

SD U-46 Educational Facility Master Plan (EFMP)

CAC Update

January 6, 2022





- Traditional Facility Master Plans
 examine the components of a
 building, its structure, systems and
 condition.
- An Educational Facility Master Plan also examines the educational adequacy (today) and educational readiness (in the future) of your schools to meet your vision, so you can ensure lasting value to the community, teachers and students.
- The goal is to align the form to its function.



DESIGNING OUR FUTURE

EFMP Process



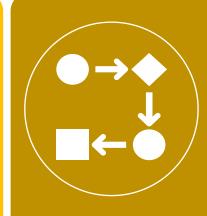
Phase 1: Deeper **Understanding**

- What's happening in the District now?
- What is the foundation for success?



Phase 2: Discover

- + Explore
- How is the District
- What is possible?
- of education look



Phase 3: Program

- How can buildings support teaching and learning?
- What resources does the District need?



Phase 4: Conceptualize

- How might this be created?
- What priorities and costs are there?



Phase 5: Game Plan

• What should be recommended to the Board?



Phase 6: Adoption & **Implementation**

- adoption
- determine how to implement recommendations & timeline for implementation

Community Meeting: Phase 1 Findings

Community **Engagement Session** 2020 + 2021

Share & Inform

Share & Inform





Key Terms and Abbreviations

ES = elementary schools

MS = middle schools

HS = high schools

SF = square feet

A/E/C Team = Architecture, Engineering, and Construction team

ESC = Educational Service Center / SD U-46 headquarters

EFMP = Educational Facility Master Plan

C&I = curriculum and instruction

FCA = facility conditions assessment

F&O = finance and operations

M&O = maintenance and operations

Right-sizing = process of determining and aligning an organization's facilities with their operations, goals, and future needs

DLR Group = Chicago-based firm that was contracted by SD U-46 to develop an Educational Facility Master Plan

Partner Teams

Cm +

BoE

F&0

SC

PrU

Community
"Vested Stakeholders"

Board of Education"Final Decision Makers"

Cabinet +
Facility &
Operations

"Initial Decision Makers"

Superintendent
Executive Team
Facility &
Operations
A/E/C Team

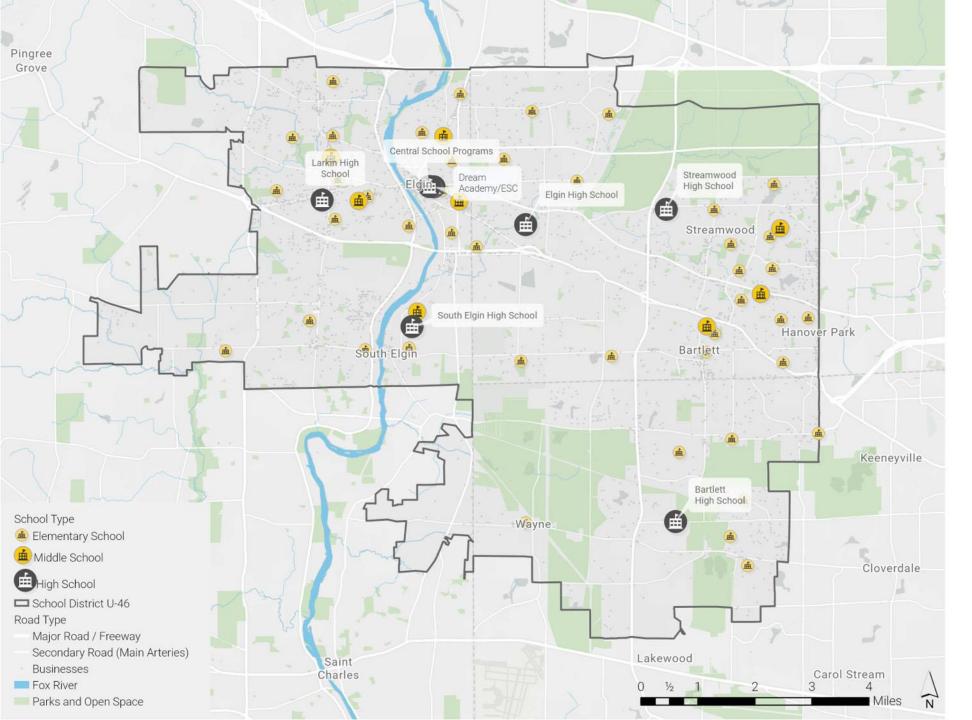
Steering
Committee
"Value Leaders"

Students
Alumni
Teachers
Administrators
Community Members
Business Partners

Primary Users "Experts"

