

2026

West Chicago SD33

D33: Cameras in the classroom

Provided by the D33 Tech department
For internal use only

Components needed

01

District infrastructure

Basic infrastructure needed to keep things running smoothly, including electrical needs and network/internet bandwidth.

02

Main Distribution Frame (MDF) / Intermediate Distribution Frame (IDF) infrastructure

infrastructure specific to the MDF/IDFs such as servers and switches.

03

Software/licensing

Licensing and software for servers as well as licensing for cameras.

04

Camera infrastructure

The cameras themselves as well as the cabling to the MDF/IDFs.

District Infrastructure

Electrical requirements

Depending on the power draw from the new equipment, certain buildings MDFs, or IDF's may require increased electrical capacity.

Bandwidth Increases

Depending on the increase in strain on our network, we may need to increase the bandwidth between buildings, or to the internet.

Infrastructure:

Main Distribution Frame (MDF) &
Intermediate Distribution Frame (IDF)

Switches

Since all of our cameras require power over ethernet(POE), new switches will be required to power the added cameras.

- The amount of switches needed will vary by MDF/IDF in each building.

Video Storage Servers

These servers are responsible for housing all of the video data collected from cameras. Upgrading these is necessary if more cameras are added.

- A main server running management software at LMS will also need to be upgraded to match the new load.

DNS Servers

These servers are necessary for devices to communicate over the network. These are in desperate need of replacement, with several of them failing on a weekly basis.

- When these servers go down, cameras will still record, but that data is inaccessible until service resumes.
- In the event that the servers are down too long, camera data loss is possible.

Software/Licensing

Camera Licensing

Each camera requires a license in order to run. We will need to ensure that we acquire enough licenses to match the increase of cameras.

Video Server Software and Licensing

Our video servers will need software and licensing to run whatever software we decide to use with our cameras.

→ Currently we use DW spectrum to run our cameras. It has the benefit of being a perpetual license rather than a subscription.

Camera Infrastructure

Cameras

The cost of the physical cameras is also an important component of the project. Camera brands will also influence the best software to use.

Cable runs from the cameras to the MDF/IDFs

Every camera that is added will require an ethernet cable ran from the relevant MDF/IDF to the camera.

Cost Estimates

Servers

→ \$300,000 replace all servers district-wide

Cameras

→ \$540,000 install cameras in classrooms at preschool, elementary, and middle school

Recommendation

- Size of the project = air conditioning
- Timing of the Request for Proposal process
- Unknown capital project costs associated with this project and McAuley
- Life Safety Items - Doors (3 years left) \$2M

Year 1 Summer 2027

→ Replace servers at Pioneer, Turner, and Wegner

\$130,000

→ Install cameras at Pioneer Preschool - \$60,000

Total

\$190,000

Year 2 Summer 2028

→ Replace servers at Currier, Gary, and Indian Knoll

\$160,000

→ Install cameras at all elementary schools - \$270,000

Total

\$430,000

Year 3 Summer 2029

→ Replace servers at Leman Middle School

\$100,000

→ Install cameras at Leman Middle School - \$210,000

Total

\$310,000

Year 1 Summer 2027

- Replace all servers at
\$300,000
- Install cameras at Pioneer
Preschool - \$60,000

Total
\$360,000

Year 2 Summer 2028

- Install cameras at all
elementary schools -
\$270,000

Total
\$270,000

Year 3 Summer 2029

- Install cameras at Leman
Middle School -
\$210,000

Total
\$210,000

Long-Term Facility Plan

Impacts

Remainder of 3-Year Facility Plan

Project	2027	2028
Wegner Roof Replacement	\$2,963,333	
Leman Boiler Replacement	\$346,500	
Pioneer Boiler Replacement	\$231,000	
Back-up Generator at ESC	\$384,199	
Flooring @ Gary & Turner	\$600,000	
Kitchen @ Gary	\$850,000	
McAuley School	\$650,000	
Replace Corridor Flooring - PreK		\$413,438
Renovate Toilet Rooms-PreK		\$385,875
Create 4 New Toilet Rooms PreK		\$578,813 - possible grant

THANK YOU