



WOLD ARCHITECTS AND ENGINEERS

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# **Facility Analysis For**

## **District Wide Facility Analysis**

**Independent School District #861**

**Winona, Minnesota**

May 11, 2021

Project No. 202116



## Facility Analysis Categories Winona, Minnesota

The following report investigates current physical and programmatic conditions and deficiencies evident in Independent School District #861 buildings. The information documented in this report was gathered primarily through field observation and supplemented by evaluation of existing information and discussion with School personnel.

The facility analysis report explores conditions and deficiencies in eleven important areas, which are outlined as follows:

- **SITE**  
This section describes the site and its surroundings.
- **EXTERIOR**  
This section describes the exterior envelope including roofing information supplied by the District.
- **INTERIOR**  
This section describes the physical condition of the interior spaces and finishes within the facility.
- **ACCESSIBILITY**  
This section addresses the conformance of the facility to the intentions of accessibility requirements with focus on the following issues: accessible parking, an accessible route to the main entrance, ability to attain all levels of the facility, and access to each teaching space.
- **LIFE SAFETY**  
This section explains life safety and code deficiencies as noted and as discovered during field observation.
- **HAZARDOUS MATERIALS**  
This section covers the information provided by the District concerning asbestos materials present and lead in the water.
- **MECHANICAL SYSTEMS**  
This section documents the existing mechanical systems and components, and their known deficiencies.
- **ELECTRICAL SYSTEMS**  
This section documents the existing electrical systems and components, and their known deficiencies.
- **PROGRAM**  
This section consists of facility programmatic and deficiency issues as addressed by the various facilities' Site administration and staff.
- **TECHNOLOGY**  
This section documents the existing technology systems and components, and their known deficiencies. It covers only non direct instructional technology infrastructure for the various buildings.
- **EXPANDABILITY**  
This section addresses the factors involved in any increase in building size or modification of the facilities.

Each category noted above includes a list of "analysis" statements which describes conditions or deficiencies. Following the "analysis" portion of each category is a list of "issues" which describe the action necessary to resolve mentioned conditions or deficiencies. Accompanying the "issue" is a cost, based on projected year 2016 project costs.



## Facility Analysis Prioritization Winona, Minnesota

### PRIORITIZATION CATEGORIES

- **Priority 1 (0 - 2 years)**

Life Safety Issue	As typically noted by Fire Marshal/Life Safety Officials.
Deterioration Item	Further deterioration will create higher future repair costs or will damage other areas in the building.
Health Issue	Rooms with no ventilation or items that do not meet state health code requirements and have been tagged.
Accessibility Issue	Must complete to provide access into the building, to the curriculum within the building, to access a restroom or to obtain a drink of water.
Hazardous Materials	Item posing a significant impact on building occupants.

- **Priority 2 (2 - 5 years)**

Energy Issue	Item replaced results in a payback in 10 years or less.
Deterioration Item	Material or system that currently functions but will require replacement or maintenance within 5 years.
Accessibility Issue	Modification required to meet state code guidelines.
Modernization	Modifications required to support future modernizations.
Hazardous Materials	Removal of items affected by other changes occurring in Group 2.
Health Issue	Inadequate exhaust and ventilation in lab environments and other areas lacking adequate ventilation.

- **Priority 3 (6 - 10 years)**

Energy Issue	Item replaced results in a payback in more than 10 years.
Health Issue	Non-tagged items that do not meet state health code requirements.
Deterioration Item	Material or system that currently functions but will require replacement or maintenance in 6-10 years.
Hazardous Materials	Removal of items affected by other changes occurring in Group 3.

- **Priority 4 (Would like to do within 10 years)**

Aesthetics	Item which impacts the visual environment.
Hazardous Materials	Removal of items affected by other changes occurring in Group 4.
Accessibility Issue	To meet full requirements of federal guidelines as stated in the ADA (American with Disabilities Act).

- **Priority 5 (\$500 or under)**

- **Priority N (Non-Prioritized)**

Item which is elective/aesthetic or programmatic which can be done at any time.



**Jefferson Elementary  
Winona, Minnesota**



**Address:** 1268 West 5th Street  
Winona, Minnesota 55987

**Contact:** Mike McArdle

**Phone:** 507-494-0871

**Year(s) Built:** 1938

**Gross Area:** 92,883 S.F.

**Site Area:** 12.5 acres

**Parking:** 0

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis

- Playground equipment and surfacing needs to be updated to match safety and District standards.

### Issues

- 1 Replace playground equipment and surfacing.  
**Priority: 1**

**Cost: \$400,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis

- The window systems throughout the building are made up of the original wood double hung windows. Aluminum screens and storm windows have been added to the exterior sash which are about 27 years old.
- Throughout the exterior façade, a large portion (50%) of the brick mortar joints is deteriorating, causing brick to spall.
- The limestone window sills and ledges are moldy and need to be cleaned.
- The exterior limestone stairs are deteriorated and are no longer level.

### Issues

- |   |   |              |                    |
|---|---|--------------|--------------------|
| 1 | Replace all exterior windows.           |              |                    |
|   | <b>Priority: 1</b>                      | <b>Cost:</b> | <b>\$2,058,284</b> |
| 2 | Tuckpoint existing masonry walls (50%). |              |                    |
|   | <b>Priority: 2</b>                      | <b>Cost:</b> | <b>\$800,000</b>   |
| 3 | Clean limestone sills and ledges.       |              |                    |
|   | <b>Priority: 3</b>                      | <b>Cost:</b> | <b>\$36,882</b>    |
| 4 | Repair stairs from exterior exits.      |              |                    |
|   | <b>Priority: 2</b>                      | <b>Cost:</b> | <b>\$133,848</b>   |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis

- The carpet flooring in the Administration Offices and Media Center is worn and in need of replacement.
- The window blinds throughout the building are old and need to be replaced.
- The original vintage auditorium seats are in poor condition and in need of replacement.
- The original plaster walls throughout the building are cracked in certain locations.
- As part of mechanical renovation, adding ceilings and LED lights throughout the facility to replace existing ceiling and lights would be beneficial.
- Re-skin all remaining chalk boards to be white boards to match the current District Standard.
- Cafeteria flooring and wall paint is needing to be replaced due to high wear and tear.
- Basketball hoops are past their useful life.
- Seclusion rooms are in disrepair and are needed for programming.
- A door is needed to the cafeteria for security lockdown purposes.
- The casework in the Staff Break Room does not have an accessible sink and does not have a surface that meets current accessibility code height requirements.

### Issues

- 1 Install ceilings throughout (lighting by elec).  
**Priority: 1** **Cost: \$629,829**
- 2 Replace window blinds.  
**Priority: 1** **Cost: \$109,457**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Issues

3	Replace main level auditorium seats or complete riser removal. <b>Priority: 4</b>	<b>Cost:</b>	<b>\$60,365</b>
4	Plaster wall repair (620SF). <b>Priority: 3</b>	<b>Cost:</b>	<b>\$18,441</b>
5	Skin existing chalkboards to be whiteboards. <b>Priority: 4</b>	<b>Cost:</b>	<b>\$85,662</b>
6	Replace gym doors and hardware. <b>Priority: 1</b>	<b>Cost:</b>	<b>\$20,225</b>
7	Replace cafeteria VCT / kitchen floor. <b>Priority: 2</b>	<b>Cost:</b>	<b>\$23,423</b>
8	Replace Basketball Hoops. <b>Priority: 3</b>	<b>Cost:</b>	<b>\$20,820</b>
9	Repair existing ceiling in gymnasium. <b>Priority: 3</b>	<b>Cost:</b>	<b>\$22,638</b>
10	Replace main office carpet. <b>Priority: 2</b>	<b>Cost:</b>	<b>\$15,360</b>
11	Repace media center carpet. <b>Priority: 2</b>	<b>Cost:</b>	<b>\$24,783</b>
12	Paint Cafeteria Walls. <b>Priority: 3</b>	<b>Cost:</b>	<b>\$11,778</b>
13	Repair seclusion room walls and doors. <b>Priority: 2</b>	<b>Cost:</b>	<b>\$44,616</b>



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Issues

14 Add door to cafeteria for lockdown.

**Priority: 1**

**Cost: \$8,625**

15 Add acoustic treatment to cafeteria.

**Priority: 2**

**Cost: \$20,225**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis

- Existing stair railings do not meet code and should be added onto.
- Toilets within classrooms do not meet current accessibility codes and should be remodeled.
- Office areas above the stage are not accessible. Remodeling the balcony would allow these offices to be accessible from the second floor.
- There is one Kindergarten room that needs a second exit.
- The lower level playroom is not accessible. An addition for an elevator is required to meet code.
- A convenient ADA path to the stadium would better serve the student population.
- Toilets in the basement are not accessible and should be remodeled to meet current codes.

### Issues

- Add to existing stair railings to meet code.  
**Priority: 4** **Cost: \$133,848**
- Remodel 1st floor classroom toilets to meet code.  
**Priority: 1** **Cost: \$654,636**
- Relocate offices from stage to balcony (infill risers).  
**Priority: 3** **Cost: \$97,140**
- Add 2nd exit to Kindergarten room.  
**Priority: 2** **Cost: \$7,436**
- Install elevator to access lower level playroom.  
**Priority: 1** **Cost: \$743,600**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Issues

- 6 Provide ADA path to stadium field.

**Priority: 2**

**Cost: \$87,683**

- 7 Remodel basement toilets.

**Priority: 1**

**Cost: \$333,728**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis

#### Heating and Ventilation

- The building was originally served by a coal fired boiler that was later converted to natural gas. In the 1970's a 3,770 MBH Burnham Firebox low pressure steam boiler was installed to replace the original boiler. An additional 2,484 MBH boiler was installed approximately 2 years ago. The original boiler has now been removed. The new boilers were originally installed with dual fuel capability, however, the fuel oil system has now been removed. Building staff noted that one boiler is able to handle the building heating load under all conditions.
- The condensate returns to the boilers room through a duplex vacuum condensate receiver. The condensate receiver was recently replaced and is in good condition. The condensate is then pumped to the boiler feed tank with duplex pumps to supply the boilers. A water softener was added to the boiler feed tank make-up water line approximately 3 to 5 years ago. The make-up water line has the code required RPZ backflow preventer.
- The underground fuel oil tank storage system has been removed. The fuel oil circulating pumps have been abandoned in place and the boiler plant now runs on firm gas.
- Ventilation air is supplied to the building by one large built-up air handling unit located in the basement installed in the original building construction. The unit has a steam heating coil to provide tempered ventilation air. The original well water evaporative cooling system has been disconnected. The original motor and starter have been replaced with a variable speed drive.
- Supply air from the air handling unit is distributed through a pressured air tunnel and up through the building through chases connected to the tunnel. The air is controlled to a neutral air temperature. The air tunnels are also used to technology cable distribution and domestic water and sanitary waste and vent piping. The tunnels have been cleaned of asbestos and the tunnel floor are concrete. The building system observed to be common to the air distribution tunnels does not comply with current code standards.
- Some occupied areas of the building were noted to not have a direct source of ventilation air and do not comply with current code standards.
- Heating zone control is provided by steam radiators located around the building perimeter.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis Heating and Ventilation

- The tunnels around the perimeter of the building have been clean of asbestos and the tunnel floors finished with concrete. The tunnels are used for steam pipe distribution throughout the building and are ventilated by several exhaust fans.
- The locker rooms in the lower level are heated with steam radiators at the ceiling and ventilated by through wall propeller style exhaust fans. The exhaust fans are beyond their useful life and ventilation in this area is very poor.
- A Classroom area on the lower level on the east side of the building has been renovated and heating and ventilation is supplied through ceiling diffusers.
- The kiln exhaust system located in a storage room adjacent to the art room on the lower level does not start. Staff noted that the kiln fan is also ducted to exhaust the toilet room on the floor above.

### Temperature Control

- The facility is served with a pneumatic control system. The air compressor and associated air dryer and original pneumatic control panel is located in the basement fan room.
- The Automated Logic direct digital control system has been expanded to the building to provide time of day scheduling and minimal monitoring. Access to the system is through the District Office. The maintenance staff on site do not have access to the system.

### Air Conditioning

- The data server room on the upper floor is served by a split AC system for cooling control.
- The computer lab in room 209 on the upper floor is not air conditioned.
- With the exception of the spaces noted above, there is no central air conditioning system for the building. A window style air conditioner is located in the principal's office.

### Plumbing

- Plumbing fixtures that have been replaced in the building are in good condition. The water closets have manual flush valves and the urinals have electronic sensors. The lavatories in the main toilet rooms have separate hot and cold faucets.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis Plumbing

- The locker room showers and fixtures on the lower level are in very poor condition.

### Issues

- 1 Convert the existing building steam heating system to hot water. Provide a high efficiency condensing boiler to handle the building loads during light load Spring and Fall months. Convert the existing steam boilers to hot water operation to have the peak building heating loads. The hydronic system will consist of constant volume primary pumps installed on each boiler and a variable speed secondary system for distribution throughout the building. Includes new direct digital controls for all new systems as an extension of the District's Automated Logic System.  
**Priority: 1** **Cost: \$1,596,857**
- 2 Provide an air cooled chiller to serve all new air handling systems to provide air conditioning. A secondary chilled water loop will be provided to serve all terminal active chilled beam and induction displacement units. Chilled water primary and secondary loops will be distributed throughout the building by a variable primary system. Includes new direct digital controls for all new systems as an extension of the District's Automated Logic System.  
**Priority: 1** **Cost: \$1,047,538**
- 3 Provide new central dedicated outside air units with with supply and return air mains ducted throughout the building. Induction displacement units and chilled beams will be provided for individual heating and cooling zone control. Large volume spaces such as the gyme will be served by a separate constant volume unit. Replace existing general use exhaust fans throughout the building. Includes new direct digital controls for all new systems as an extension of the District's Automated Logic System.  
**Priority: 1** **Cost: \$3,576,960**
- 4 Provide perimeter hot water fin tube radiation around perimeter of the building.  
**Priority: 1** **Cost: \$268,272**
- 5 Provide de-stratification fans to serve high volume spaces such as the gym.  
**Priority: 3** **Cost: \$22,995**
- 6 Provide a water softening system to serve all building domestic water.  
**Priority: 2** **Cost: \$43,435**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Issues

- 7 Investigate cause for sanitary system drainage issues by camera scoping all underground lines.

**Priority: 4**

**Cost: \$229,947**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis

- Distribution transformers and panels are approximately 30 years old and should be replaced. Some additional panelboards have been added to accommodate new loads such as an elevator. Many of the panelboards are nearing maximum capacity.
- Due to the age of the building and the amount of electrical modifications, the entire electrical distribution system including branch circuits should be traced. Revised, accurate panelboard schedules should be produced for ease of maintenance and future electrical work.
- Most interior lights are pendant mounted, 2 lamp, fluorescent T8 fixtures. There are recessed 4 lamp, fluorescent T8 fixtures throughout out the building as well as new, recessed, indirect, volumetric, LED fixtures. The gym has new 6 lamp, wire-guarded, fluorescent, T8, 2' x 4', high bay fixtures. The exterior wall mounted lights are HID and there are very around the facility's perimeter. Additional lights should be added in the mechanical rooms in the basement. The light fixtures are controlled via local wall switches. The stairways are the only areas with occupancy sensors. Consider updating and adding new interior and exterior LED fixtures as well as new lighting controls.
- Consider adding outlets to classrooms for programmatic needs.