Students
Teachers/Staff
Administrators
Maintenance
Operations





56 school buildings total

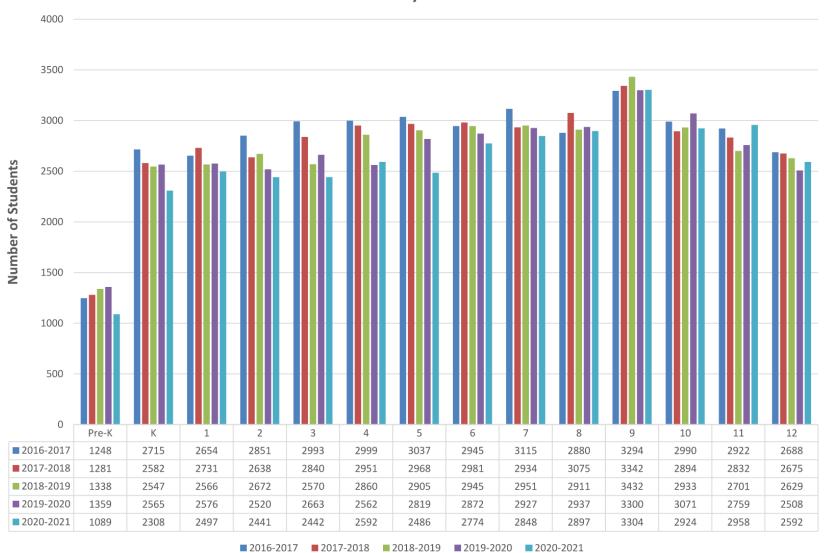
6 high schools8 middle schools40 elementary schools2 early childhood centers



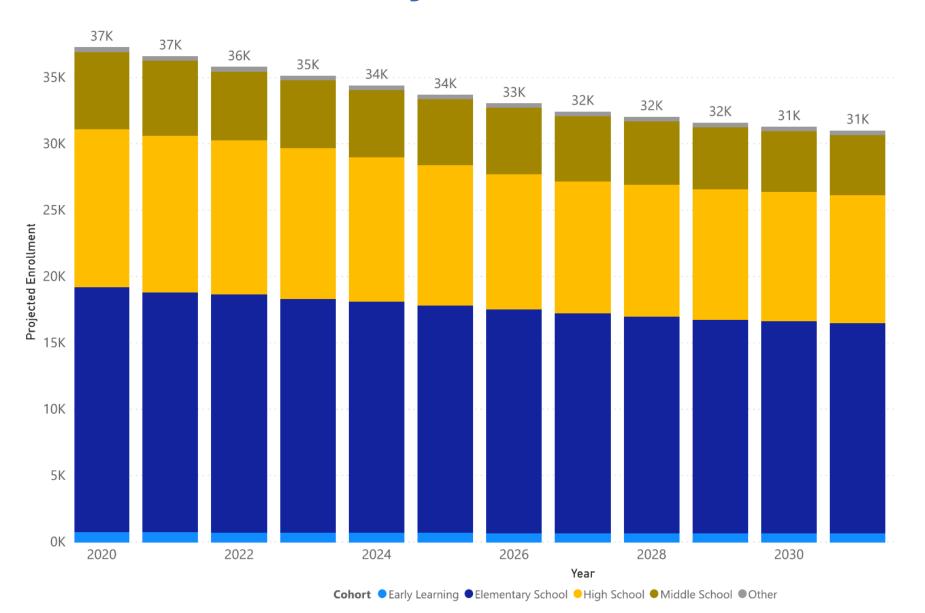
U-46 Enrollment History

Number of Students by Grade Level

Excludes Externally Placed Students



U-46 Projected Enrollment





Middle Schools

How do we provide an equitable experience for all middle school students, while moving 6th grade out of elementary schools and including it at middle schools?





Why are we investigating a 6th grade shift?

The District asked DLR Group to investigate the potential of moving 6th grade to middle schools to improve the educational experience.

What are the potential benefits?

District has identified that 6th grade curriculum aligns better with 7th and 8th grade

Improves the transition to high school

Extends time students are in middle school to create community and build peer connections

Build parental involvement in middle school community



Summary of C&I: What did we hear from educators?

Creating a middle school model provides for better curricular alignment and strengthens middle school community.

- Vertical curriculum articulation: designing curriculum so teaching strategies and course material align between grade levels for smoother transitions for students.
- Teaming helps MS experience become more personal (better/more teaming abilities)
- More leadership opportunities for 7th/8th grade students, and to mentor 6th graders
- 6th graders are developmentally closer to MS students
- Greater ability to meet more students across the district; increased peer interaction
- Lengthen MS experience to three years; smoother transition to HS, build relationships, stronger sense of belonging
- Opportunity for greater parent involvement and community building
- More student interest-based opportunities; choice in electives, extracurricular clubs and sports



Equalizing SF/student at middle schools

Right-sizing capacities

140

SF/student

State Guideline

147

SF/student

National Low Quartile 160

SF/student

Future Ready Recommendation

A range of reference points for SF/student are available – our goal was to find the best guideline that the fit needs & goals of SD U-46.



