20E 500 2540 5110

<b>GMSN</b>	IT Server Room A/C	\$ 20,000.00	
	10 Year HLS "A" Repairs	\$ 17,595.00	
<b>GMSS</b>	Gym Flooring	\$ 25,000.00	
	10 Year HLS "A" Repairs	\$ 46,160.00	
	LMC Fire Shutters (10 Yr HLS "B" Item)	\$125,000.00	
	Fire Lane (Crack-fill/Seal Coat)	\$ 5,000.00	
<b>WAS</b>	Chilled/hot water pumps (3)	\$ 25,000.00	
	200-Ton Chiller	\$260,000.00	
	VFD for the chilled/hot water pumps	\$ 25,000.00	
<b>MCS</b>	VFD (6)	\$ 34,000.00	
	Hot Water Pumps (2)	\$ 15,000.00	
<b>FES</b>	Floor Tile	\$165,500.00	
	Parking Lot (Periodic maintenance)	\$ 45,000.00	
<b>CESC</b>	Emergency Back-up Generator	\$125,000.00	
<b>Bus Garage</b>	Emergency Back-up Generator	\$125,000.00	
	Building Carpet Replacement	<u>\$ 10,000.00</u>	
	<b>SUBTOTAL</b>	<b>\$1,068,255.00</b>	
	<b>300</b>		<b>\$1,393,650.00</b>
	<b>500</b>		<b><u>\$1,068,255.00</u></b>
	<b>TOTAL</b>		<b>\$2,461,905.00</b>

## 20E 300 2540 5110

Budgeting for Boiler Replacement	\$150,000.00
Budgeting for Burgess Field Turf	<u>\$ 50,000.00</u>
	<b>\$200,000.00</b>

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Building / Description	Recommendation	Cost Estimate		Priority	Year	Comments	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
GMS-N													
IT Server Room A/C	Install new A/C unit	\$ 20,000.00		H	1	Current unit is oversized for load	\$ 20,000.00						
Public Lavatories and Sinks throughout building - Water temperature exceeds 110 degrees.	Provide thermostatic mixing valve at all public lavatories to prevent water temperature from exceeding 110 degrees.	\$ 6,400.00		H	1	10 Year HLS "A" Repairs	\$ 6,400.00						
Science Room does not have proper thermostatic mixing valve at eye wash unit.	Provide proper thermostatic mixing valve in Science Rooms 115, 121, 136, 141, 215, 221, 236, 241	\$ 7,120.00		H	1	10 Year HLS "A" Repairs	\$ 7,120.00						
Faucet is cold water only (special purpose) does not have serrated nozzle outlet. Science Rooms throughout building	Provide serrated nozzle outlet in Science Rooms 115, 121, 136, 141, 215, 221, 236, 241	\$ 2,575.00		H	1	10 Year HLS "A" Repairs	\$ 2,575.00						
Eye wash is supplied with cold water only in Dishwashing area	Provide necessary hot water piping and approved mixing valve	\$ 1,500.00		H	1	10 Year HLS "A" Repairs	\$ 1,500.00						
The guardrail along the open side of the stair has a height of 36" which is lower than the required 42" height.	Extend the existing guardrail to achieve a minimum overall height of 42 inches in Stair A, B, C, D, E, and F	\$ 25,000.00		M	2	10 Year HLS "B" Repairs		\$ 25,000.00					
Door leading to basement does not have a label and therefore does not comply with the 1-hour fire rating requirement for an interior stair	In Stair C and D Replace door with 1-hour fire-rated door.	\$ 5,000.00		M	2	10 Year HLS "B" Repairs		\$ 5,000.00					
First floor doors have vision panels that are rated 1/3 or 3/4-hour and therefore do not meet the required 1-hour fire-rating.	In Stair C, D and F Replace doors with 1-hour fire-rated doors.	\$ 20,000.00		M	2	10 Year HLS "B" Repairs		\$ 20,000.00					
Doors leading to the north Team Center are labeled with a 1/3-hour fire rating and therefore do not meet the required 3/4-hour fire rating.	In library Replace doors with 3/4-hour fire-rated doors.	\$ 5,000.00		M	2	10 Year HLS "B" Repairs		\$ 5,000.00					
Wall penetration is not sealed and therefore does not comply with the required fire or smoke rating.	In Custodian rm 139B Seal penetrations in the wall separating the Library to comply with 1-hour fire rating. Seal penetrations in all other walls against the passage of smoke.	\$ 500.00		M	2	10 Year HLS "B" Repairs		\$ 500.00					
Door leading into Storage 199B are labeled with a 1/3-hour fire rating and therefore do not meet the required 3/4-hour fire rating.	In White gym (Storage 199B) Replace the door with a 3/4-hour fire rated door.	\$ 5,000.00		M	2	10 Year HLS "B" Repairs		\$ 5,000.00					
Doors leading into Storage 197A are labeled with a 1/3-hour fire rating and therefore do not meet the required 3/4-hour fire rating.	In Blue gym (Storage 197B) Replace the door with a 3/4-hour fire rated door.	\$ 5,000.00		M	2	10 Year HLS "B" Repairs		\$ 5,000.00					
Doors leading into Storage 171 and out the back of the Platform are not labeled and therefore do not meet the required 3/4-hour fire rating.	In Cafeteria 164 Replace the door with a 3/4-hour fire rated door.	\$ 10,000.00		M	2	10 Year HLS "B" Repairs		\$ 10,000.00					
Doors are not labeled and therefore do not meet the required 3/4-hour fire rating.	Technical Education 157 and 156 Replace the doors with a 3/4-hour fire rated door.	\$ 15,000.00		M	2	10 Year HLS "B" Repairs		\$ 15,000.00					
Doors are not labeled and therefore do not meet the required 3/4-hour fire rating.	In Finishing 156A Replace the door with a 3/4-hour fire rated door.	\$ 5,000.00		M	2	10 Year HLS "B" Repairs		\$ 5,000.00					