### Issues

- 1 Replace hallways panelboards with adequate space breakers and existing transformers.  
**Priority: 1** **Cost: \$57,750**
- 2 Add (3 duplex) power outlets in the classrooms as needed.  
**Priority: 2** **Cost: \$26,770**
- 3 Replace interior lighting to LED light fixtures.  
**Priority: 1** **Cost: \$629,829**
- 4 Replace exit signs throughout the facility.  
**Priority: 1** **Cost: \$5,000**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Issues

- |   |   |              |            |
|---|---|--------------|------------|
| 1 | Cafeteria footprint too narrow.           |              |            |
|   | <b>Priority:</b>                          | <b>Cost:</b> | <b>\$0</b> |
| 2 | Deliveries crossing over student traffic. |              |            |
|   | <b>Priority:</b>                          | <b>Cost:</b> | <b>\$0</b> |
| 3 | Lack of toilets in building.              |              |            |
|   | <b>Priority:</b>                          | <b>Cost:</b> | <b>\$0</b> |
| 4 | Storage space for large SPED equipment.   |              |            |
|   | <b>Priority:</b>                          | <b>Cost:</b> | <b>\$0</b> |
| 5 | Create maker lab in media center.         |              |            |
|   | <b>Priority:</b>                          | <b>Cost:</b> | <b>\$0</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Jefferson Elementary Winona, Minnesota

### Analysis

- The PA/phone system has been updated district-wide with a Mitel phone system. All communication is sent through the phone to existing PA speakers throughout the building. The gym has a local sound system. The replacement of existing paging speakers and cabling is recommended.
- The main data rack is located in the Janitor's Closet 224. There are (9) 24 port patch panels with 18 spares. The data cabling is Cat 5e and there are two small Eaton UPSes for the head-end equipment. There is also a Blonder Tongue TV system within the rack with TV's located throughout the building. There is adequate phone/data coverage throughout the building.
- New wireless access points have been installed throughout the building.
- Raptor, a web-based security system, has been installed district-wide. This facility has also added Bosch security cameras to the roof, the main entrance and the building's first floor.
- Consider adding additional data drops in classroom spaces as needed for programmatic reasons.

### Issues

- 1 Replace PA speakers and bell systems.  
**Priority: 1** **Cost: \$24,039**
- 2 Add (3) data outlets in the classrooms as needed.  
**Priority: 2** **Cost: \$14,872**



## Winona, Minnesota Executive Summary

### Jefferson Elementary

#### Jefferson Elementary

##### SITE

- |   |   |             |           |
|---|---|-------------|-----------|
| 1 | Replace playground equipment and surfacing. | Priority: 1 | \$400,000 |
|---|---|-------------|-----------|

##### EXTERIOR

- |   |   |             |             |
|---|---|-------------|-------------|
| 1 | Replace all exterior windows.           | Priority: 1 | \$2,058,284 |
| 2 | Tuckpoint existing masonry walls (50%). | Priority: 2 | \$800,000   |
| 3 | Clean limestone sills and ledges.       | Priority: 3 | \$36,882    |
| 4 | Repair stairs from exterior exits.      | Priority: 2 | \$133,848   |

##### INTERIOR

- |    |  |             |           |
|----|--|-------------|-----------|
| 1  | Install ceilings throughout (lighting by elec).                | Priority: 1 | \$629,829 |
| 2  | Replace window blinds.   | Priority: 1 | \$109,457 |
| 3  | Replace main level auditorium seats or complete riser removal. | Priority: 4 | \$60,365  |
| 4  | Plaster wall repair (620SF).                                   | Priority: 3 | \$18,441  |
| 5  | Skin existing chalkboards to be whiteboards.                   | Priority: 4 | \$85,662  |
| 6  | Replace gym doors and hardware.                                | Priority: 1 | \$20,225  |
| 7  | Replace cafeteria VCT / kitchen floor.                         | Priority: 2 | \$23,423  |
| 8  | Replace Basketball Hoops.                                      | Priority: 3 | \$20,820  |
| 9  | Repair existing ceiling in gymnasium.                          | Priority: 3 | \$22,638  |
| 10 | Replace main office carpet.                                    | Priority: 2 | \$15,360  |
| 11 | Repace media center carpet.                                    | Priority: 2 | \$24,783  |
| 12 | Paint Cafeteria Walls.   | Priority: 3 | \$11,778  |
| 13 | Repair seclusion room walls and doors.                         | Priority: 2 | \$44,616  |
| 14 | Add door to cafeteria for lockdown.                            | Priority: 1 | \$8,625   |
| 15 | Add acoustic treatment to cafeteria.                           | Priority: 2 | \$20,225  |

##### ACCESSIBILITY

- |   |   |             |           |
|---|---|-------------|-----------|
| 1 | Add to existing stair railings to meet code.            | Priority: 4 | \$133,848 |
| 2 | Remodel 1st floor classroom toilets to meet code.       | Priority: 1 | \$654,636 |
| 3 | Relocate offices from stage to balcony (infill risers). | Priority: 3 | \$97,140  |
| 4 | Add 2nd exit to Kindergarten room.                      | Priority: 2 | \$7,436   |
| 5 | Install elevator to access lower level playroom.        | Priority: 1 | \$743,600 |
| 6 | Provide ADA path to stadium field.                      | Priority: 2 | \$87,683  |
| 7 | Remodel basment toilets.                                | Priority: 1 | \$333,728 |

##### MECHANICAL SYSTEMS

- |   |   |             |             |
|---|---|-------------|-------------|
| 1 | Convert the existing building steam heating system to hot water. Provide a high efficiency condensing | Priority: 1 | \$1,596,857 |
| 2 | Provide an air cooled chiller to serve all new air handling systems to provide air conditioning. A    | Priority: 1 | \$1,047,538 |
| 3 | Provide new central dedicated outside air units with with supply and return air mains ducted          | Priority: 1 | \$3,576,960 |
| 4 | Provide perimeter hot water fin tube radiation around perimeter of the building.                      | Priority: 1 | \$268,272   |
| 5 | Provide de-stratification fans to serve high volume spaces such as the gym.                           | Priority: 3 | \$22,995    |



## Winona, Minnesota Executive Summary

### Jefferson Elementary

- |   |  |             |           |
|---|--|-------------|-----------|
| 6 | Provide a water softening system to serve all building domestic water.                         | Priority: 2 | \$43,435  |
| 7 | Investigate cause for sanitary system drainage issues by camera scoping all underground lines. | Priority: 4 | \$229,947 |

#### ELECTRICAL SYSTEMS

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Replace hallways panelboards with adequate space breakers and existing transformers. | Priority: 1 | \$57,750  |
| 2 | Add (3 duplex) power outlets in the classrooms as needed.                            | Priority: 2 | \$26,770  |
| 3 | Replace interior lighting to LED light fixtures.                                     | Priority: 1 | \$629,829 |
| 4 | Replace exit signs throughout the facility.  | Priority: 1 | \$5,000   |

#### PROGRAM

- |   |   |           |     |
|---|---|-----------|-----|
| 1 | Cafeteria footprint too narrow.           | Priority: | \$0 |
| 2 | Deliveries crossing over student traffic. | Priority: | \$0 |
| 3 | Lack of toilets in building.              | Priority: | \$0 |
| 4 | Storage space for large SPED equipment.   | Priority: | \$0 |
| 5 | Create maker lab in media center.         | Priority: | \$0 |

#### TECHNOLOGY

- |   |   |             |          |
|---|---|-------------|----------|
| 1 | Replace PA speakers and bell systems.             | Priority: 1 | \$24,039 |
| 2 | Add (3) data outlets in the classrooms as needed. | Priority: 2 | \$14,872 |



**Jefferson Elementary  
Winona, Minnesota**

<b>SITE</b>	<b>\$400,000.00</b>
<b>EXTERIOR</b>	<b>\$3,029,014.00</b>
<b>INTERIOR</b>	<b>\$1,116,247.00</b>
<b>ACCESSIBILITY</b>	<b>\$2,058,071.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$6,786,003.22</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$719,348.80</b>
<b>PROGRAM</b>	<b>\$0.00</b>
<b>TECHNOLOGY</b>	<b>\$38,911.00</b>
<hr/>	
<b>Total Cost</b>	<b>\$14,147,595.02</b>



**Jefferson Elementary  
Winona, Minnesota  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$400,000</b>
<b>EXTERIOR</b>	\$2,058,284	\$933,848	\$36,882	\$0	\$0	\$0	\$0	<b>\$3,029,014</b>
<b>INTERIOR</b>	\$768,136	\$128,407	\$73,677	\$146,027	\$0	\$0	\$0	<b>\$1,116,247</b>
<b>ACCESSIBILITY</b>	\$1,731,964	\$95,119	\$97,140	\$133,848	\$0	\$0	\$0	<b>\$2,058,071</b>
<b>MECHANICAL SYSTEMS</b>	\$6,489,627	\$43,435	\$22,995	\$229,947	\$0	\$0	\$0	<b>\$6,786,003</b>
<b>ELECTRICAL SYSTEMS</b>	\$692,579	\$26,770	\$0	\$0	\$0	\$0	\$0	<b>\$719,349</b>
<b>PROGRAM</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>TECHNOLOGY</b>	\$24,039	\$14,872	\$0	\$0	\$0	\$0	\$0	<b>\$38,911</b>
<b>Totals:</b>	<b>\$12,164,629</b>	<b>\$1,242,450</b>	<b>\$230,694</b>	<b>\$509,822</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,147,595</b>



**Goodview Elementary  
Winona, Minnesota**



**Address:** 5100 9th Street  
Winona, Minnesota 55987

**Contact:** Mike McArdle

**Phone:** 507-494-0871

**Year(s) Built:** 1971

**Gross Area:** 42,753 S.F.

**Site Area:** 10 acres

**Parking:** 40

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandibility



## Goodview Elementary Winona, Minnesota

### Analysis

- The existing concrete walkways are cracked in certain areas and in need of repair.
- After large rainfalls, there is some standing water on the hard pay area. Add storm sewer to collect rain water in this area.
- Basketball hoops are in need of replacement.

### Issues

- 1 Add storm sewer to drain hard play area.  
**Priority: 2** **Cost: \$96,379**
- 2 Replace main entry sidewalk and curb.  
**Priority: 2** **Cost: \$86,477**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Analysis

- The window systems throughout the building are made up of the original 1/2" double glazed with no air space.
- The existing 2004 roof system is in need of replacement.
- A covered or secure vestibule for the early childhood area is desired for security.

### Issues

- 1 Replace exterior windows.  
**Priority: 2** **Cost: \$221,525**
- 2 Replace 2004 vintage roof.  
**Priority: 3** **Cost: \$1,015,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Analysis

- The carpet flooring in the Early Childhood area is damaged or worn and in need of replacement.
- The carpet flooring in the Music Room is damaged or worn and in need of replacement.
- The carpet flooring in the Administration Offices is damaged or worn and in need of replacement.
- The existing lay-in ceiling throughout the facility is damaged and in need of replacement.
- The original casework in the classroom areas and staff break room is beyond its useful life.
- The window blinds throughout the building are old and in need of replacement.
- First and second grade locker area is not functional for current use.
- Sinks in the Kindergarten toilets are too high for use.
- Curtain at the art room is beyond its useful life.
- Cafeteria flooring is in a high use space and could be replaced.
- Gym flooring is VCT and beyond its useful life. Replacement with a flooring suitable for a gym space is recommended.
- Early childhood casework is in good condition, but the countertops could be replaced.
- Gymnasium ceiling is in disrepair and should be painted.

### Issues

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Issues

- |    |  |              |                  |
|----|--|--------------|------------------|
| 1  | Remove and replace carpet in EC.<br><b>Priority: 3</b>                   | <b>Cost:</b> | <b>\$78,549</b>  |
| 2  | Remove and replace carpet in Office and Music.<br><b>Priority: 1</b>     | <b>Cost:</b> | <b>\$40,388</b>  |
| 3  | Replace ceilings throughout (lights by elec).<br><b>Priority: 1</b>      | <b>Cost:</b> | <b>\$301,901</b> |
| 4  | Replace casework in staff lunch room.<br><b>Priority: 3</b>              | <b>Cost:</b> | <b>\$48,967</b>  |
| 5  | Replace window blinds.<br><b>Priority: 2</b>                             | <b>Cost:</b> | <b>\$20,582</b>  |
| 6  | Replace 1st and 2nd grade lockers.<br><b>Priority: 2</b>                 | <b>Cost:</b> | <b>\$54,505</b>  |
| 7  | Modify sinks in K toilets to be lower.<br><b>Priority: 1</b>             | <b>Cost:</b> | <b>\$9,375</b>   |
| 8  | Replace classroom casework (approx 14' each room).<br><b>Priority: 2</b> | <b>Cost:</b> | <b>\$200,000</b> |
| 9  | Replace curtain at Art Room.<br><b>Priority: 3</b>                       | <b>Cost:</b> | <b>\$3,000</b>   |
| 10 | Replace cafeteria VCT.<br><b>Priority: 3</b>                             | <b>Cost:</b> | <b>\$22,308</b>  |
| 11 | Replace gym floor with rubber athletic floor.<br><b>Priority: 2</b>      | <b>Cost:</b> | <b>\$172,000</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Issues

12 Replace countertops at EC.

**Priority: 3**

**Cost: \$5,371**

13 Paint gym ceiling.

**Priority: 3**

**Cost: \$7,138**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Analysis

- Toilets in the Early Childhood rooms do not meet current codes and should be replaced.
- Toilets serving the gymnasium should be replaced to provide facilities for both genders.

### Issues

- 1 Remodel EC toilets in CR.

**Priority: 1**

**Cost: \$200,000**

- 2 Remodel gymnasium toilets.

**Priority: 1**

**Cost: \$116,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Analysis

- There is asbestos and other hazardous materials throughout the building that require abatement.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Analysis

#### **Heating and Ventilation**

- The facility is served by five gas fired packaged rooftop units which were recently replaced and are in good working condition.
- Electric fin tube radiation is located along the perimeter of the building. Electric cabinet unit heaters are located in the vestibules. The electric heating elements are mostly original to the building and are nearing the end of their useful life.

#### **Temperature Control**

- The Automated Logic direct digital control system has been expanded to the building to provide time of day scheduling and minimal monitoring. Access to the system is through the District Office. The maintenance staff on site do not have access to the system.
- The rooftop units operate on their own factory packaged control system.

#### **Air Conditioning**

- The building is fully air conditioned by the packaged rooftop units.