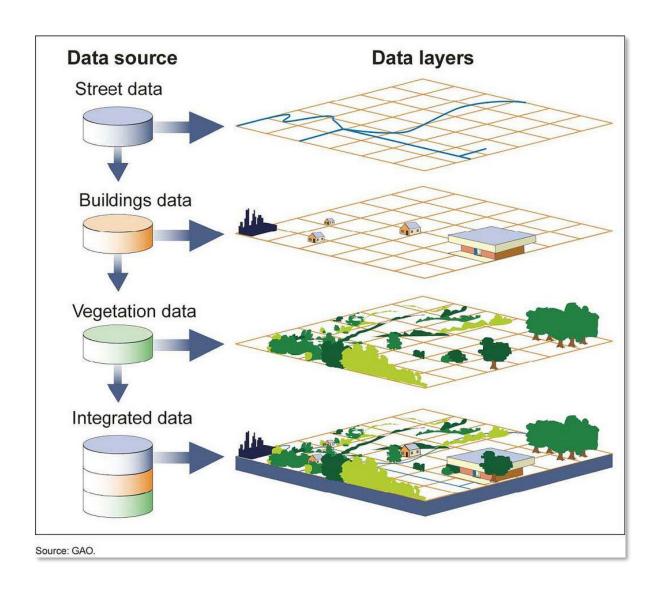
District-wide GIS Analysis

What is "GIS?"

Geographic Information Systems - a framework for gathering, analyzing, and mapping spatial data in 2D and 3D

GIS organizes **spatial data** to help identify **patterns**, **relationships**, & **trends** that can **inform decisions**. In a district that crosses 11 communities and 3 counties, this is especially important!

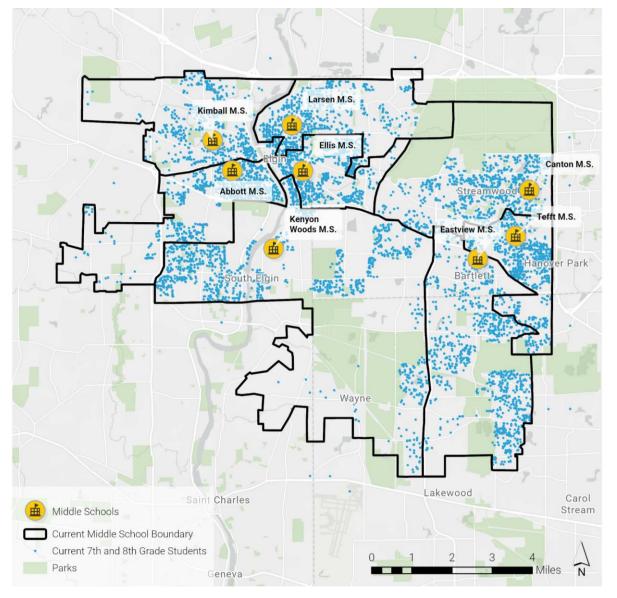
This process helps us ask the right planning questions and identify the right problems to solve.



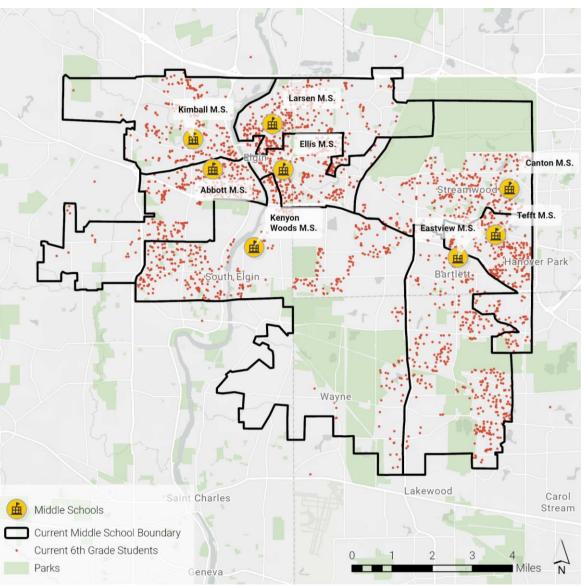


Where are students located?

Current 7th and 8th Graders

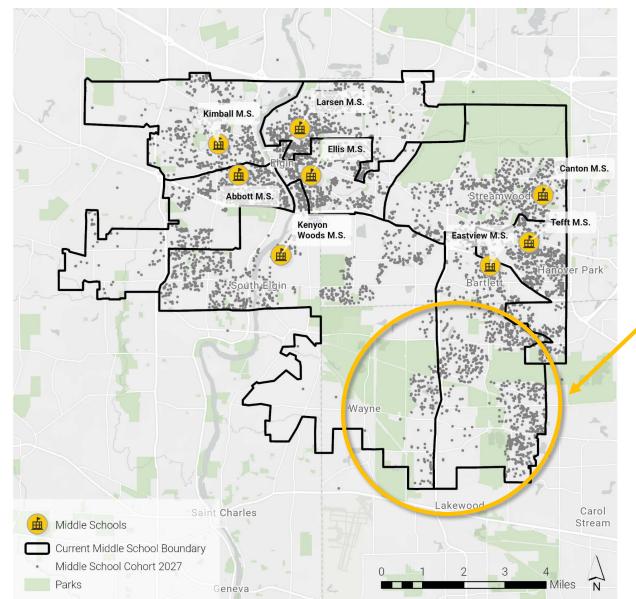


Current 6th Graders



Do we have the right number and location of middle schools?

