

BUILDING SUMMARY				
Gross SF	403,688	Number of Levels	2	
Year Built	1968	Number of Additions	1	









LEVEL 1





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Furthest approximate travel time from one location to another for an average **High School Student**.

- Performance Venue Performing Arts Classroom •••• Under-sized Resources Commons / Cafeteria Science Lab Special Education Stem / Hands-On Learning Restrooms Student Support Visual Arts
  - OmO Travel Path space



10

Room Capacity based on ISBE Guidelines

Room Capacity based on ISBE Guidelines (not included in Effective Capacity)





EHS Average U-46 Average (all colored bars)

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Scienc

ENROLLMENT METRICS

AREA COMPARISON

PLAN KEY

0 20' 40' 80

fire code

LEVEL 2



U46



### Occupancy\*\* 2955 TBD **Effective Capacity Total Enrollment** 2601

**Occupancy:** the maximum number of people that can be housed in a space in accordance with the building/

\*\*NOTE: Occupancy is NOT the recommended number of students for a space, it is the maximum allowed by code.

Effective Capacity: the amount of students a school can effectively support based on the District's current practices and future vision for teaching and learning. This is calculated based on ISBE's square footage per student guideline. Calculated based on core classrooms, science labs and Special Education spaces.

Enrollment: number of students that attended the facility in 2019-2020.



\* This comparison notes the difference between Elgin High School area per student in comparison to the current National average as noted in the 2015 School Construction Report. The master planning process will produce outcomes pertinent to the District as a whole. This is just one metric to compare space.



Administration Building Support Cafe Support Core Classroom Elective Classroom Gym / Fitness Kindergarten /ECC Learning Center Media Lab



OmO Travel Path Under-sized space



Room Capacity based on ISBE Guidelines

Room Capacity based on ISBE Guidelines (not included in Effective Capacity)

January 27, 2021

Spatial Educational Adequacy	(25%) C	Facility Condition	on(35%) C
(Data collected through Staff Survey)	6.3/10	FCI	.14
Physical Features	6.6/10	Water Usage(5%	%) C
Environment Supports Variety	7.5/10	5/10 Gallons/SF	
Visual Stimulation	5.7/10	Gallons/SF	12.0
Future Readiness	5.2/10	Energy Usage(10%) F*	
Building Allocation(25%)	Α	Total EUI	96.0kBTU/SF/yr
• • • •		Electric	25.3kBTU/SF/yr
Gross SF/student	155	Gas	70.7kBTU/SF/yr
Site Acreage/Guideline Mobiles in Use/Basement Used	152% No/No	2020 EUI	56.2kBTU/SF/yr

B-

# AGGREGATED FACILITY GRADE

Educational Adequacy grades were determined by a survey issued to staff. Square Foot/Student grades were determined by building area and enrollment. Facility grades are determined building assessments. Water grades were determined by comparing utility data to the Commercial Buildings Energy Consumption Survey. Energy grades were deteremined by comparing utility data to the US Dept of Energy's Building Performance Database. Percent in parenthesis indicates weight of category in aggregate facility grade.

\* Energy Usage Grade is based on 2019 EUI data, not 2020 EUI data. The decrease in EUI from 2019 to 2020 is a result of both major HVAC equipment upgrades as well as operational changes due to COVID-19.

Activity mapping is based on survey data (Week in the Life) collected by teachers throughout the district over the course of one week. The teachers provided the learning activity and amount of time spent in that activity. Data was aggregated for the school and is represented by the average percent of time spent in the activity.



## What's a Listening Tour?

Staff surveys (Listening Tours) were sent to each school where faculty gave input about the strengths and weaknesses of the building. The following comments highlight common themes and concerns.

## Listening Tour Comments From Staff

- Staff values the flexibility of the library space so that they can fit large and small groups in multiple places throughout the library.
- The classrooms are generally a good size if class sizes are managed, but are too small when there are too many students. We do not have proper equipment that is necessary for a student's learning process.
- The arrangement of the student furniture, style and functionality of desks for medium to large students places limitations on the student learning process.
- Teacher and faculty office spaces are adequate for collaboration and planning. Having private space for a parent phone call is wonderful.
- The science labs need drastic updating; they need proper ventilation or windows.

Superstructure \$0.42M Heating, Ventilation, and Air Conditioning \$2.77M Exterior Vertical Enclosures \$0.06M **SYSTEM** Electronic Safety and Security Interior Finishes \$0.56M BUILDING Electrical \$3.97M Interior Construction \$0.78M Furnishings \$1.82M BY Plumbing \$3.68M Exterior Horizontal Enclosures \$3.83M FACILITY

This chart indicates the approximate cost of deferred and anticipated maintenance (in dollars) of items assessed by building system. Highlighted items indicate those items in immediate need, code requirement, poor and fair condition



This chart indicates the approximate cost of deferred and anticipated maintenance (in dollars) based on condition of assessed items.



This chart indicates the approximate cost of deferred and anticipated maintenance (in dollars) based on condition of assessed items in relation to the entire cohort of buildings.



100

75

50

25

0.3

0.2

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(EUI)

USAGE

ENERGY

COST

WATER

 $\mathbf{+}$ 

USAGE

ER

AT

 $\geq$ 

COLLECTION

DATA

Phase 1 Snapshot

**STENING** TOUR



**HIGH SCHOOLS IN U-46** 

Energy Use Intensity (EUI) is a key metric that expresses a building's energy use as a function of its size. Generally, a low EUI signifies good energy performance



WATER USAGE/STUDENT FOR HIGH SCHOOLS IN U-46 Water usage is a key metric that expresses a school's water use and total cost of water in comparison to the other high schools in the district.

## How is this information collected?

The goal of the DLR Group integrated design team is to **collect multiple** qualitative and quantitative data points around the same set of items for example energy use or learning behavior – in order to form a holistic **picture**. The team collects these data points through the use of utility analysis, expert walkthroughs, focus groups, surveys, and ethnographic observation techniques. The results are validated by cross-checking data points, such as a survey answer and a spot measurement, that should relate to one another.