#### **Plumbing**

- Two small electric water heaters provide hot water to the building. One is a 40 gallon electric State water heater with two 4.5 kilowatt elements and is located near the loading dock.
- The second water heater is a 28 gallon water heater with two 4,500 watt elements that serves the toilet room groups.
- The domestic water and sanitary piping is original to the construction of the building and is in good condition.
- There is a total of 16 classroom sinks with integral bubblers. The sinks do not meet the minimum 18" separation requirement between the bubbler and the faucet. The sink faucets are in fair condition. Replacement of the faucets will require replacing the sink basins to meet the Health Department Code requirements.

### Issues

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Issues

- 1 Provide a central high efficiency hot water heating plant with a variable primary piping loop to distribute hot water throughout the facility. High efficiency condensing boiler plant and associated heating water piping will be sized for future conversion of the existing gas fired rooftop units to hot water. Provide two high efficiency condensing boilers, with space reserved for a third to be installed during future conversion of RTUs from gas to hot water. Replace the electric perimeter finned tube radiation and cabinet unit heaters with new hot water heating terminal units. The new plant and terminal devices to be controlled by a DDC system as an extension of the existing ALC system. Space within the building needs to be allocated for the new heating plant. Further investigation is required.

**Priority: 1** **Cost: \$1,249,870**
- 2 Provide new VAV Boxes with reheat coils to serve existing zones. Existing rooftop units are multi-zone units. Each zone has a reheat coil located in the branch ductwork supplying ventilation to the zone. Existing reheat coils would be replaced with new VAV Boxes for individual zone control. Ductwork will be modified to accommodate installation. Heating water piping will be tied into new heating water loop. VAV Boxes will be controlled by a DDC system as an extension of the existing ALC system.

**Priority: 1** **Cost: \$563,054**
- 3 Provide de-stratification fans to serve high volume spaces such as the gym.

**Priority: 3** **Cost: \$22,995**
- 4 Replace plumbing fixtures to include the 16 class room sinks.

**Priority: 2** **Cost: \$47,590**
- 5 Replace existing electric domestic water heaters with a central domestic water heater to serve building. Provide new domestic hot water piping and circulating hot water piping from central plant to existing water heater locations and connect into existing piping. Provide new circulating hot water piping to fixtures not currently provided with recirculation.

**Priority: 1** **Cost: \$155,000**
- 6 Provide a water softening system to serve all building domestic hot water.

**Priority: 2** **Cost: \$43,435**
- 7 Provide an allowance to recommission and rebalance all existing systems to remain.

**Priority: 2** **Cost: \$45,285**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Issues

8 Provide an allowance to replace existing exhaust fans throughout building.

**Priority: 2**

**Cost:**

**\$41,642**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Analysis

- The main electrical service is located in Mechanical Room 121. It is a Westinghouse, 480/277V, 3 phase, 4 wire, 1600A switchboard. The switchboard has a digital Xcel Energy meter. The switchboard is oversized and has (12) 100A/3P, (4) 30A/3P and (1) 60A/3P switches turned off. Most are spares are labeled as mechanical units that are no longer in use. There are (5) 100A/3P and (4) 200A/3P switches being used. The system is oversized and outdated. Consider replacing the service with a new 1200A switchboard.
  
- The switchboard and panelboards are original to the building and should be replaced. The power and lighting circuits throughout the building should be traced and the panelboard schedules should be updated. Distribution transformers and panels are approximately 30 years old and should be replaced. Some additional panelboards have been added to accommodate new loads such as an elevator. Many of the panelboards are nearing maximum capacity.
  
- Due to the age of the building and the amount of electrical modifications, the entire electrical distribution system including branch circuits should be traced. Revised, accurate panelboard schedules should be produced for ease of maintenance and future electrical work.
  
- The majority of the interior lighting is recessed, indirect, 2 lamp, lensed fluorescent T8 fixtures. Many of the lenses appear discolored. There are some 2 lamp, wraparound, fluorescent T8 fixtures in the bathroom areas. The exterior canopy light fixtures are incandescent and the few exterior wall packs are HID. There are still some incandescent bulbs in the custodian closets. The gym has new 6 lamp, wire-guarded, T8, fluorescent, 2'x4', high bay fixtures. The exterior lights are controlled via programmable time- clock/lighting contractors. The lighting in the rest of the building is controlled via local switches, except in the bathrooms which is where the only occupancy sensors are located. Consider updating and adding new interior and exterior LED fixtures as well as new lighting controls.

### Issues

- 1 Replace existing outdated main switchboard with a new 1200A switchboard.  
**Priority: 1** **Cost: \$85,016**
  
- 2 Replace outlived transformers and panelboards.  
**Priority: 1** **Cost: \$36,094**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Issues

- 3 Replace interior lights to new LED fixtures.

**Priority: 1**

**Cost: \$280,566**

- 4 Replace and add exterior light fixtures to LED fixtures

**Priority: 1**

**Cost: \$37,379**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Issues

- |   |                                  |              |            |
|---|----------------------------------|--------------|------------|
| 1 | Building storage lacking.        |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 2 | EC office tight.                 |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 3 | Flow from PK to Motor room.      |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 4 | EC sink locations.               |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 5 | EC existing toilet small.        |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 6 | Secure entry at early childhood. |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Goodview Elementary Winona, Minnesota

### Analysis

- The main data rack is located in the Media Center Office 115. The rack has one 48 port patch panel and one 24 port patch panel. There are nine spaces remaining in the patch panels. There is plenty of room for expansion. The data cabling is Cat 5e and there are two small Eaton UPSes for the head-end equipment. There is also a Blonder Tongue TV system within the rack with TV's located throughout the building. There is adequate phone/data coverage throughout the building including at teacher stations which appears to be run by teacher/facility owned laptops.
- The PA/phone system has been updated district-wide with a Mitel phone system. All communication is sent through the phone to existing PA speakers throughout the building. The Gym has a local sound system. The replacement of existing paging speakers and cabling is recommended.
- New wireless access points have been installed throughout the building.
- Raptor, a web-based security system, has been installed district-wide. This facility has also added Bosch security cameras to the roof, the main entrance and the building's first floor.

### Issues

- 1 Replace PA speakers and bell system.

**Priority: 1**

**Cost: \$11,218**



## Winona, Minnesota Executive Summary

### Goodview Elementary

#### Goodview Elementary

##### SITE

- |   |  |             |          |
|---|--|-------------|----------|
| 1 | Add storm sewer to drain hard play area. | Priority: 2 | \$96,379 |
| 2 | Replace main entry sidewalk and curb.    | Priority: 2 | \$86,477 |

##### EXTERIOR

- |   |                            |             |             |
|---|----------------------------|-------------|-------------|
| 1 | Replace exterior windows.  | Priority: 2 | \$221,525   |
| 2 | Replace 2004 vintage roof. | Priority: 3 | \$1,015,000 |

##### INTERIOR

- |    |  |             |           |
|----|--|-------------|-----------|
| 1  | Remove and replace carpet in EC.                   | Priority: 3 | \$78,549  |
| 2  | Remove and replace carpet in Office and Music.     | Priority: 1 | \$40,388  |
| 3  | Replace ceilings throughout (lights by elec).      | Priority: 1 | \$301,901 |
| 4  | Replace casework in staff lunch room.              | Priority: 3 | \$48,967  |
| 5  | Replace window blinds.                             | Priority: 2 | \$20,582  |
| 6  | Replace 1st and 2nd grade lockers.                 | Priority: 2 | \$54,505  |
| 7  | Modify sinks in K toilets to be lower.             | Priority: 1 | \$9,375   |
| 8  | Replace classroom casework (approx 14' each room). | Priority: 2 | \$200,000 |
| 9  | Replace curtain at Art Room.                       | Priority: 3 | \$3,000   |
| 10 | Replace cafeteria VCT.                             | Priority: 3 | \$22,308  |
| 11 | Replace gym floor with rubber athletic floor.      | Priority: 2 | \$172,000 |
| 12 | Replace countertops at EC.                         | Priority: 3 | \$5,371   |
| 13 | Paint gym ceiling.                                 | Priority: 3 | \$7,138   |

##### ACCESSIBILITY

- |   |                            |             |           |
|---|----------------------------|-------------|-----------|
| 1 | Remodel EC toilets in CR.  | Priority: 1 | \$200,000 |
| 2 | Remodel gymnasium toilets. | Priority: 1 | \$116,000 |

##### MECHANICAL SYSTEMS

- |   |  |             |             |
|---|--|-------------|-------------|
| 1 | Provide a central high efficiency hot water heating plant with a variable primary piping loop to         | Priority: 1 | \$1,249,870 |
| 2 | Provide new VAV Boxes with reheat coils to serve existing zones. Existing rooftop units are multi-       | Priority: 1 | \$563,054   |
| 3 | Provide de-stratification fans to serve high volume spaces such as the gym.                              | Priority: 3 | \$22,995    |
| 4 | Replace plumbing fixtures to include the 16 class room sinks.  | Priority: 2 | \$47,590    |
| 5 | Replace existing electric domestic water heaters with a central domestic water heater to serve building. | Priority: 1 | \$155,000   |
| 6 | Provide a water softening system to serve all building domestic hot water.                               | Priority: 2 | \$43,435    |
| 7 | Provide an allowance to recommission and rebalance all existing systems to remain.                       | Priority: 2 | \$45,285    |
| 8 | Provide an allowance to replace existing exhaust fans throughout building.                               | Priority: 2 | \$41,642    |

##### ELECTRICAL SYSTEMS

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Replace existing outdated main switchboard with a new 1200A switchboard. | Priority: 1 | \$85,016  |
| 2 | Replace outlived transformers and panelboards.                           | Priority: 1 | \$36,094  |
| 3 | Replace interior lights to new LED fixtures.                             | Priority: 1 | \$280,566 |
| 4 | Replace and add exterior light fixtures to LED fixtures                  | Priority: 1 | \$37,379  |



## Winona, Minnesota Executive Summary

**Goodview Elementary**

### PROGRAM

- 1 Building storage lacking.
- 2 EC office tight.
- 3 Flow from PK to Motor room.
- 4 EC sink locations.
- 5 EC existing toilet small.
- 6 Secure entry at early childhood.

Priority: \$0

Priority: \$0

Priority: \$0

Priority: \$0

Priority: \$0

Priority: \$0

### TECHNOLOGY

- 1 Replace PA speakers and bell system.

Priority: 1 \$11,218



**Goodview Elementary  
Winona, Minnesota**

<b>SITE</b>	<b>\$182,856.00</b>
<b>EXTERIOR</b>	<b>\$1,236,525.00</b>
<b>INTERIOR</b>	<b>\$964,084.00</b>
<b>ACCESSIBILITY</b>	<b>\$316,000.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$2,168,870.41</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$439,055.00</b>
<b>PROGRAM</b>	<b>\$0.00</b>
<b>TECHNOLOGY</b>	<b>\$11,218.00</b>
<hr/>	
<b>Total Cost</b>	<b>\$5,318,608.41</b>





**Goodview Elementary  
Winona, Minnesota**

**Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$182,856	\$0	\$0	\$0	\$0	\$0	<b>\$182,856</b>
<b>EXTERIOR</b>	\$0	\$221,525	\$1,015,000	\$0	\$0	\$0	\$0	<b>\$1,236,525</b>
<b>INTERIOR</b>	\$351,664	\$447,087	\$165,333	\$0	\$0	\$0	\$0	<b>\$964,084</b>
<b>ACCESSIBILITY</b>	\$316,000	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$316,000</b>
<b>HAZARDOUS MATERIALS</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>MECHANICAL SYSTEMS</b>	\$1,967,924	\$177,952	\$22,995	\$0	\$0	\$0	\$0	<b>\$2,168,870</b>
<b>ELECTRICAL SYSTEMS</b>	\$439,055	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$439,055</b>
<b>PROGRAM</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>TECHNOLOGY</b>	\$11,218	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$11,218</b>
<b>Totals:</b>	<b>\$3,085,861</b>	<b>\$1,029,420</b>	<b>\$1,203,328</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,318,608</b>



**Washington-Kiscusko Elementary  
Winona, Minnesota**



**Address:** 365 Mankato Avenue  
Winona, Minnesota 55987

**Contact:** Mike McArdle

**Phone:** 507-494-0871

**Year(s) Built:** 1934

**Gross Area:** 87,144 S.F.

**Site Area:** 2 acres

**Parking:** 0

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kisciusko Elementary Winona, Minnesota

### Analysis

- Site fencing around play area is damaged.

### Issues

- 1 Replace playground fencing.

**Priority: 2**

**Cost:        \$99,463**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Analysis

- The window systems throughout the building are made up of the original wood double hung windows. Aluminum screens and storm windows have been added to the exterior sash which are about 27 years old.
- Throughout the exterior façade, a portions of the brick mortar joints are deteriorating, causing brick to spall.
- The limestone window sills, ledges and foundations are moldy and need to be cleaned.
- Exterior stairs are heaved and cracked.

### Issues

- |   |                                    |              |                    |
|---|------------------------------------|--------------|--------------------|
| 1 | Replace all exterior windows.      |              |                    |
|   | <b>Priority: 1</b>                 | <b>Cost:</b> | <b>\$2,295,943</b> |
|   |                                    |              |                    |
| 2 | Tuckpoint exterior walls (50%).    |              |                    |
|   | <b>Priority: 1</b>                 | <b>Cost:</b> | <b>\$835,000</b>   |
|   |                                    |              |                    |
| 3 | Clean stone sills, coping, ledges. |              |                    |
|   | <b>Priority: 4</b>                 | <b>Cost:</b> | <b>\$88,042</b>    |
|   |                                    |              |                    |
| 4 | Replace exterior stairs.           |              |                    |
|   | <b>Priority: 2</b>                 | <b>Cost:</b> | <b>\$148,802</b>   |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Analysis

- As part of mechanical renovation, adding ceilings and LED lights throughout the facility to replace existing ceiling and lights would be beneficial.
- Corridor hand washing sinks and counters are worn.
- Cafeteria wall paint is needed to be replaced due to high wear and tear.
- Basketball hoops are past their useful life.
- For security, gym doors should be replaced with locking hardware.
- Gym floor sustained some minor water damage, replace damaged areas.
- Seclusion rooms are in disrepair and are needed for programming.
- Acoustic treatment should be added to the cafeteria to help absorb sound in loud spaces.
- The window blinds throughout the building are old and need to be replaced.
- The original plaster walls throughout the building are cracked in certain locations.