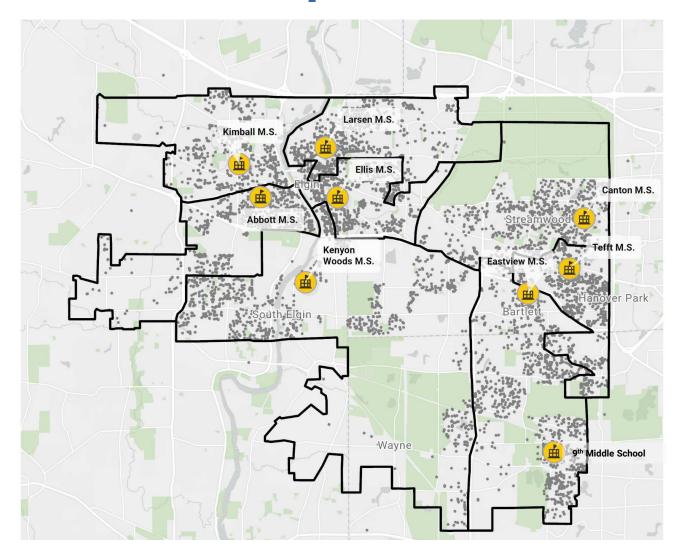
2027 Middle School Cohort



There's a large area in the southeast without a middle school.

Would it make sense to add a new middle school to equalize the student experience for those in the south portion of the district?

Middle School Reference Map





Exploring Middle School Options

What quantity and model size of middle schools best serve SD U-46?

What's a model size? Why use a model?

- Create a building template sized for a specific number of students
- Regular model sizes offer more consistent student experience; amenities, programs, amount of space

Options Explored in this Process

- 9 MS at regular model sizes; 750, 855, and 950 student schools
- 8 MS at regular model sizes; 750, 855, and 1000 student schools
- 9 MS at irregular model sizes that fit existing building size; student capacity varies



Program Models by School – 9 Middle Schools

Based on unified capacity models of 750, 855, and 950

School	Current Enrollment (7 th -8th)**	Projected Enrollment w/ 6 th grade included	Proposed Program Model	Existing SF	Proposed SF*	Gap b/w Proposed & Existing	Addition Needed (SF)
Abbott M.S.	666	895	750	117,288	110,250	-7,038	
Canton M.S.	505	625	855	137,754	125,685	-12,069	
Eastview M.S.	785	972	950	167,762	139,650	-28,112	
Ellis M.S.	755	829	750	121,490	110,250	-11,240	
Kenyon Woods M.S.	962	999	855	135,411	125,685	-9,726	
Kimball M.S.	626	758	855	127,354	125,685	-1,669	
Larsen M.S.	654	782	750	101,675	110,250	8,575	
Middle School 9	0	0	750	60,620	110,250	49,630	49,630
Tefft M.S.	911	1,089	855	128,742	125,685	-3,057	
Totals	5,864 students	6,947 students	7,370 students	1,098,096 SF	1,083,390 SF	-14,706 SF	49,630 SF

Cushion of approx. 420 students to accommodate development impacts and/or housing turnover

*This model uses 147 SF/student
**Current Enrollment numbers are from Oct. 2019
Note: This is a high-level review of SF within the District, but
close review of space types and quantities is necessary to
make sure classroom needs are met district-wide.





Program Models by School – 8 Middle Schools

Based on unified capacity models of 750, 855, and 1000

School	Current Enrollment**	Projected Enrollment w/ 6 th grade included	Proposed Program Model	Existing SF	Proposed SF	Gap b/w Proposed & Existing	Addition Needed (SF)
Abbott M.S.	666	895	750	117,288	110,250	-7,038	
Canton M.S.	505	625	1000	137,754	147,000	9,246	9,246
Eastview M.S.	785	972	1000	167,762	147,000	-20,762	
Ellis M.S.	755	829	750	121,490	110,250	-11,240	
Kenyon Woods M.S.	962	999	1000	135,411	147,000	11,589	11,589
Kimball M.S.	626	758	855	127,354	125,68	-1,669	
Larsen M.S.	654	782	750	101,675	110,250	8,575	8,575
Tefft M.S.	911	1,089	855	128,742	125,68	-3,057	
Totals	5,864 students	6,947 students	6,960 students	1,037,476 SF	1,023,120 SF	-14,356 SF	29,410 SF

Very little cushion to accommodate development impacts and/or housing turnover

*This model uses 147 SF/student **Current Enrollment numbers are from Oct. 2019 Note: This is a high-level review of SF within the District, but close review of space types and quantities is necessary to make sure classroom needs are met district-wide.





Capacity Using Existing SF – 9 Middle Schools

Based on existing square footage and 147 SF/student; irregular models

School	Current Enrollment*	Projected Enrollment w/ 6 th grade included	Existing SF	Potential Maximum Capacity (SF/147 Sf/stu)
Abbott M.S.	666	895	117,288	798
Canton M.S.	505	625	137,754	937
Eastview M.S.	785	972	167,762	1,141
Ellis M.S.	755	829	121,490	826
Kenyon Woods M.S.	962	999	135,411	921
Kimball M.S.	626	758	127,354	866
Larsen M.S.	654	782	101,675	692
Middle School 9	-	-	60,620+	412
Tefft M.S.	911	1,089	128,742	876
Totals	5,864 students	6,947 students	1,098,096 SF	7,470 students

Note: This is a high-level review of SF within the District, but close review of space types and quantities is necessary to make sure classroom needs are met district-wide.