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Building / Description	Recommendation	Cost Estimate		Priority	Year	Comments	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
GMS-S													
Gym Flooring	Resurface and seal Contest Gym	\$ 25,000.00		H	1	Floor showing wear	\$ 25,000.00						
Pair of doors creates a dead-end corridor therefore impeding egress.	Remove Doors in corridor outside receiving rm 180	\$ 1,500.00		H	1	10 Year HLS "A" Repairs	\$ 1,500.00						
No acid neutralization device installed on the drain of "BLR-3"	Install acid neutralization device in boiler room	\$ 2,500.00		H	1	10 Year HLS "A" Repairs	\$ 2,500.00						
Air cooled condensing units (2) near "PRV-2" & "PRV-3" are within 10' of roof edge and are dangerous to service	Provide movable roof guard for fall protection	\$ 6,000.00		H	1	10 Year HLS "A" Repairs	\$ 6,000.00						
Public Lavatories and Sinks throughout building - Water temperature exceeds 110 degrees.	Provide thermostatic mixing valve to prevent water temperature from exceeding 110 degrees.	\$ 29,600.00		H	1	10 Year HLS "A" Repairs	\$ 29,600.00						
Sink has eye wash installed as an attachment to the faucet in Nurse office 191	Provide separate eye wash fixture with thermostatic mixing valve. Remove existing faucet mounted eye wash	\$ 3,800.00		H	1	10 Year HLS "A" Repairs	\$ 3,800.00						
Faucet is cold water only (special purpose) does not have serrated nozzle outlet. Science Rooms throughout building	Provide serrated nozzle outlet.	\$ 2,760.00		H	1	10 Year HLS "A" Repairs	\$ 2,760.00						
The fire shutters surrounding the Library do not close and therefore do not provide the required 1-hour fire rating. Repairs to improve the operation have been unsuccessful.	Remove the fire shutters and construct 1-hour fire rated wall partitions to enclose the library.	\$ 125,000.00		H	1	10 Year HLS "B" Repairs	\$ 125,000.00						
Fire Lane	Crack-fill and seal coat 2016 to extend life and full resurface 2017	\$ 40,000.00		M	1-2	Cracks more apparent posing hazards	\$ 5,000.00	\$ 35,000.00					
Hot water make-up air unit	Replace failing unit	\$ 22,000.00		M	2	Replace gas fired unit for efficiency		\$ 22,000.00					
Stage Lighting	Update the entire light system	\$ 25,000.00		M	2	Original to the building, starting to fail		\$ 25,000.00					
Doors do not have a label and therefore do not meet the required 1-hour fire rating. In addition, the hardware is in disrepair making it difficult to egress.	In Stair B, C, F and G - Replace doors with 1-hour fire-rated doors.	\$ 25,000.00		M	2	10 Year HLS "B" Repairs		\$ 25,000.00					
Doors do not have a label or have a label that is less than what is required and therefore do not meet the 3/4-hour fire rating.	Replace doors with 3/4-hour fire-rated doors in Storage 109A, Library Workroom 109B, Library 140 (two pairs of doors), ITC 109C, Faculty Resource 109D, LRC Storage 109E, and Electrical Room 109F	\$ 25,000.00		M	2	10 Year HLS "B" Repairs		\$ 25,000.00					
In Cafeteria room 185 - Large coiling door into Serving Area does not have a label or fusible link and therefore does not meet the required 3/4-hour fire rating.	Replace coiling door with 3/4-hour rated door.	\$ 9,000.00		M	2	10 Year HLS "B" Repairs		\$ 9,000.00					
Door between storage room and Contest Gym has a label that is less than what is required and therefore does not meet the 3/4-hour fire rating.	In Storage room 196A - Replace door with 3/4-hour fire-rated door.	\$ 2,500.00		M	2	10 Year HLS "B" Repairs		\$ 2,500.00					
Door into Electrical Room has a label that is less than what is required and therefore does not meet the 3/4-hour fire rating.	In Multi-purpose room 197 Replace door with 3/4-hour fire-rated door.	\$ 2,500.00		M	2	10 Year HLS "B" Repairs		\$ 2,500.00					
Doors do not have a label and therefore do not meet the 3/4-hour fire rating.	In Cafeteria 185 Replace door with 3/4-hour fire-rated door.	\$ 35,000.00		M	2	10 Year HLS "B" Repairs		\$ 35,000.00					
Doors do not have a label and therefore do not meet the 3/4-hour fire rating.	In Technical Education 173, Finishing Room 173A, Office 173C, and Technical Education 179 Replace door with 3/4-hour fire-rated door.	\$ 15,000.00		M	2	10 Year HLS "B" Repairs		\$ 15,000.00					

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