### Issues

- |   |              |                  |
|---|--------------|------------------|
| 1 Install ceilings and LED lights throughout. |              |                  |
| <b>Priority: 1</b>                            | <b>Cost:</b> | <b>\$493,750</b> |
| 2 Replace approx. 165 window blinds.          |              |                  |
| <b>Priority: 1</b>                            | <b>Cost:</b> | <b>\$122,545</b> |
| 3 Replace corridor sinks and counters.        |              |                  |
| <b>Priority: 2</b>                            | <b>Cost:</b> | <b>\$34,235</b>  |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Issues

4	Repair approx. 80 sf of plaster walls. <b>Priority: 3</b>	<b>Cost:</b>	<b>\$2,400</b>
5	Replace basketball hoops. <b>Priority: 3</b>	<b>Cost:</b>	<b>\$20,820</b>
6	Replace gym doors and locks. <b>Priority: 1</b>	<b>Cost:</b>	<b>\$20,225</b>
7	Patch gymnasium floor at water damage. <b>Priority: 4</b>	<b>Cost:</b>	<b>\$5,000</b>
8	Repaint cafeteria. <b>Priority: 4</b>	<b>Cost:</b>	<b>\$8,030</b>
9	Repair seclusion room walls and doors. <b>Priority: 2</b>	<b>Cost:</b>	<b>\$29,744</b>
10	Add acoustic treatment to cafeteria. <b>Priority: 2</b>	<b>Cost:</b>	<b>\$16,656</b>

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Analysis

- Existing stair railings do not meet code and should be added onto.
- Toilets within classrooms do not meet current accessibility codes and should be remodeled.
- A ramp out of the Pre-K room would benefit programming.
- The lower level playroom is not accessible. An addition for an elevator is required to meet code.
- A convenient ADA path to the stadium would better serve the student population.
- Toilets in the basement are not accessible and should be remodeled to meet current codes.

### Issues

- |   |  |                        |
|---|--|------------------------|
| 1 | Remodel 1st floor classroom toilets.<br><b>Priority: 1</b>             | <b>Cost: \$743,897</b> |
| 2 | Add to existing stair railings to meet code.<br><b>Priority: 4</b>     | <b>Cost: \$136,822</b> |
| 3 | Remodel 2nd floor northwest single stall toilet.<br><b>Priority: 3</b> | <b>Cost: \$49,598</b>  |
| 4 | Add elevator to access playroom, lower level.<br><b>Priority: 1</b>    | <b>Cost: \$743,600</b> |
| 5 | Add ramp to pre-k room.<br><b>Priority: 1</b>                          | <b>Cost: \$92,816</b>  |
| 6 | Remodel basement single stall toilet.<br><b>Priority: 1</b>            | <b>Cost: \$58,893</b>  |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Analysis

#### **Heating and Ventilation**

- The original boiler plant was replaced approximately 14 years ago with two 2,400 MBH low pressure steam boilers. The boilers are LES Model HF3-60, 3-pass “Scotch Box” boilers. The boilers were originally installed with dual fuel capability, however, the fuel oil system was removed approximately 6 years ago and the boilers now run on firm gas. The original boilers have been removed from the building. Building staff noted that one boiler is able to handle the building heating load until the temperature drops below approximately 0 Deg F.
- The boiler chimney was tuck pointed approximately 20 years ago. A screen has been added to the opening in the boiler to prevent pigeons from entering the building.
- The condensate returns to the boilers room through a duplex vacuum condensate receiver. The condensate is then pumped to the boiler feed tank with duplex pumps to supply the boilers. A water softener was added to the boiler feed tank make-up water line approximately 3 to 5 years ago. The make-up water line has the code required RPZ backflow preventer.
- The underground fuel oil tank storage system was removed approximately 6 years ago. The fuel oil circulating pumps have been abandoned in place and the boiler plant now runs on firm gas.
- Ventilation air is supplied to the building by one large built-up air handling unit located in the basement installed in the original building construction. The unit has a steam heating coil to provide tempered ventilation air. The original well water evaporative cooling system has been disconnected. The original motor and starter have been replaced with a variable speed drive.
- Supply air from the air handling unit is distributed through a pressured air tunnel and up through the building through chases connected to the tunnel. The air is controlled to a neutral air temperature. The air tunnels are also used to technology cable distribution and domestic water and sanitary waste and vent piping. The tunnels have been cleaned of asbestos and the tunnel floor are concrete. The building system observed to be common to the air distribution tunnels does not comply with current code standards.
- Some occupied areas of the building were noted to not have a direct source of ventilation air and do not comply with current code standards.



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Analysis

#### Heating and Ventilation

- Heating zone control is provided by steam radiators located around the building perimeter.
- The tunnels around the perimeter of the building have been clean of asbestos and the tunnel floors finished with concrete. The tunnels are used for steam pipe distribution throughout the building and are ventilated by several exhaust fans.
- The building staff noted that steam is currently unavailable to the steam radiators in the gymnasium area. The cause is unknown at this time.

#### Temperature Control

- The facility is served with a pneumatic control system. The air compressor and associated air dryer and original pneumatic control panel is located in the basement fan room.
- The Automated Logic direct digital control system has been expanded to the building to provide time of day scheduling and minimal monitoring. Access to the system is through the District Office. The maintenance staff on site do not have access to the system.
- The steam radiators in the corridor do not have automatic control valves. The radiators are adjusted manually. Site staff has commented that the corridors often overheat in the winter months.

#### Air Conditioning

- In 2009 the classrooms on the upper floor in the Northeast corner of the building were renovated to create a media center. Two packaged 5 ton DX rooftop cooling only units provide cooling for the media center with two control zones. Heating is provided by the central heating plant.
- The data server room on the main floor is served by a split AC system for cooling control.
- The computer lab in room 209 on the upper floor is served by a split AC system. The system is in poor condition.
- With the exception of the spaces noted above, there is no central air conditioning system for the building. A total of 5 window air conditioners provide cooling for the office and conference room areas.

#### Plumbing

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Analysis Plumbing

- 
- The original domestic hot water storage tank has been removed. A new 50 gallon AO Smith atmospheric standard efficiency water heater with a 50,000 Btu input capacity was installed approximately 10 to 15 years ago. The water heater is in poor condition and the relief valve was noted to be leaking.
- A domestic circulating pump circulates water throughout the building.
- Most fixtures throughout the building have been replaced and are in good condition. The water closets have manual flush valves and the urinals have electronic sensors. The lavatories in the main toilet rooms have electronic sensors.
- The 3-compartment sink in the kitchen is soap sanitized and is supplied by the hot water distribution system common to the rest of the building.
- The domestic water supplied to the kitchen is buried in the concrete floor and has been noted to leak and should be replaced.

### Issues

- 1 Convert the existing building steam heating system to hot water. Provide a high efficiency condensing boiler to handle the building loads during light load Spring and Fall months. Convert the existing steam boilers to hot water operation to handle the peak building heating loads. The hydronic system will consist of constant volume primary pumps installed on each boiler and a variable speed secondary system for distribution throughout the building. Includes new direct digital controls for all new systems as an extension of the District's Automated Logic System.  
**Priority: 1** **Cost: \$1,250,000**
- 2 Provide an air cooled chiller to serve all new air handling systems to provide air conditioning. A secondary chilled water loop will be provided to serve all terminal active chilled beam and induction displacement units. Chilled water primary and secondary loops will be distributed throughout the building by a variable primary system. Includes new direct digital controls for all new systems as an extension of the District's Automated Logic System.  
**Priority: 1** **Cost: \$840,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kisciusko Elementary Winona, Minnesota

### Issues

- 3 Provide new central dedicated outside air units with with supply and return air mains ducted throughout the building. Induction displacement units and chilled beams will be provided for individual heating and cooling zone control. Large volume spaces such as the gyme will be served by a separate constant volume unit. Replace existing general use exhaust fans throughout the building. Includes new direct digital controls for all new systems as an extension of the District's Automated Logic System.

**Priority: 1**

**Cost: \$2,871,290**

- 4 Provide perimeter hot water fin tube radiation around perimeter of the building.

**Priority: 1**

**Cost: \$255,497**

- 5 Provide de-stratification fans to serve high volume spaces such as the gym.

**Priority: 3**

**Cost: \$22,995**

- 6 Provide a water softening system to serve all building domestic water.

**Priority: 2**

**Cost: \$43,435**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Analysis

- The main electrical service is located in Room 03C. There are three services consisting of a 400 A, 120/240V Square D switchboard with meter; a 200 A, 120/240V Square D switchboard with meter and a newer distribution panel that services the new media center. There are also several old fuseboxes located in the main electrical room and kitchen area. All of this equipment except the media center panel is original to the building and have outlived their life expectancy. Replacement is necessary. More space in this room would be recommended when replacing services.
- Distribution transformers and panels are old and should be replaced. Some additional panelboards have been added to accommodate new loads such as the new elevator and new media center.
- Due to the age of the building and the amount of electrical modifications, the entire electrical distribution system including branch circuits should be traced. Revised, accurate panelboard schedules should be produced for ease of maintenance and future electrical work.
- The majority of the interior lights are older, about 15 years old, 2 lamp, T8 fluorescent, wraparound fixtures. The gym has new, 6 lamp, wire-guarded, T8 fluorescent, 2' x 4' hanging fixtures. There are some 2' x 4' troffers in the first floor classrooms as well as some 2 lamp, T8 fluorescent, strip, suspended fixtures in the basement. There are very few exterior wall mounted, HID light fixtures. The exterior lights do not match and they appear to be aged. The light fixtures are controlled via local wall switches. There are no occupancy sensors. Consider updating and adding new interior and exterior LED fixtures as well as new lighting controls.

### Issues

- |   |  |                             |
|---|--|-----------------------------|
| 1 | Replace main switchboard with new service.<br><b>Priority: 1</b>     | <b>Cost:      \$114,159</b> |
| 2 | Replace outdated transformers and panelboards.<br><b>Priority: 1</b> | <b>Cost:      \$57,750</b>  |
| 3 | Replace light fixtures to LED fixtures.<br><b>Priority: 1</b>        | <b>Cost:      \$543,125</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kiscusko Elementary Winona, Minnesota

### Issues

- 1 Need outdoor classroom.

**Priority:**

**Cost:** **\$0**

- 2 Need group toilets on 1st floor.

**Priority:**

**Cost:** **\$0**

- 3 Need changing space for EC.

**Priority:**

**Cost:** **\$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Washington-Kisciusko Elementary Winona, Minnesota

### Analysis

- The PA/phone system has been updated district-wide with a Mitel phone system. All communication is sent through the phone to existing PA speakers throughout the building. The Gym has a local sound system. The replacement of existing paging speakers and cabling is recommended.
- The data rack is located in a Storage Room that has been repurposed to be the Main Data Room 107B. There is (1) 48 patch panel and (3) 24 port patch panels in the rack. The data cabling is Cat 5e and there are two small Eaton UPSes for the head-end equipment. There is also a Blonder Tongue TV system within the rack with TV's located throughout the building.
- Each classroom has a TV, data and voice outlet.
- New wireless access points have been installed throughout the building.
- Raptor, a web-based security system, has been installed district-wide. This school has also added Bosch security cameras to the roof, the main entrance and the building's first floor. Exterior camera images have been known to be poor quality.

### Issues

- 1 Replace PA speakers and bell systems.

**Priority: 1**

**Cost: \$25,641**



## Winona, Minnesota Executive Summary

### Washington-Kiscusko Elementary

#### Washington-Kiscusko Elementary

##### SITE

- |   |                             |             |          |
|---|-----------------------------|-------------|----------|
| 1 | Replace playground fencing. | Priority: 2 | \$99,463 |
|---|-----------------------------|-------------|----------|

##### EXTERIOR

- |   |                                    |             |             |
|---|------------------------------------|-------------|-------------|
| 1 | Replace all exterior windows.      | Priority: 1 | \$2,295,943 |
| 2 | Tuckpoint exterior walls (50%).    | Priority: 1 | \$835,000   |
| 3 | Clean stone sills, coping, ledges. | Priority: 4 | \$88,042    |
| 4 | Replace exterior stairs.           | Priority: 2 | \$148,802   |

##### INTERIOR

- |    |   |             |           |
|----|---|-------------|-----------|
| 1  | Install ceilings and LED lights throughout. | Priority: 1 | \$493,750 |
| 2  | Replace approx. 165 window blinds.          | Priority: 1 | \$122,545 |
| 3  | Replace corridor sinks and counters.        | Priority: 2 | \$34,235  |
| 4  | Repair approx. 80 sf of plaster walls.      | Priority: 3 | \$2,400   |
| 5  | Replace basketball hoops.                   | Priority: 3 | \$20,820  |
| 6  | Replace gym doors and locks.                | Priority: 1 | \$20,225  |
| 7  | Patch gymnasium floor at water damage.      | Priority: 4 | \$5,000   |
| 8  | Repaint cafeteria.                          | Priority: 4 | \$8,030   |
| 9  | Repair seclusion room walls and doors.      | Priority: 2 | \$29,744  |
| 10 | Add acoustic treatment to cafeteria.        | Priority: 2 | \$16,656  |

##### ACCESSIBILITY

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Remodel 1st floor classroom toilets.             | Priority: 1 | \$743,897 |
| 2 | Add to existing stair railings to meet code.     | Priority: 4 | \$136,822 |
| 3 | Remodel 2nd floor northwest single stall toilet. | Priority: 3 | \$49,598  |
| 4 | Add elevator to access playroom, lower level.    | Priority: 1 | \$743,600 |
| 5 | Add ramp to pre-k room.                          | Priority: 1 | \$92,816  |
| 6 | Remodel basement single stall toilet.            | Priority: 1 | \$58,893  |

##### MECHANICAL SYSTEMS

- |   |   |             |             |
|---|---|-------------|-------------|
| 1 | Convert the existing building steam heating system to hot water. Provide a high efficiency condensing | Priority: 1 | \$1,250,000 |
| 2 | Provide an air cooled chiller to serve all new air handling systems to provide air conditioning. A    | Priority: 1 | \$840,000   |
| 3 | Provide new central dedicated outside air units with with supply and return air mains ducted          | Priority: 1 | \$2,871,290 |
| 4 | Provide perimeter hot water fin tube radiation around perimeter of the building.                      | Priority: 1 | \$255,497   |
| 5 | Provide de-stratification fans to serve high volume spaces such as the gym.                           | Priority: 3 | \$22,995    |
| 6 | Provide a water softening system to serve all building domestic water.                                | Priority: 2 | \$43,435    |

##### ELECTRICAL SYSTEMS

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Replace main switchboard with new service.     | Priority: 1 | \$114,159 |
| 2 | Replace outdated transformers and panelboards. | Priority: 1 | \$57,750  |
| 3 | Replace light fixtures to LED fixtures.        | Priority: 1 | \$543,125 |

##### PROGRAM

- |   |                         |           |     |
|---|-------------------------|-----------|-----|
| 1 | Need outdoor classroom. | Priority: | \$0 |
|---|-------------------------|-----------|-----|



**Winona, Minnesota  
Executive Summary**

<b>Washington-Kiscusko Elementary</b>
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- 2    Need group toilets on 1st floor.
- 3    Need changing space for EC.

**TECHNOLOGY**

- 1    Replace PA speakers and bell systems.