*Current Enrollment numbers are from Oct. 2019
+ Current building size without addition needed to accommodate anticipated enrollment with 6th grade shift





Elementary Schools

How do we provide an equitable experience for all elementary school students, while offering pre-K programs at all elementary schools once 6th is moved to MS?



What changes at the elementary level can ensure operational efficiency and an equitable educational experience?

This master plan provides an opportunity to create a more equitable educational experience for elementary school students.

What did we investigate?

Reviewed current, historical, and projected enrollment from Baragar Systems (District 3rd party consultant)

Investigated implications of integrating pre-K into elementary schools

Reviewed Phase 1 analyses to compare facility, operational, and educational factors district-wide (capacity, programs, facility condition, operational costs, site size, etc.)

Examined neighborhood demographics to understand community context



Summary of Curriculum & Instruction:

What did we hear from educators?

Elementary schools are where relationships with the district are established.

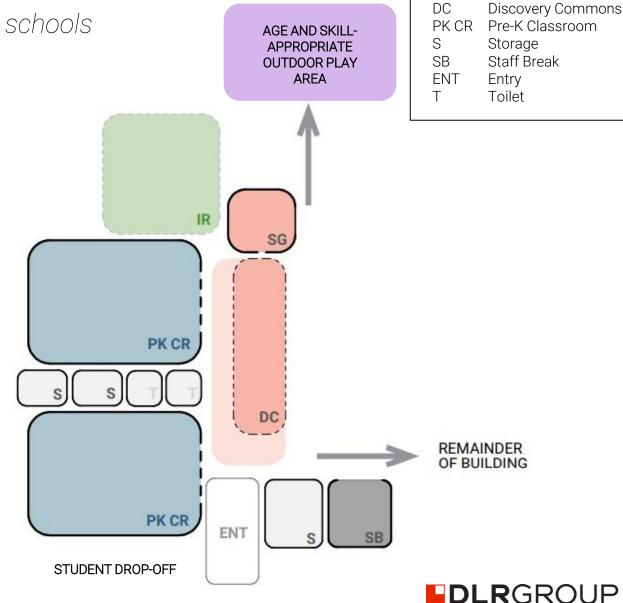
- Strong participation in school and community at elementary school level
- (Pre-K at ES) creates greater investment earlier in students' educational journey
- Continuity of instruction and related services
- Opportunity for early intervention and learning supports
- Opportunities for cross-grade staff collaboration at ES level
- Balancing the needs of the population is important for the future
- Adjustments to facilities would be needed to incorporate pre-K: playgrounds, restrooms, size-appropriate furniture and sharing of common spaces
- Pre-K staff should be recognized as a part of the ES staff



Acknowledging Changes Needed for Pre-K

Considerations for integrating pre-K into elementary schools

- Pre-K best supported with a suite of spaces tailored to early childhood learning
- Building and site must be considered
 - Pre-K classrooms with toilet rooms
 - Appropriately sized for ages served
 - "Discovery Commons" multi-purpose and collaborative space
 - Gross motor skills indoor play space
 - Age and skill appropriate outdoor play
 - Educator support space
 - Supporting integration of student services
 - Student drop-off & pick-up



Legend

Indoor Recess Small Group

Equalizing SF/student at elementary schools

Right-sizing building capacities: aligning SD U-46 facilities with future instructional and operational needs and goals

120

SF/student

State Guideline

150

SF/student

National Low Quartile 170

SF/student

Future Ready Recommendation

A range of reference points for SF/student are available — choosing the best guideline to fit needs & goals of SD U-46 while providing opportunity to grow.



Based on existing square footage and 120 SF/student

1 of 4

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School	Current Enrollment*	Projected Enrollment with Pre-K – 5	Existing SF	Potential Maximum Capacity (SF/120 SF/stu)
Bartlett E.S.	485	429	60,466	504
Centennial E.S.	476	467	75,540	630
Century Oaks E.S.	479	370	50,722	423
Channing E.S.	452	398	54,768	456
Clinton E.S.	433	395	47,552	396
Coleman E.S.	648	524	68,779	573
Creekside E.S.	538	462	59,120	493
Fox Meadow E.S.	512	420	73,641	614
Garfield E.S.	277	242	46,711	0
Glenbrook E.S	497	421	47,250	394
Hanover Countryside E.S.	393	368	46,386	0
Harriet Gifford E.S.	402	344	55,566	463

Note: This is a high-level review of SF within the District, but close review of space types and quantities is necessary to make sure classroom needs are met district-wide.