Priority:	<b>\$0</b>
Priority:	<b>\$0</b>
Priority: 1	<b>\$25,641</b>





**Washington-Kiscusko Elementary  
Winona, Minnesota**

<b>SITE</b>	<b>\$99,463.00</b>
<b>EXTERIOR</b>	<b>\$3,367,787.00</b>
<b>INTERIOR</b>	<b>\$753,405.00</b>
<b>ACCESSIBILITY</b>	<b>\$1,825,626.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$5,283,216.36</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$715,034.44</b>
<b>PROGRAM</b>	<b>\$0.00</b>
<b>TECHNOLOGY</b>	<b>\$25,641.00</b>
<hr/>	
<b>Total Cost</b>	<b>\$12,070,172.80</b>



**Washington-Kiscusko Elementary  
Winona, Minnesota  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$99,463	\$0	\$0	\$0	\$0	\$0	<b>\$99,463</b>
<b>EXTERIOR</b>	\$3,130,943	\$148,802	\$0	\$88,042	\$0	\$0	\$0	<b>\$3,367,787</b>
<b>INTERIOR</b>	\$636,520	\$80,635	\$23,220	\$13,030	\$0	\$0	\$0	<b>\$753,405</b>
<b>ACCESSIBILITY</b>	\$1,639,206	\$0	\$49,598	\$136,822	\$0	\$0	\$0	<b>\$1,825,626</b>
<b>MECHANICAL SYSTEMS</b>	\$5,216,787	\$43,435	\$22,995	\$0	\$0	\$0	\$0	<b>\$5,283,216</b>
<b>ELECTRICAL SYSTEMS</b>	\$715,034	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$715,034</b>
<b>PROGRAM</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>TECHNOLOGY</b>	\$25,641	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$25,641</b>
<b>Totals:</b>	<b>\$11,364,132</b>	<b>\$372,335</b>	<b>\$95,813</b>	<b>\$237,894</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,070,173</b>



**Winona Middle School**  
**Winona, Minnesota**



**Address:** 1570 Homer Road  
Winona, Minnesota 55987

**Contact:** Mike McArdle

**Phone:** 507-494-0871

**Year(s) Built:** 2000

**Gross Area:** 275,380 S.F.

**Site Area:** 18 acres

**Parking:** 0

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Middle School Winona, Minnesota

### Analysis

- The bituminous parking lot has been re-sealed and patched which should be suitable for the next 5 years. Complete replacement should be planned for in the next 5 to 10 years.
- Tennis courts should be planned to be rebuilt in the next 5 to 10 years.

### Issues

- 1 Replace tennis courts.  
**Priority: 4** **Cost: \$777,000**
- 2 Reconstruct Middle School Parking lot, basketball and fire lane.  
**Priority: 4** **Cost: \$1,747,527**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Middle School Winona, Minnesota

### Analysis

- The exterior hollow metal doors and frames are in need of a fresh coat of paint.
- Certain areas of brick are showing signs of efflorescence and need to be cleaned.
- The limestone window sills and ledges are moldy and need to be cleaned.
- The existing ballast roof system is over 20 years old and replacement should be planned for.

### Issues

- |   |  |                                 |
|---|--|---------------------------------|
| 1 | Paint exterior hollow metal doors and frames.<br><b>Priority: 3</b>      | <b>Cost:        \$5,056</b>     |
| 2 | Clean approx. 5000 LF of limestone sills.<br><b>Priority: 3</b>          | <b>Cost:        \$29,744</b>    |
| 3 | Replace roof system installed in 2000.<br><b>Priority: 2</b>             | <b>Cost:        \$2,974,000</b> |
| 4 | Remove and replace 660 LF of brick control joints.<br><b>Priority: 3</b> | <b>Cost:        \$14,767</b>    |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Middle School Winona, Minnesota

### Analysis

- Carpet in the classroom pods is worn and needs to be replaced.
- Carpet and painted floors in the auditorium is worn and needs to be replaced.
- Carpet in the fitness center is worn and needs to be replaced.
- High use doors in corridors are deteriorated and could be replaced.
- Auditorium seats and curtains are original and replacement should be planned for.
- Wall pads in the small gym are damaged and should be replaced.
- Sink counter tops in science rooms are original and show signs of damage.
- FACS rooms counter tops are original and show signs of damage.
- Toilet partitions throughout the building are damaged and should be replaced.
- The elevator equipment is 20 years old and replacement should be planned for.

### Issues

- |   |                          |
|---|--------------------------|
| 1 Replace carpet in classroom pods.<br><b>Priority: 1</b> | <b>Cost: \$1,064,597</b> |
| 2 Replace carpet in Auditorium.<br><b>Priority: 1</b>     | <b>Cost: \$28,283</b>    |
| 3 Replace fitness center flooring.<br><b>Priority: 1</b>  | <b>Cost: \$77,080</b>    |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Middle School Winona, Minnesota

### Issues

- |    |   |              |                  |
|----|---|--------------|------------------|
| 4  | Replace carpet in Music rooms and Music hall.<br><b>Priority: 1</b>                           | <b>Cost:</b> | <b>\$102,410</b> |
| 5  | Repaint interior door frames.<br><b>Priority: 4</b>   | <b>Cost:</b> | <b>\$38,677</b>  |
| 6  | Replace cross corridor doors and high traffic doors (Gyms, Aud, Music).<br><b>Priority: 4</b> | <b>Cost:</b> | <b>\$195,000</b> |
| 7  | Replace auditorium seats.<br><b>Priority: 4</b>   | <b>Cost:</b> | <b>\$231,000</b> |
| 8  | Replace auditorium curtains.<br><b>Priority: 4</b>  | <b>Cost:</b> | <b>\$142,000</b> |
| 9  | Replace wall pads in Small Gym.<br><b>Priority: 2</b>   | <b>Cost:</b> | <b>\$10,707</b>  |
| 10 | Replace corner wall pads at North Gym entry.<br><b>Priority: 2</b>                            | <b>Cost:</b> | <b>\$3,000</b>   |
| 11 | Repair conc. floor paint in auditorium.<br><b>Priority: 1</b>                                 | <b>Cost:</b> | <b>\$15,000</b>  |
| 12 | Replace sink and counter in Science Rooms.<br><b>Priority: 3</b>                              | <b>Cost:</b> | <b>\$48,114</b>  |
| 13 | Replace countertop and stoves in Facs room.<br><b>Priority: 4</b>                             | <b>Cost:</b> | <b>\$67,162</b>  |
| 14 | Replace toilet partitions throughout facility.<br><b>Priority: 1</b>                          | <b>Cost:</b> | <b>\$99,940</b>  |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



**Winona Middle School**  
**Winona, Minnesota**

**Issues**

15 Replace elevator equipment.

**Priority: 3**

**Cost: \$148,720**



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Middle School Winona, Minnesota

### Analysis

#### **Heating and Ventilation**

- The building heating plant is hot water and is served by two large fire tube dual fuel boilers. There is not high efficiency heating capacity associate with the plant. Hot water is distributed throughout the building by a variable volume secondary hydronic loop.

#### **Temperature Control**

- All control systems in the building are direct digital by Automated Logic.

#### **Air Conditioning**

- An air cooled chiller plant provides for air conditioning throughout the building. The plant is located on the south side of the building near the boiler room.

#### **Plumbing**

- The plumbing fixtures are in good condition. The flush valves on the urinals and water closets and the mixing valves on the lavatories are electronically controlled.

### Issues

- 1 Provide one (1) new high efficiency condensing boiler to provide building heating needs during light load conditions.  
**Priority: 1** **Cost: \$191,623**
- 2 Provide two (2) new dual fuel burners to replace burners on existing boilers.  
**Priority: 1** **Cost: \$133,848**
- 3 Swap position of heating and chilled water coils in existing air handlers. Currently, the heating water coils are located upstream of the chilled water coils. The coils would be repositioned such that the chilled water coils are upstream of the heating water coils to accommodate a dehumidification control strategy. The existing controls would be modified as required to provide a dehumidification sequence. New chilled water coil cost not included in this cost.  
**Priority: 1** **Cost: \$223,080**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Middle School Winona, Minnesota

### Issues

- 4 Convert existing domestic water heater plants to a new, high efficiency condensing domestic water heater plant. Existing plant consists of a heat exchanger which uses heating water from the boiler plant, and a gas fired water heater and storage tank that operates when the boilers are not running.

**Priority: 1**

**Cost: \$126,412**

- 5 Replace existing type 1 kitchen exhaust fan and clean associated kitchen hood ductwork.

**Priority: 3**

**Cost: \$18,590**

- 6 Replace existing dishwasher exhaust fan and exhaust ductwork. Fan and ductwork will be sized to accommodate additional exhaust to be provided to the dishwasher room.

**Priority: 3**

**Cost: \$26,770**

- 7 Provide an allowance to replace existing exhaust fans throughout building.

**Priority: 3**

**Cost: \$204,490**

- 8 Provide an allowance to recommission and rebalance all existing systems to remain.

**Priority: 3**

**Cost: \$291,491**

- 9 Add an additional chiller to provide additional capacity for the existing chilled water plant. Provide new chilled water coils in existing air handlers. New chilled water coils will be selected to match current entering chilled water temperature, but a higher leaving chilled water temperature to allow for a similar system flow rate requirements. Provide a new stainless steel drain pan in new coil location.

**Priority: 1**

**Cost: \$527,956**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Middle School Winona, Minnesota

### Analysis

- The building has all of the original electrical panelboards, distribution panels, transformers, switchboards and wiring. The main service is a 3000A, 480/277V, 3 phase, 4 wire switchboard located in the Mechanical Room 09B on the west side of the building's upper level. Section 1 is rated at 1600A and has no space, Section 2 is rated 2000A and has (2) 400A spaces and Section 3 is rated at 2400A and has (1) 200A space. This service utilizes all the wall space in this area; therefore, there is no room for expansion.
- The lighting and large motor loads are connected to the 480/277V panelboards. Receptacles and smaller motors are connected to the 208/120V panelboards. Most panelboards are still original and are about at 75% capacity.
- Most areas like the kitchen and classrooms have 2' x 4' lensed, 2 lamp, fluorescent, T-8 light fixtures. The corridors have 6" x 4' lensed, single lamp, fluorescent, T-8 fixtures. The Auditorium house lighting is in need of an update. The current set up has 2 sets of 4 recessed downlights (incandescent) recessed in soffits and 1 set of 4 pendant lights all equidistant across the room. The lighting is inconsistent and a LED system would provide more consistent lighting and less maintenance over time. The facility has been upgrading their light fixtures to more sustainable options such as utilizing LED bulbs instead of incandescent and using T-8 wherever possible. The facility has occupancy sensors throughout the entire building. The next step would be utilizing photocells for daylight harvesting wherever possible. Consider updating and adding new interior and exterior LED fixtures.

### Issues

- 1 Replace interior lights to LED fixtures.  
**Priority: 1** **Cost: \$1,807,181**
- 2 Replace sparse exterior lighting and HID fixtures to new LED fixtures.  
**Priority: 1** **Cost: \$57,354**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandibility



## Winona Middle School Winona, Minnesota

### Analysis

- The main data rack is located in the Media Center sub-room 110C-1. The main data rack is comprised of 3 racks and has (3) 24 port patch panels. The data cabling is Cat5e and is terminated on RJ45 style jacks. There is adequate data outlet coverage throughout the building. There are also 2 APC UPSes for the head-end equipment. There is also a Blonder Tongue TV system within the rack with TV's located throughout the building.
- The original Dukane bell system is still function and operational; although, it is very archaic and requires special maintenance attention. An upgraded bell system should be considered.
- New wireless access points have been installed throughout the building.
- Raptor, a web-based security system, has been installed district-wide. This facility has also added Bosch security cameras to the roof, the main entrance and the building's first floor.

### Issues

- 1 Replace PA speakers and upgrade bell system throughout the facility.

**Priority: 1**

**Cost: \$47,070**



## Winona, Minnesota Executive Summary

Winona Middle School

### Winona Middle School

#### SITE

- |   |  |             |             |
|---|--|-------------|-------------|
| 1 | Replace tennis courts.   | Priority: 4 | \$777,000   |
| 2 | Reconstruct Middle School Parking lot, basketball and fire lane. | Priority: 4 | \$1,747,527 |

#### EXTERIOR

- |   |  |             |             |
|---|--|-------------|-------------|
| 1 | Paint exterior hollow metal doors and frames.      | Priority: 3 | \$5,056     |
| 2 | Clean approx. 5000 LF of limestone sills.          | Priority: 3 | \$29,744    |
| 3 | Replace roof system installed in 2000.             | Priority: 2 | \$2,974,000 |
| 4 | Remove and replace 660 LF of brick control joints. | Priority: 3 | \$14,767    |

#### INTERIOR

- |    |   |             |             |
|----|---|-------------|-------------|
| 1  | Replace carpet in classroom pods.                                       | Priority: 1 | \$1,064,597 |
| 2  | Replace carpet in Auditorium.   | Priority: 1 | \$28,283    |
| 3  | Replace fitness center flooring.  | Priority: 1 | \$77,080    |
| 4  | Replace carpet in Music rooms and Music hall.                           | Priority: 1 | \$102,410   |
| 5  | Repaint interior door frames.   | Priority: 4 | \$38,677    |
| 6  | Replace cross corridor doors and high traffic doors (Gyms, Aud, Music). | Priority: 4 | \$195,000   |
| 7  | Replace auditorium seats.   | Priority: 4 | \$231,000   |
| 8  | Replace auditorium curtains.  | Priority: 4 | \$142,000   |
| 9  | Replace wall pads in Small Gym.   | Priority: 2 | \$10,707    |
| 10 | Replace corner wall pads at North Gym entry.                            | Priority: 2 | \$3,000     |
| 11 | Repair conc. floor paint in auditorium.                                 | Priority: 1 | \$15,000    |
| 12 | Replace sink and counter in Science Rooms.                              | Priority: 3 | \$48,114    |
| 13 | Replace countertop and stoves in Facs room.                             | Priority: 4 | \$67,162    |
| 14 | Replace toilet partitions throughout facility.                          | Priority: 1 | \$99,940    |
| 15 | Replace elevator equipment.   | Priority: 3 | \$148,720   |

#### MECHANICAL SYSTEMS

- |   |   |             |           |
|---|---|-------------|-----------|
| 1 | Provide one (1) new high efficiency condensing boiler to provide building heating needs during light    | Priority: 1 | \$191,623 |
| 2 | Provide two (2) new dual fuel burners to replace burners on existing boilers.                           | Priority: 1 | \$133,848 |
| 3 | Swap position of heating and chilled water coils in existing air handlers. Currently, the heating water | Priority: 1 | \$223,080 |
| 4 | Convert existing domestic water heater plants to a new, high efficiency condensing domestic water       | Priority: 1 | \$126,412 |
| 5 | Replace existing type 1 kitchen exhaust fan and clean associated kitchen hood ductwork.                 | Priority: 3 | \$18,590  |
| 6 | Replace existing dishwasher exhaust fan and exhaust ductwork. Fan and ductwork will be sized to         | Priority: 3 | \$26,770  |
| 7 | Provide an allowance to replace existing exhaust fans throughout building.                              | Priority: 3 | \$204,490 |
| 8 | Provide an allowance to recommission and rebalance all existing systems to remain.                      | Priority: 3 | \$291,491 |
| 9 | Add an additional chiller to provide additional capacity for the existing chilled water plant. Provide  | Priority: 1 | \$527,956 |

#### ELECTRICAL SYSTEMS

- |   |  |             |             |
|---|--|-------------|-------------|
| 1 | Replace interior lights to LED fixtures.                               | Priority: 1 | \$1,807,181 |
| 2 | Replace sparse exterior lighting and HID fixtures to new LED fixtures. | Priority: 1 | \$57,354    |



## Winona, Minnesota Executive Summary

Winona Middle School

### TECHNOLOGY

- 1 Replace PA speakers and upgrade bell system throughout the facility.

Priority: 1

**\$47,070**



**Winona Middle School  
Winona, Minnesota**

<b>SITE</b>	<b>\$2,524,527.00</b>
<b>EXTERIOR</b>	<b>\$3,023,567.00</b>
<b>INTERIOR</b>	<b>\$2,271,689.68</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$1,744,259.63</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$1,864,535.00</b>
<b>TECHNOLOGY</b>	<b>\$47,070.00</b>
<b>Total Cost</b>	<b>\$11,475,648.31</b>



**Winona Middle School  
Winona, Minnesota  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$0	\$0	\$2,524,527	\$0	\$0	\$0	<b>\$2,524,527</b>
<b>EXTERIOR</b>	\$0	\$2,974,000	\$49,567	\$0	\$0	\$0	\$0	<b>\$3,023,567</b>
<b>INTERIOR</b>	\$1,387,310	\$13,707	\$196,834	\$673,839	\$0	\$0	\$0	<b>\$2,271,690</b>
<b>MECHANICAL SYSTEMS</b>	\$1,202,919	\$0	\$541,341	\$0	\$0	\$0	\$0	<b>\$1,744,260</b>
<b>ELECTRICAL SYSTEMS</b>	\$1,864,535	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$1,864,535</b>
<b>TECHNOLOGY</b>	\$47,070	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$47,070</b>
<b>Totals:</b>	<b>\$4,501,834</b>	<b>\$2,987,707</b>	<b>\$787,742</b>	<b>\$3,198,366</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,475,648</b>





**Winona High School  
Winona, Minnesota**



<b>Address:</b>	901 Gilmore Avenue Winona, Minnesota 55987	<b>Year(s) Built:</b>	1967, 1977 (Main), 1997 (Agricultural), 2000 (Fit)
<b>Contact:</b>	Mike McArdle	<b>Gross Area:</b>	240,185 S.F.
		<b>Site Area:</b>	38 acres
		<b>Parking:</b>	338
<b>Phone:</b>	507-494-0871		

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

- The west and south parking areas are deteriorated and should be replaced.
- The practice fields are currently not irrigated.
- There are sections of fencing around the athletic fields that are in poor condition.

### Issues

- 1 Install irrigation at softball games field and practice fields.

**Priority: 3**

**Cost: \$286,000**

- 2 Repair site fencing at athletic fields.

**Priority: 2**

**Cost: \$35,750**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

- The window and curtain wall systems throughout the building contain the original single pane, uninsulated glazing.
- The original entry vestibules throughout the building contain the original single pane, uninsulated glazing.
- The sealant in the vertical brick control joints area failing and are in need of replacement.
- A small percentage of the brick throughout the exterior is spalling and the mortar joints need to be reset and repointed.
- The existing ballast roof system is failing and is need of replacement.

### Issues

- |   |  |              |                    |
|---|--|--------------|--------------------|
| 1 | Replace exterior windows.<br><b>Priority: 3</b>          | <b>Cost:</b> | <b>\$1,383,000</b> |
| 2 | Replace exterior control joints.<br><b>Priority: 2</b>   | <b>Cost:</b> | <b>\$50,000</b>    |
| 3 | Tuckpoint masonry walls (8500 sf).<br><b>Priority: 3</b> | <b>Cost:</b> | <b>\$153,200</b>   |
| 4 | Replace roof (2004 original).<br><b>Priority: 2</b>      | <b>Cost:</b> | <b>\$2,810,000</b> |
| 5 | Replace roof (2000 original).<br><b>Priority: 2</b>      | <b>Cost:</b> | <b>\$967,000</b>   |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

- Swimming pool cover and hoist is past its useful life and replacement should be planned.
- FACS area casework is deteriorated and should be replaced.
- Ceiling tiles in commons are deteriorated and could be replaced to help with acoustics.
- Elevator equipment is past its useful life and replacement should be planned.
- Art room casework is damaged and should be replaced.
- Media center furniture is hardwired and does not allow for flexibility. Replacement should be considered.
- Media center and part of the hallway has worn carpet and should be replaced.
- Original operable walls do not function and should be removed or replaced.
- Auditorium systems are outdated or past their useful life and should be considered for replacement.
- Tile inlays in the commons flooring pop loose and should be considered for replacement.
- The carpet flooring in the High School Office and District Offices is showing signs of wear and should be replaced soon.
- The carpet flooring in the Upper Level classrooms and corridors is worn and needs to be replaced.
- The old vintage lay-in ceiling tile systems throughout the facility are in poor condition.

### Issues

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Issues

- |    |   |              |                    |
|----|---|--------------|--------------------|
| 1  | Replace swimming pool cover and hoists.<br><b>Priority: 2</b>                   | <b>Cost:</b> | <b>\$115,000</b>   |
| 2  | Replace FACS lab casework.<br><b>Priority: 1</b>                                | <b>Cost:</b> | <b>\$383,000</b>   |
| 3  | Replace ceiling tile in cafeteria for acoustics.<br><b>Priority: 2</b>          | <b>Cost:</b> | <b>\$138,000</b>   |
| 4  | Replace carpet at High School office and District Office.<br><b>Priority: 3</b> | <b>Cost:</b> | <b>\$245,000</b>   |
| 5  | Replace elevator equipment.<br><b>Priority: 3</b>                               | <b>Cost:</b> | <b>\$148,720</b>   |
| 6  | Replace art room casework (150 feet).<br><b>Priority: 2</b>                     | <b>Cost:</b> | <b>\$72,500</b>    |
| 7  | Replace media center furniture and power.<br><b>Priority: 2</b>                 | <b>Cost:</b> | <b>\$96,370</b>    |
| 8  | Replace media center carpet and hallway carpet.<br><b>Priority: 1</b>           | <b>Cost:</b> | <b>\$83,436</b>    |
| 9  | Remove Operable Walls and Replace with Fixed Walls.<br><b>Priority: 4</b>       | <b>Cost:</b> | <b>\$67,000</b>    |
| 10 | Replace 2nd floor ceilings and lights (lighting by elec).<br><b>Priority: 1</b> | <b>Cost:</b> | <b>\$557,700</b>   |
| 11 | Replace 1st floor ceilings and lights (lighting by elec).<br><b>Priority: 1</b> | <b>Cost:</b> | <b>\$1,011,000</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Issues

12	Replace auditorium seats. <b>Priority: 1</b>	<b>Cost:</b>	<b>\$230,000</b>
13	Replace auditorium carpet. <b>Priority: 1</b>	<b>Cost:</b>	<b>\$28,000</b>
14	Replace auditorium lights, curtains, sound, shell, AV. <b>Priority: 1</b>	<b>Cost:</b>	<b>\$1,414,000</b>
15	Acoustic treatment in auditorium. <b>Priority: 1</b>	<b>Cost:</b>	<b>\$250,000</b>
16	Replace ceilings and lights in AG Building (lighting by elec). <b>Priority: 4</b>	<b>Cost:</b>	<b>\$24,167</b>
17	Replace AG building doors. <b>Priority: 4</b>	<b>Cost:</b>	<b>\$45,000</b>
18	Replace Tile in Cafeteria Flooring. <b>Priority: 3</b>	<b>Cost:</b>	<b>\$53,000</b>

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

- Pool seating is not accessible.
- Stage toilet areas are not accessible.
- Second floor gang toilets should be remodeled to meet current codes.
- The Auditorium stage is inaccessible from this house.

### Issues

- |   |   |              |                  |
|---|---|--------------|------------------|
| 1 | Add lift to pool and seating area.<br><b>Priority: 1</b>          | <b>Cost:</b> | <b>\$171,000</b> |
| 2 | Add lift from house to stage in auditorium.<br><b>Priority: 1</b> | <b>Cost:</b> | <b>\$75,000</b>  |
| 3 | Remodel stage toilets.<br><b>Priority: 2</b>                      | <b>Cost:</b> | <b>\$120,000</b> |
| 4 | Remodel 2nd floor gang toilets.<br><b>Priority: 2</b>             | <b>Cost:</b> | <b>\$149,000</b> |
| 5 | Remodel AG Building toilets to meet ADA.<br><b>Priority: 2</b>    | <b>Cost:</b> | <b>\$218,231</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

#### Heating and Ventilation

- The building was originally constructed in 1968. In 1997 three new 5,678 MBH Burhan hot water fire tube boilers and one Fulton high efficiency pulse boiler were installed to replace the original Kewanee boilers. The three Burham boiler have Gordan Piatt dual fuel burners.
- The hot water hydronic loop consists of a constant volume primary loop and variable volume secondary loop. Two redundant 40 HP base mounted pumps distribute hot water throughout the facility. Three way valves were installed at the air handling unit heating coils to provide by-pass in the hydronic loop under low load conditions. The lack of isolation vales in the system has been noted as an issue that requires large areas of the building to be drained when working on the system. Isolation vales have been added to the system to improve the operations.
- A dedicated make-up air unit in the boiler room is interlocked with the boilers to provide combustion air.
- A 10,000-gallon underground fuel oil storage tank provides an alternate fuel source such that the plant burns natural gas at the interruptible rate.
- The 2-story area that includes the science rooms on the East side of the building have been recently renovated and are ventilated and heated by two variable air volume systems, AC #1 and AC #2. The systems include variable air volume boxes with hot water reheat for individual room heating and cooling control.
- Each of two stair towers on the East side do not have dedicated unit heaters for heating, however, the site staff has indicated that they do not consider these as problem areas.
- The office area and a portion of the commons area is served by a recently installed variable air volume unit, AC #3. The systems include variable air volume boxes with hot water reheat for individual room heating and cooling control.
- The original air handling system serving the music area has been replaced with unit AC #17 to provide ventilation and temperature control.



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis Heating and Ventilation

- The original air handling system serving the Auditorium area has been replaced with unit AC #14 to provide ventilation and temperature control.
- The original air handling system serving the kitchen has been replaced with unit AC #8 to provide ventilation and temperature control.
- The original air handling system serving the upper level classroom areas in the center of the building has been replaced with unit AC #7 to provide ventilation and temperature control.
- The original air handling system serving the media center has been replaced with unit AC #4 to provide ventilation and temperature control.
- The original handling system serving the lower level classrooms in the center of the building has been replaced with unit AC #6 to provide ventilation and temperature control.
- The gymnasium has been retrofitted with de-stratification fans.
- The maintenance staff have been replacing the original heating and ventilating units as budgeting allows. Areas in the building where the system remain to be replaced include the gymnasium, wrestling room, pool, locker rooms, and auditorium stage.
- The gymnasium is heated and ventilated by four air handling units located in penthouse mechanical space on both the east and west side of the gymnasium. The units are original to the building and are nearing the end of their useful life and should be replaced
- The wrestling room is heated and ventilated by an air handling unit that is original to the building. The unit is nearing the end of its useful life and should be replaced.
- The pool is heated and ventilated by two air handling system located in the mechanical penthouses on the east and west sides of the pool. The systems do not have a mechanical means to maintain humidity control on the space. The site staff noted that he spaces get very humid ion the summer months.
- The locker rooms near the pool are served by the original mechanical systems and are not dehumidified. The systems are near the end of their useful life and should be replaced.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

#### Heating and Ventilation

- The Auditorium is served by two constant volume units located mechanical spaces on either side of the stage. The units are original to the building construction and are nearing the end of their useful life and should be replaced.
- The Agriculture building to the north of the high school was built in 1977 and is served by a separate heating plant. The boiler system was recently replaced with a 400 MBH sealed combustion system and is in good working condition. Three ¼ HP pumps circulate water throughout the facility for heating zone control.
- The Agriculture building is ventilated by a roof top unit with integral cooling. Most rooms have an individual thermostat for temperature control and temperature control reported to be adequate in the building.

#### Temperature Control

- The control system installed in the original building were pneumatic. As the air handling systems have been replaced the controls have been upgraded to direct digital controls as an extension of the Automated Logic System. The remaining pneumatic controls should be removed from the building.
- The main pneumatic control compressor does not work. Pneumatic control air is provided by a back-up compressor located in the shop area.
- There currently is not control of lighting in the commons areas on the automation system.

#### Air Conditioning

- A 400-ton air cooled chiller system was installed in 1997 to replace the original ground source water cooled chillers. The plant has pumping system located in the boiler room to distribute water throughout the building. The plant was noted by site staff to be near maximum capacity. The plant is 19 years old and nearing the end of its useful life.
- Each of the data rooms served by split AC systems or transfer fans for cooling. Temperature control reported to be adequate.

#### Plumbing

- The original hot water storage tank has been recently replaced with two parallel tank style PVI high efficiency hot water heaters. The water heaters are in excellent good condition and provide for the buildings hot water needs.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis Plumbing

- A duplex water softening system softens all of the hot water to the building and is good condition. A second water softener was added to the kitchen to address noted issues with scaling.
- Most of the plumbing fixtures throughout the building have been replaced and are in good condition. Additional isolation valves have been added to the building to improve operations.
- The wash fountains in the industrial technology area are original to the building and are in very poor condition and should be replaced.
- The diatomaceous earth filter has been recently replaced with a new moss filter that is in good working condition.

### Issues

- 1 Replace the existing ventilation systems serving the Pool with a new package roof mounted unit with de-humidification capabilities and new direct digital controls.  
**Priority: 2** **Cost: \$958,114**
- 2 Replace the existing ventilation systems on either side of the Auditorium stage with new ventilation units with new direct digital controls.  
**Priority: 2** **Cost: \$574,869**
- 3 Replace the existing 400-ton air cooled chiller and add additional capacity to serve the cooling needs for the entire building. The cooling to be provide by two new air cooled chillers installed to operate as lead / lag depending on the cooling demand. The total plant capacity is approximately 600 tons of cooling.  
**Priority: 3** **Cost: \$766,491**
- 4 Replace (7) washfountains in industrial tech area and (1) washfountain in the Agriculture Building.  
**Priority: 2** **Cost: \$124,925**
- 5 Replace existing hot water boiler plant with new high efficiency condensing boiler plant.  
**Priority: 3** **Cost: \$446,160**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Issues

- 6 Replace existing seasonal boiler with one (1) high efficiency condensing boiler to provide building heating needs during light load conditions.  
**Priority: 1** **Cost: \$66,924**
- 7 Provide new dishwasher exhaust fan sized for new dishwasher and to provide additional exhaust to the space. Replace existing dishwasher exhaust ductwork.  
**Priority: 1** **Cost: \$26,770**
- 8 Replace existing domestic hot water plant and provide additional capacity for kitchen domestic hot water. Remove existing water heaters serving kitchen.  
**Priority: 1** **Cost: \$178,464**
- 9 Replace existing hot water heating boiler serving the Agriculture Building.  
**Priority: 3** **Cost: \$22,308**
- 10 Provide two (2) new packaged rooftop units to replace existing constant volume rooftop units. Rooftop units will be constant volume and will have a gas fired furnace for heat and packaged DX for cooling.  
**Priority: 3** **Cost: \$44,616**
- 11 Provide allowance for modifications to existing domestic water softening system and soft cold water piping. School has noted potential cross-contamination of domestic soft and hard cold water systems.  
**Priority: 1** **Cost: \$74,360**
- 12 Provide an allowance to replace existing exhaust fans throughout building.  
**Priority: 3** **Cost: \$130,130**
- 13 Provide an allowance to recommission and rebalance all existing systems to remain.  
**Priority: 3** **Cost: \$290,004**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

- The Winona Senior High School was built in 1967. There is a detached Agriculture building built in 1997 which has two classrooms, a workroom, an office, storage rooms and a greenhouse. A one room Fitness Center Addition was added in 2000. In 2012 there was a renovation that added several Math and Science classrooms to the East wing of the facility.