*Current Enrollment numbers are from Oct. 2019





Based on existing square footage and 120 SF/student

2 of 4

2014				
School	Current Enrollment*	Projected Enrollment with Pre-K - 5	Existing SF	Potential Maximum Capacity (SF/120 SF/stu)
Hawk Hollow E.S.**	373	336	60,620	0
Heritage E.S.	424	350	48,126	401
Highland E.S.	610	511	62,911	524
Hillcrest E.S.	494	402	52,093	434
Hilltop E.S.	566	464	67,528	563
Horizon E.S.	579	504	64,573	538
Huff E.S.	629	470	62,150	518
Illinois Park Early Learning	365	0	51,197	0
Independence Early Learning	264	269	32,245	269
Laurel Hill E.S.	472	374	44,530	371
Liberty E.S.	597	480	60,658	505
Lincoln E.S.	469	424	57,552	480

Note: This is a high-level review of SF within the District, but close review of space types and quantities is necessary to make sure classroom needs are met district-wide.

*Current Enrollment numbers are from Oct. 2019

**Hawk Hollow would become 9th MS





Based on existing square footage and 120 SF/student

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School	Current Enrollment*	Projected Enrollment with Pre-K - 5	Existing SF	Potential Maximum Capacity (SF/120 SF/stu)
Lords Park E.S.	655	517	63,865	532
Lowrie E.S.	385	339	42,332	353
McKinley E.S.	368	306	58,693	489
Nature Ridge E.S.	599	500	58,485	487
Oakhill E.S.	437	379	60,065	501
O'Neal E.S.	529	401	46,808	390
Ontarioville E.S.	528	400	56,533	471
Otter Creek E.S.	676	563	62,769	523
Parkwood E.S.	353	290	51,283	427
Prairieview E.S.	332	279	76,072	634
Ridge Circle E.S.	475	426	69,801	582
Spring Trail E.S.	341	307	60,578	505

Note: This is a high-level review of SF within the District, but close review of space types and quantities is necessary to make sure classroom needs are met district-wide.

*Current Enrollment numbers are from Oct. 2019





Based on existing square footage and 120 SF/student

4 of 4

School	Current Enrollment*	Projected Enrollment with Pre-K - 5	Existing SF	Potential Maximum Capacity (SF/120 SF/stu)
Sunnydale E.S.	380	315	47,435	395
Sycamore Trails E.S.	652	583	75,733	631
Timber Trails E.S.	413	337	57,343	478
Washington E.S.	391	375	55,191	460
Wayne E.S.	350	340	60,650	505
Willard E.S.	293	256	43,440	362
Totals	19,591 students	16,339 students	2,397,760 SF	18,274 students

Allows for flexibility in changing space types to accommodate changes in teaching & learning (collaborative, hands-on/project-based learning, etc.)

Note: This is a high-level review of SF within the District, but close review of space types and quantities is necessary to make sure classroom needs are met district-wide.

*Current Enrollment numbers are from Oct. 2019





Data Points Reviewed for Elementary Schools in SD U-46



Oldest elementary schools

Smallest site acreage

Lowest SF/student

Lowest spatial educational adequacy score

Lowest average projected enrollment

Least amount of space for expansion (any # of levels)

Least amount of space for expansion (more than one level)

Lowest overall building score

Highest FCI (worst condition)

Lowest Building Adequacy Score



10 oldest elementary schools in SD U-46



Garfield Elementary (1887)

Lowrie Elementary (1887)

McKinley Elementary (1887)

Washington Elementary (1893)

Bartlett Elementary (1928)

Ontarioville Elementary (1928)

Wayne Elementary (1947)

Harriet Gifford Elementary (1948)

Coleman Elementary (1953)

Willard Elementary (1953)



10 Smallest Sites for Elementary Schools in SD U-46



Lowrie Elementary (1.95 acres)

Willard Elementary (2.13 acres)

McKinley Elementary (2.39 acres)

Ontarioville Elementary (2.79 acres)

Garfield Elementary (2.91 acres)

Harriet Gifford Elementary (3.64 acres)

Hanover Countryside Elementary (4.48 acres)

Laurel Hill Elementary (4.68 acres)

Glenbrook Elementary (5.36 acres)

Heritage Elementary (5.53 acres)



10 Lowest SF/student for Elementary Schools in SD U-46 (Current)



Ronald O'Neal Elementary (88 SF/student)

Otter Creek Elementary (92 SF/student)

Laurel Hill Elementary (94 SF/student)

Glenbrook Elementary (95 SF/student)

Lords Park Elementary (97 SF/student)

Nature Ridge Elementary (97 SF/student)

Liberty Elementary (101 SF/student)

Highland Elementary (103 SF/student)

Century Oaks Elementary (105 SF/student)

Hillcrest Elementary (105 SF/student)



10 lowest average projected enrollment over 10 years



Garfield Elementary (250)

Prairieview Elementary (288)

Parkwood Elementary (297)

Willard Elementary (299)

McKinley Elementary (315)

Spring Trail Elementary (315)

Hawk Hallow Elementary (335)

Timber Trails Elementary (347)

Wayne Elementary (347)

Lowrie Elementary (348)



Combining Factors: A Mixed Scenario Methodology

A mixed methodology allows us to control for equity factors.