### **Service and Distribution**

- The building has all of the original ITE electrical panelboards, distribution boards, transformers, switchboards and wiring. The main service is an ITE, 4000A, 480/277V, 3 phase, 4 wire switchboard located in the Boiler Room. There are three main disconnects for this service: the first is unknown, the second is a Pringle disconnect rated at 2500A, and the last is a Siemens disconnect rated at 200A. The switchboard is pretty full with (3) 800A switches, (1) 400A switch, (3) 200A switches and (6) 100A switches being utilized; however, there are (2) 400A spares, space for (2) 100 A switches in the third section and space for (1) 200A switch in the last section. Not all of the switches are original to the ITE switchboard due to numerous AHU replacement projects throughout the years. There is an exterior Xcel utility transformer located directly outside the main switch board. There are two utility meters and a demand meter at the main service. The 4000A service has a 1600A capacitor, but no TVSS protection. There is also a patch of rust developing on the main switchboard's second section base panel. The system is outdated and has outlived its useful lifetime. Consider replacing the existing service and secondary feeder with a new 3000A service.
- There is another ITE switchboard that is a 1600A, 480/277V, 3 phase, 4 wire service located in the room across the hall from Resource 231A. The switchboard is original to the facility and is mostly full like the main switch board. There are (4) 400A switches, (7) 200A switches, (3) 100A switches and (2) 60A switches being utilized; however, there is (1) 200A spare, (1) 100A spare, and space for (4) 100A switches. Again not all of the switches are original to the ITE switchboard due to numerous AHU replacement projects throughout the years. The switchboard and panelboards are original to the building and should be replaced. The power and lighting circuits throughout the building should be traced and the panelboard schedules should be updated. The system is outdated and has outlived its useful lifetime. Consider replacing the distribution board as well as the existing transformers and panelboards that are original to the building.
- The lighting and large motor loads are connected to the 480/277V panelboards. Receptacles and smaller motors are connected to the 208/120V panelboards. Most panelboards are still original and are about at 75% capacity, except in the new Math and Science wing which have new Square D panelboards equipped with some spare breakers. The only place this does not occur is in the Agriculture Building. The panel serving this area is a near capacity 120/240V panel that serves everything in the building including lights, receptacles and some mechanical equipment. Consider replacing and updating this service.

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis Service and Distribution

- There is no life safety generator, load-shedding generator, or emergency lighting inverter. There are a couple of UPSes for each data rack in the facility.

### Lighting

- The Commons and most of the second floor has 3' x 3', 2 lamp, lensed, fluorescent, T-8 light fixtures. These fixtures are both surface mounted to the concrete ceilings and recessed in a custom 5' x 5' lay-in ceiling grid. The shop and music wings have pendant mounted, linear, louvered, T-8, fluorescent light fixtures. In the Math and Science wing has 2' x 4' lensed, indirect, volumetric, LED fixtures throughout the whole wing. The Gym light fixtures are now 4 lamp, wire-guarded, T-8, fluorescent high bay fixtures. Compact fluorescent fixtures still exist in the mechanical room above the gym, incandescent fixtures still exist in the greenhouse and wood shop areas, and HID fixtures still exist on the facilities exterior wall. Consider updating and adding new interior and exterior LED fixtures as well as new lighting controls.
- A typical older classroom has original AV controls, one data receptacle, four power receptacles, and a smartboard. The typical new Math and Science rooms have a smartboard, ample power and data receptacles, and lighting controls such as 0-10V dimming and occupancy sensors. There are also occupancy sensors in the corridors, main entry, office areas, and most bathrooms. There are no photocells which would be utilized for daylight harvesting.

### Issues

#### Systems/ Technology

- Replace existing main switchboard that is original to the building and has outlived its useful lifetime.  
**Priority: 2** **Cost: \$210,000**
- Upgrade lighting throughout the facility to new LED.  
**Priority: 2** **Cost: \$1,576,214**
- Add (3) duplex outlets in each High School classroom for charging and outlets at CAD and Art room.  
**Priority: 2** **Cost: \$62,462**
- Replace sparse exterior lighting fixtures and facility's perimeter.  
**Priority: 1** **Cost: \$93,959**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Issues

- |   |                                  |              |            |
|---|----------------------------------|--------------|------------|
| 1 | Gym Space for Activities.        |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 2 | Remodel interior space for Ag.   |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 3 | Girls locker room on main level. |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 4 | Music suite remodel.             |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 5 | Flexible learning spaces.        |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 6 | Flexible staff furniture.        |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |
| 7 | Elevator for east wing.          |              |            |
|   | <b>Priority:</b>                 | <b>Cost:</b> | <b>\$0</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona High School Winona, Minnesota

### Analysis

- The main data rack is located in the Information Server Room 121H. The rack is comprised of 4 racks and does not have much room for expansion but there are 5 other data rooms that serve the building that have plenty of space for expansion. The data cabling is Cat5e and is terminated on RJ45 style jacks. There is adequate data outlet coverage throughout the building. There are also 5 APC UPSes for the head-end equipment. There is also a Blonder Tongue TV system within the rack with TV's located throughout the building..
- The phone system has been updated district-wide with a Mitel phone system. There is adequate voice outlet coverage throughout the building. This phone system also acts as PA system for facility.
- The Gym has a local sound system and has been replaced. There is now a mobile module that allows the user to control the system throughout the gym. New speakers have been also added. The sound system and lighting controls for the auditorium have been updated as of 2-3 years ago. The auditorium is equipped with all LED retro fit bulbs, replacing the incandescent fixtures, and have been connected to a DMX control system.
- All scoreboards in the gym, pool and the exterior have been replace in 2015.
- New wireless access points have been installed throughout the building.
- Raptor, a web-based security system, has been installed district-wide. This facility has also added Bosch security cameras to the roof, the main entrance and the building's first floor.

### Issues

- 1 Replace PA speakers and bell system.  
**Priority: 2**

**Cost: \$45,034**





## Winona, Minnesota Executive Summary

### Winona High School

#### **Winona High School**

##### **SITE**

- |   |   |             |                  |
|---|---|-------------|------------------|
| 1 | Install irrigation at softball games field and practice fields. | Priority: 3 | <b>\$286,000</b> |
| 2 | Repair site fencing at athletic fields.                         | Priority: 2 | <b>\$35,750</b>  |

##### **EXTERIOR**

- |   |                                    |             |                    |
|---|------------------------------------|-------------|--------------------|
| 1 | Replace exterior windows.          | Priority: 3 | <b>\$1,383,000</b> |
| 2 | Replace exterior control joints.   | Priority: 2 | <b>\$50,000</b>    |
| 3 | Tuckpoint masonry walls (8500 sf). | Priority: 3 | <b>\$153,200</b>   |
| 4 | Replace roof (2004 original).      | Priority: 2 | <b>\$2,810,000</b> |
| 5 | Replace roof (2000 original).      | Priority: 2 | <b>\$967,000</b>   |

##### **INTERIOR**

- |    |  |             |                    |
|----|--|-------------|--------------------|
| 1  | Replace swimming pool cover and hoists.                        | Priority: 2 | <b>\$115,000</b>   |
| 2  | Replace FACS lab casework.                                     | Priority: 1 | <b>\$383,000</b>   |
| 3  | Replace ceiling tile in cafeteria for acoustics.               | Priority: 2 | <b>\$138,000</b>   |
| 4  | Replace carpet at High School office and District Office.      | Priority: 3 | <b>\$245,000</b>   |
| 5  | Replace elevator equipment.                                    | Priority: 3 | <b>\$148,720</b>   |
| 6  | Replace art room casework (150 feet).                          | Priority: 2 | <b>\$72,500</b>    |
| 7  | Replace media center furniture and power.                      | Priority: 2 | <b>\$96,370</b>    |
| 8  | Replace media center carpet and hallway carpet.                | Priority: 1 | <b>\$83,436</b>    |
| 9  | Remove Operable Walls and Replace with Fixed Walls.            | Priority: 4 | <b>\$67,000</b>    |
| 10 | Replace 2nd floor ceilings and lights (lighting by elec).      | Priority: 1 | <b>\$557,700</b>   |
| 11 | Replace 1st floor celings and lights (lighting by elec).       | Priority: 1 | <b>\$1,011,000</b> |
| 12 | Replace auditorium seats.                                      | Priority: 1 | <b>\$230,000</b>   |
| 13 | Replace auditorium carpet.                                     | Priority: 1 | <b>\$28,000</b>    |
| 14 | Replace auditorium lights, curtains, sound, shell, AV.         | Priority: 1 | <b>\$1,414,000</b> |
| 15 | Acoustic treatment in auditorium.                              | Priority: 1 | <b>\$250,000</b>   |
| 16 | Replace ceilings and lights in AG Building (lighting by elec). | Priority: 4 | <b>\$24,167</b>    |
| 17 | Replace AG building doors.                                     | Priority: 4 | <b>\$45,000</b>    |
| 18 | Replace Tile in Cafeteria Flooring.                            | Priority: 3 | <b>\$53,000</b>    |

##### **ACCESSIBILITY**

- |   |   |             |                  |
|---|---|-------------|------------------|
| 1 | Add lift to pool and seating area.          | Priority: 1 | <b>\$171,000</b> |
| 2 | Add lift from house to stage in auditorium. | Priority: 1 | <b>\$75,000</b>  |
| 3 | Remodel stage toilets.                      | Priority: 2 | <b>\$120,000</b> |
| 4 | Remodel 2nd floor gang toilets.             | Priority: 2 | <b>\$149,000</b> |
| 5 | Remodel AG Building toilets to meet ADA.    | Priority: 2 | <b>\$218,231</b> |

##### **MECHANICAL SYSTEMS**

- |   |  |             |                  |
|---|--|-------------|------------------|
| 1 | Replace the existing ventilation systems serving the Pool with a new package roof mounted unit with  | Priority: 2 | <b>\$958,114</b> |
| 2 | Replace the existing ventilation systems on either side of the Auditorium stage with new ventilation | Priority: 2 | <b>\$574,869</b> |



## Winona, Minnesota Executive Summary

Winona High School

3	Replace the existing 400-ton air cooled chiller and add additional capacity to serve the cooling needs	Priority: 3	\$766,491
4	Replace (7) washfountains in industrial tech area and (1) washfountain in the Agriculture Building.	Priority: 2	\$124,925
5	Replace existing hot water boiler plant with new high efficiency condensing boiler plant.	Priority: 3	\$446,160
6	Replace existing seasonal boiler with one (1) high efficiency condensing boiler to provide building	Priority: 1	\$66,924
7	Provide new dishwasher exhaust fan sized for new dishwasher and to provide additional exhaust to the	Priority: 1	\$26,770
8	Replace existing domestic hot water plant and provide additional capacity for kitchen domestic hot	Priority: 1	\$178,464
9	Replace existing hot water heating boiler serving the Agriculture Building.	Priority: 3	\$22,308
10	Provide two (2) new packaged rooftop units to replace existing constant volume rooftop units. Rooftop	Priority: 3	\$44,616
11	Provide allowance for modifications to existing domestic water softening system and soft cold water	Priority: 1	\$74,360
12	Provide an allowance to replace existing exhaust fans throughout building.	Priority: 3	\$130,130
13	Provide an allowance to recommission and rebalance all existing systems to remain.	Priority: 3	\$290,004

### ELECTRICAL SYSTEMS

1	Replace existing main switchboard that is original to the building and has outlived its useful lifetime.	Priority: 2	\$210,000
2	Upgrade lighting throughout the facility to new LED.	Priority: 2	\$1,576,214
3	Add (3) duplex outlets in each High School classroom for charging and outlets at CAD and Art room.	Priority: 2	\$62,462
4	Replace sparse exterior lighting fixtures and facility's perimeter.	Priority: 1	\$93,959

### PROGRAM

1	Gym Space for Activities.	Priority:	\$0
2	Remodel interior space for Ag.	Priority:	\$0
3	Girls locker room on main level.	Priority:	\$0
4	Music suite remodel.	Priority:	\$0
5	Flexible learning spaces.	Priority:	\$0
6	Flexible staff furniture.	Priority:	\$0
7	Elevator for east wing.	Priority:	\$0

### TECHNOLOGY

1	Replace PA speakers and bell system.	Priority: 2	\$45,034
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**Winona High School  
Winona, Minnesota**

<b>SITE</b>	<b>\$321,750.00</b>
<b>EXTERIOR</b>	<b>\$5,363,200.00</b>
<b>INTERIOR</b>	<b>\$4,961,893.00</b>
<b>ACCESSIBILITY</b>	<b>\$733,231.00</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$3,704,134.39</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$1,942,635.40</b>
<b>PROGRAM</b>	<b>\$0.00</b>
<b>TECHNOLOGY</b>	<b>\$45,034.00</b>
<hr/>	
<b>Total Cost</b>	<b>\$17,071,877.79</b>



**Winona High School  
Winona, Minnesota**

**Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$35,750	\$286,000	\$0	\$0	\$0	\$0	<b>\$321,750</b>
<b>EXTERIOR</b>	\$0	\$3,827,000	\$1,536,200	\$0	\$0	\$0	\$0	<b>\$5,363,200</b>
<b>INTERIOR</b>	\$3,957,136	\$421,870	\$446,720	\$136,167	\$0	\$0	\$0	<b>\$4,961,893</b>
<b>ACCESSIBILITY</b>	\$246,000	\$487,231	\$0	\$0	\$0	\$0	\$0	<b>\$733,231</b>
<b>MECHANICAL SYSTEMS</b>	\$346,518	\$1,657,907	\$1,699,709	\$0	\$0	\$0	\$0	<b>\$3,704,134</b>
<b>ELECTRICAL SYSTEMS</b>	\$93,959	\$1,848,676	\$0	\$0	\$0	\$0	\$0	<b>\$1,942,635</b>
<b>PROGRAM</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>TECHNOLOGY</b>	\$0	\$45,034	\$0	\$0	\$0	\$0	\$0	<b>\$45,034</b>
<b>Totals:</b>	<b>\$4,643,613</b>	<b>\$8,323,469</b>	<b>\$3,968,629</b>	<b>\$136,167</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$17,071,878</b>



**Winona Area Learning Center  
Winona, Minnesota**



**Address:** 1299 West 3rd Street  
Winona, Minnesota 55987

**Contact:** Mike McArdle

**Phone:** 507-494-0871

**Year(s) Built:** 2007

**Gross Area:** 17,500 S.F.

**Site Area:** 12.5 acres

**Parking:** 46

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Area Learning Center Winona, Minnesota

### Analysis

- The bituminous parking lot is showing signs of deterioration and is in need of replacement.

### Issues

- 1 Reconstruct parking lot.

**Priority: 3**

**Cost:       \$224,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Area Learning Center Winona, Minnesota

### Analysis

- The existing wall panels are dirty and need to be recoated.
- Roof is 14 years old. Replacement within the next 5 to 10 years should be planned.

### Issues

- 1 Recoat exterior stucco.  
**Priority: 3** **Cost: \$40,000**
- 2 Replace 2007 vintage roof.  
**Priority: 4** **Cost: \$375,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Area Learning Center Winona, Minnesota

### Analysis

- Art room sink and counter show signs of damage and should be replaced.
- Toilet room sinks and counters are showing damage and should be replaced.
- Classroom carpet is 14 years old and replacement should be planned for.
- Early Childhood door should have electronic control for security.
- Replace weatherstripping on Early Childhood exterior doors.
- Repair stained concrete.

### Issues

- |   |  |                        |
|---|--|------------------------|
| 1 | Replace sink and counter at Art Room.<br><b>Priority: 3</b>          | <b>Cost: \$5,000</b>   |
| 2 | Replace toilet room sinks and counters.<br><b>Priority: 3</b>        | <b>Cost: \$21,300</b>  |
| 3 | Replace classroom carpet.<br><b>Priority: 3</b>                      | <b>Cost: \$202,306</b> |
| 4 | Electrify EC entry door.<br><b>Priority: 1</b>                       | <b>Cost: \$8,000</b>   |
| 5 | Replace weatherstripping on EC exterior doors.<br><b>Priority: 1</b> | <b>Cost: \$1,000</b>   |
| 6 | Repaint all interior door frames.<br><b>Priority: 3</b>              | <b>Cost: \$7,500</b>   |



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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Area Learning Center Winona, Minnesota

### Issues

7    Repair stained polished concrete floor.

**Priority: 4**

**Cost:            \$5,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Area Learning Center Winona, Minnesota

### Issues

- 1 Provide a BTU meter on the geothermal well field loop.  
**Priority: 2** **Cost: \$5,950**
  
- 2 Provide a small supplemental heating water boiler to serve perimeter radiation.  
**Priority: 2** **Cost: \$22,308**
  
- 3 Add perimeter fin tube radiation to provide supplemental heat in all perimeter spaces.  
**Priority: 2** **Cost: \$80,308**
  
- 4 Provide an allowance to recommission and rebalance all existing systems to remain.  
**Priority: 3** **Cost: \$32,346**
  
- 5 Provide new toilet room sink plumbing fixtures.  
**Priority: 3** **Cost: \$26,770**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Area Learning Center Winona, Minnesota

### Issues

#### **Systems/ Technology**

- 1 Replace flourescent lighting to new LED lighting and upgrade lighting controls.

**Priority: 2**

**Cost: \$143,143**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Winona Area Learning Center Winona, Minnesota

### Issues

1 Gym Space for Activities.

**Priority:**

**Cost:**

**\$0**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandibility



## Winona Area Learning Center Winona, Minnesota

### Issues

- 1 Replace PA speakers and replace bells.

**Priority: 1**

**Cost:        \$11,500**



## Winona, Minnesota Executive Summary

### Winona Area Learning Center

#### Winona Area Learning Center

##### SITE

- |   |                          |             |           |
|---|--------------------------|-------------|-----------|
| 1 | Reconstruct parking lot. | Priority: 3 | \$224,000 |
|---|--------------------------|-------------|-----------|

##### EXTERIOR

- |   |                            |             |           |
|---|----------------------------|-------------|-----------|
| 1 | Recoat exterior stucco.    | Priority: 3 | \$40,000  |
| 2 | Replace 2007 vintage roof. | Priority: 4 | \$375,000 |

##### INTERIOR

- |   |  |             |           |
|---|--|-------------|-----------|
| 1 | Replace sink and counter at Art Room.          | Priority: 3 | \$5,000   |
| 2 | Replace toilet room sinks and counters.        | Priority: 3 | \$21,300  |
| 3 | Replace classroom carpet.                      | Priority: 3 | \$202,306 |
| 4 | Electrify EC entry door.                       | Priority: 1 | \$8,000   |
| 5 | Replace weatherstripping on EC exterior doors. | Priority: 1 | \$1,000   |
| 6 | Repaint all interior door frames.              | Priority: 3 | \$7,500   |
| 7 | Repair stained polished concrete floor.        | Priority: 4 | \$5,000   |

##### MECHANICAL SYSTEMS

- |   |  |             |          |
|---|--|-------------|----------|
| 1 | Provide a BTU meter on the geothermal well field loop.                                 | Priority: 2 | \$5,950  |
| 2 | Provide a small supplemental heating water boiler to serve perimeter radiation.        | Priority: 2 | \$22,308 |
| 3 | Add perimeter fin tube radiation to provide supplemental heat in all perimeter spaces. | Priority: 2 | \$80,308 |
| 4 | Provide an allowance to recommission and rebalance all existing systems to remain.     | Priority: 3 | \$32,346 |
| 5 | Provide new toilet room sink plumbing fixtures.  | Priority: 3 | \$26,770 |

##### ELECTRICAL SYSTEMS

- |   |   |             |           |
|---|---|-------------|-----------|
| 1 | Replace flourescent lighting to new LED lighting and upgrade lighting controls. | Priority: 2 | \$143,143 |
|---|---|-------------|-----------|

##### PROGRAM

- |   |                           |           |     |
|---|---------------------------|-----------|-----|
| 1 | Gym Space for Activities. | Priority: | \$0 |
|---|---------------------------|-----------|-----|

##### TECHNOLOGY

- |   |  |             |          |
|---|--|-------------|----------|
| 1 | Replace PA speakers and replace bells. | Priority: 1 | \$11,500 |
|---|--|-------------|----------|



**Winona Area Learning Center  
Winona, Minnesota**

<b>SITE</b>	<b>\$224,000.00</b>
<b>EXTERIOR</b>	<b>\$415,000.00</b>
<b>INTERIOR</b>	<b>\$250,106.20</b>
<b>MECHANICAL SYSTEMS</b>	<b>\$167,682.00</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$143,143.00</b>
<b>PROGRAM</b>	<b>\$0.00</b>
<b>TECHNOLOGY</b>	<b>\$11,500.00</b>
<b>Total Cost</b>	<b>\$1,211,431.20</b>



**Winona Area Learning Center  
Winona, Minnesota  
Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$0	\$224,000	\$0	\$0	\$0	\$0	<b>\$224,000</b>
<b>EXTERIOR</b>	\$0	\$0	\$40,000	\$375,000	\$0	\$0	\$0	<b>\$415,000</b>
<b>INTERIOR</b>	\$9,000	\$0	\$236,106	\$5,000	\$0	\$0	\$0	<b>\$250,106</b>
<b>MECHANICAL SYSTEMS</b>	\$0	\$108,566	\$59,116	\$0	\$0	\$0	\$0	<b>\$167,682</b>
<b>ELECTRICAL SYSTEMS</b>	\$0	\$143,143	\$0	\$0	\$0	\$0	\$0	<b>\$143,143</b>
<b>PROGRAM</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>TECHNOLOGY</b>	\$11,500	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$11,500</b>
<b>Totals:</b>	<b>\$20,500</b>	<b>\$251,709</b>	<b>\$559,222</b>	<b>\$380,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,211,431</b>





**Paul Giel Field  
Winona, Minnesota**



**Address:** West 3rd Street  
Winona, Minnesota 55987

**Contact:** Mike McArdle

**Phone:** 507-494-0871

**Year(s) Built:**

**Gross Area:** 000 S.F.

**Site Area:** 5.7 acres

**Parking:** 0

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



**Paul Giel Field  
Winona, Minnesota**

**Analysis**

- Track Surface and Turf Surface are nearing the end of their useful life and need to be replaced.

**Issues**

- |   |  |                              |
|---|--|------------------------------|
| 1 | Replace Turf.<br><b>Priority: 2</b>    | <b>Cost:       \$680,000</b> |
| 2 | Resurface Track.<br><b>Priority: 4</b> | <b>Cost:       \$650,000</b> |

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



**Paul Giel Field  
Winona, Minnesota**

**Analysis**

- Water infiltrates bleachers and drips on items below. Add metal skin to underside of the bleachers to divert water.

**Issues**

- 1 Add metal skin and drain to storage room ceilings.

**Priority: 3**

**Cost: \$25,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



## Paul Giel Field Winona, Minnesota

### Analysis

- Current toilet rooms are deteriorated and do not meet current accessibility codes and should be upgraded.

### Issues

- 1 Remodel Toilets.  
**Priority: 4** **Cost: \$240,000**
- 2 Add Aisle Railings.  
**Priority: 2** **Cost: \$75,000**
- 3 Add ADA Ramp to south side of the bleachers.  
**Priority: 2** **Cost: \$150,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



**Paul Giel Field  
Winona, Minnesota**

**Issues**

**Systems/ Technology**

- 1 Add additional LED lighting beneath bleacher (storage).

**Priority: 3**

**Cost: \$3,000**

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Site	Exterior	Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Expandability



**Paul Giel Field  
Winona, Minnesota**

**Issues**

- 1 Add Visitor bleachers.

**Priority:**

**Cost:**

**\$0**



Winona, Minnesota  
Executive Summary

Paul Giel Field

Paul Giel Field

SITE

1	Replace Turf.	Priority: 2	\$680,000
2	Resurface Track.	Priority: 4	\$650,000

INTERIOR

1	Add metal skin and drain to storage room ceilings.	Priority: 3	\$25,000
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ACCESSIBILITY

1	Remodel Toilets.	Priority: 4	\$240,000
2	Add Aisle Railings.	Priority: 2	\$75,000
3	Add ADA Ramp to south side of the bleachers.	Priority: 2	\$150,000

ELECTRICAL SYSTEMS

1	Add additional LED lighting beneath bleacher (storage).	Priority: 3	\$3,000
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PROGRAM

1	Add Visitor bleachers.	Priority:	\$0
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**Paul Giel Field  
Winona, Minnesota**

<b>SITE</b>	<b>\$1,330,000.00</b>
<b>INTERIOR</b>	<b>\$25,000.00</b>
<b>ACCESSIBILITY</b>	<b>\$465,000.00</b>
<b>ELECTRICAL SYSTEMS</b>	<b>\$3,000.00</b>
<b>PROGRAM</b>	<b>\$0.00</b>
<hr/>	
<b>Total Cost</b>	<b>\$1,823,000.00</b>





**Paul Giel Field  
Winona, Minnesota**

**Cost Analysis By Category By Priority**

<b>CATEGORY:</b>	<b>Priority 1:</b>	<b>Priority 2:</b>	<b>Priority 3:</b>	<b>Priority 4:</b>	<b>Priority 5:</b>	<b>Priority 6:</b>	<b>Not Prioritized</b>	<b>Total</b>
<b>SITE</b>	\$0	\$680,000	\$0	\$650,000	\$0	\$0	\$0	<b>\$1,330,000</b>
<b>INTERIOR</b>	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	<b>\$25,000</b>
<b>ACCESSIBILITY</b>	\$0	\$225,000	\$0	\$240,000	\$0	\$0	\$0	<b>\$465,000</b>
<b>ELECTRICAL SYSTEMS</b>	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0	<b>\$3,000</b>
<b>PROGRAM</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
<b>Totals:</b>	<b>\$0</b>	<b>\$905,000</b>	<b>\$28,000</b>	<b>\$890,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,823,000</b>



## Winona, Minnesota

### Cost Analysis By Priority-All Buildings

BUILDING:	Priority 1:	Priority 2:	Priority 3:	Priority 4:	Priority 5:	Priority 6:	Not Prioritized	Total
Jefferson Elementary	\$12,164,629	\$1,242,450	\$230,694	\$509,822	\$0	\$0	\$0	\$14,147,595
Goodview Elementary	\$3,085,861	\$1,029,420	\$1,203,328	\$0	\$0	\$0	\$0	\$5,318,608
Washington-Kiscusko Elementary	\$11,364,132	\$372,335	\$95,813	\$237,894	\$0	\$0	\$0	\$12,070,173
Winona Middle School	\$4,501,834	\$2,987,707	\$787,742	\$3,198,366	\$0	\$0	\$0	\$11,475,648
Winona High School	\$4,643,613	\$8,323,469	\$3,968,629	\$136,167	\$0	\$0	\$0	\$17,071,878
Winona Area Learning Center	\$20,500	\$251,709	\$559,222	\$380,000	\$0	\$0	\$0	\$1,211,431
Paul Giel Field	\$0	\$905,000	\$28,000	\$890,000	\$0	\$0	\$0	\$1,823,000
Totals:	\$35,780,568	\$15,112,089	\$6,873,427	\$5,352,249	\$0	\$0	\$0	\$63,118,334

### Totals By Facility Analysis Categories

Facility:	Site	Building Exterior	Building Interior	Accessibility	Life Safety	Hazardous Materials	Mechanical Systems	Electrical Systems	Program	Technology	Totals:
Jefferson Elementary	\$400,000	\$3,029,014	\$1,116,247	\$2,058,071	\$0	\$0	\$6,786,003	\$719,349	\$0	\$38,911	<b>\$14,147,595</b>
Goodview Elementary	\$182,856	\$1,236,525	\$964,084	\$316,000	\$0	\$0	\$2,168,870	\$439,055	\$0	\$11,218	<b>\$5,318,608</b>
Washington-Kiscusko Elementary	\$99,463	\$3,367,787	\$753,405	\$1,825,626	\$0	\$0	\$5,283,216	\$715,034	\$0	\$25,641	<b>\$12,070,173</b>
Winona Middle School	\$2,524,527	\$3,023,567	\$2,271,690	\$0	\$0	\$0	\$1,744,260	\$1,864,535	\$0	\$47,070	<b>\$11,475,648</b>
Winona High School	\$321,750	\$5,363,200	\$4,961,893	\$733,231	\$0	\$0	\$3,704,134	\$1,942,635	\$0	\$45,034	<b>\$17,071,878</b>
Winona Area Learning Center	\$224,000	\$415,000	\$250,106	\$0	\$0	\$0	\$167,682	\$143,143	\$0	\$11,500	<b>\$1,211,431</b>
Paul Giel Field	\$1,330,000	\$0	\$25,000	\$465,000	\$0	\$0	\$0	\$3,000	\$0	\$0	<b>\$1,823,000</b>
<b>Category Totals:</b>	<b>\$5,082,596</b>	<b>\$16,435,093</b>	<b>\$10,342,425</b>	<b>\$5,397,928</b>	<b>\$0</b>	<b>\$0</b>	<b>\$19,854,166</b>	<b>\$5,826,752</b>	<b>\$0</b>	<b>\$179,374</b>	<b>\$63,118,334</b>