Methodology:

- Identify schools with the highest number of issues and prioritize those for decommissioning
- From those options, evaluate schools based on "no go" factors to eliminate infeasible closures
- Compare potential closures to demographic factors such as population density, socioeconomic status, and race/ethnicity to ensure equitable distribution of potential closures
- Consider proximity to adjacent schools and potential of those schools to absorb students
- Avoid clustering any closures

Factors weighing against building closure:

- School has historic significance
- School includes a high number of selfcontained special education students
- School is the only school in its general area / no nearby schools
- School received a favorable facility grade or above, or may have had extensive recent renovations
- Other school-specific factors identified by SD U-46



Potential Elementary/Pre-K Schools to be Decommissioned

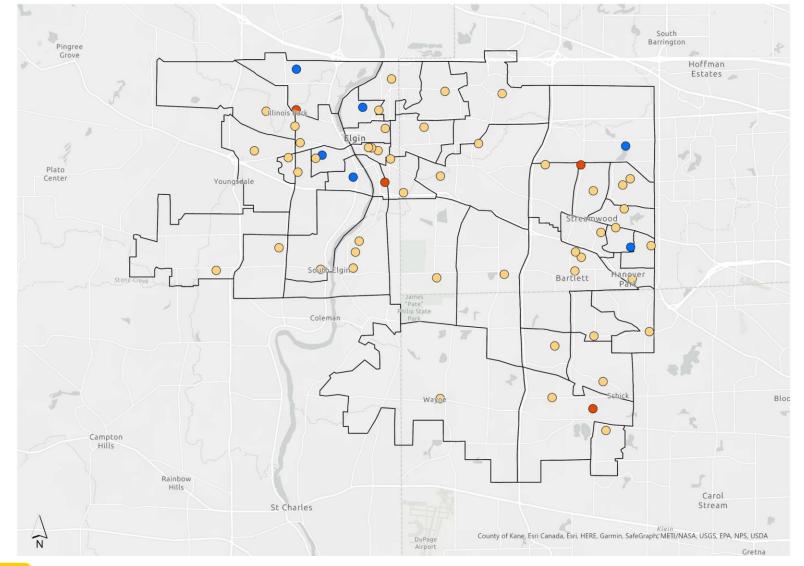
School	Proposal	Possible Student Distribution	Additional Notes
Garfield	Decommission	To Channing & Huff	Renovation and/or potential addition at Channing
Hanover Countryside	Swing space then decommission	To Glenbrook and/or Oakhill	Schools receiving students may require renovation/addition/replacement
Hawk Hollow	Repurpose: Becomes new MS site	To Prairieview, Spring Trail & Wayne	Renovation/addition for cohort-shift alignment
Illinois Park	Decommission	To home elementary schools	Repurpose as another use TBD

Potential Elementary Schools to be Modified or Replaced

School	Proposal	Possible Student Distribution	Additional Notes
Lowrie	Replace		School to be considered for replacement
Glenbrook	Replace	Absorb portion of students from Hanover Countryside	Site flooding issues, poor building adequacy & security concerns; consider replacement on existing site
McKinley	Replace	Absorb students from redrawing boundaries in central Elgin	In historic district although does not hold an historic designation; consider replacement
Washington	Addition/Renovation	Right-size and absorption of students due to boundary change	Historic district and need to accommodate student population equitably
Century Oaks	Replace		Given age, location, poor spatial adequacy & condition; consider replacement
Parkwood	Replace	Absorb students from Laurel Hill and Ontarioville	Sister school to Century Oaks; inefficient placement on site; consider replacement

^{*}Note: Updates, renovations, additions may be needed at other schools for right-sizing and alignment with curricular goals.

Elementary School Reference Map





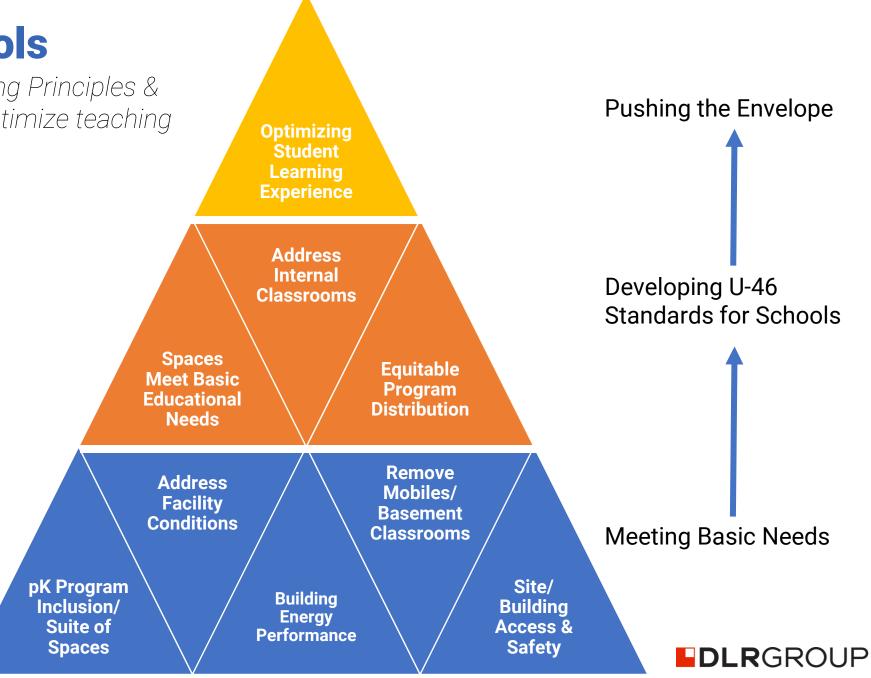
Updates TBD

Elementary Boundary Areas



Elementary Schools

Defining a path to meet Guiding Principles & identifying opportunities to optimize teaching & learning District-wide



Addressing maintenance & renovation needs across SD U-46

What happens to the rest of the schools?

- Facility Condition Assessments (FCA): All buildings were evaluated based on their current condition and maintenance needs.
- FCA weighs into the recommendations for decommission and replacement as well as the evaluation of the remaining buildings.
- Plans for addressing maintenance needs are a major component of the master plan.
- Combining condition analysis and future vision for SD U-46 into recommendations for all schools.
- Address deferred maintenance and renovation needs through
 - Targeted projects
 - o Intentional plan for increasing annual expenditures for building maintenance.



The physical condition of building systems and related components are typically defined as being in one of four conditions: Excellent, Good, Fair, and Poor.

For the purposes of this review, the following definitions are used:

Excellent = New or near new condition with no corrective actions required but eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.

Good = Generally good condition, is sound and performing its function but may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.

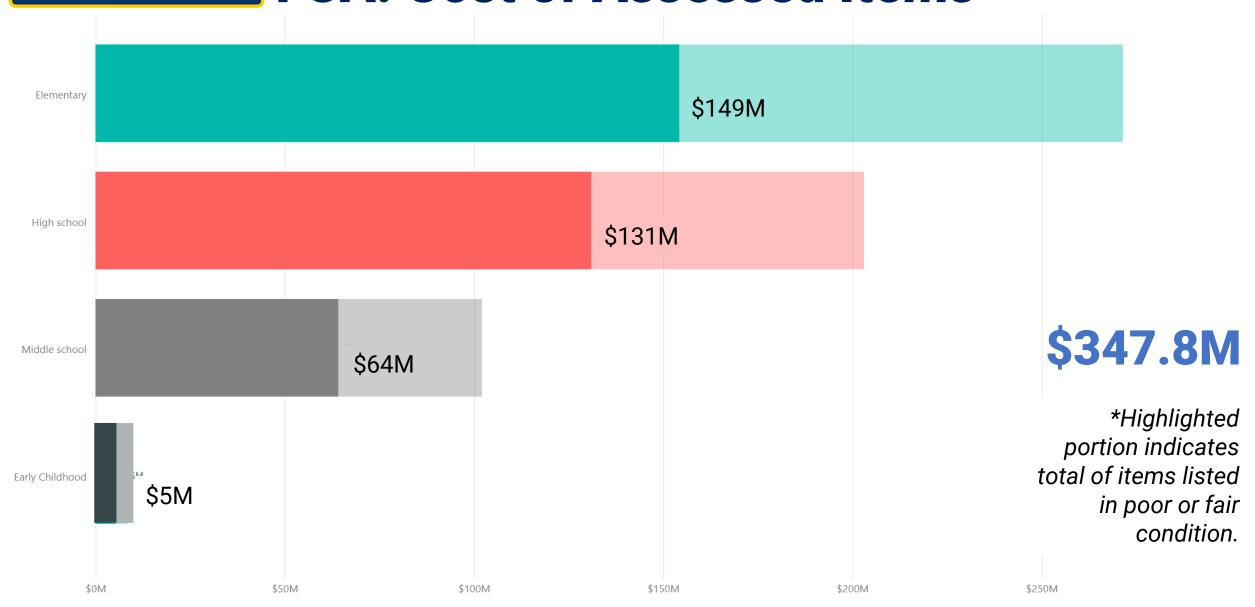
Fair = Fair condition with some corrective actions required; may exhibit some signs of significant wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.

Poor = Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance, shows evidence of previous repair, has become obsolete, or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.



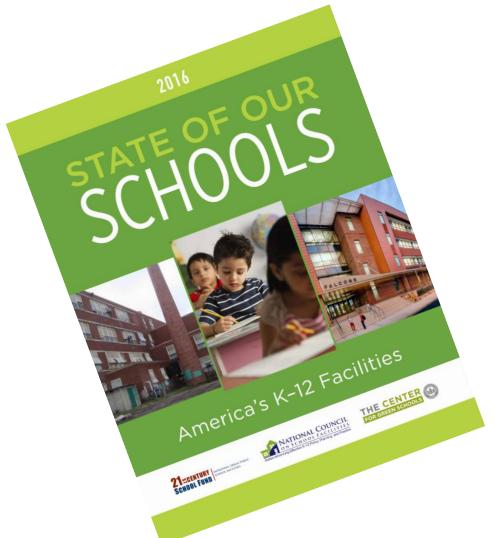


FCA: Cost of Assessed Items





Planning Considerations: Benchmark Annual Expenditures

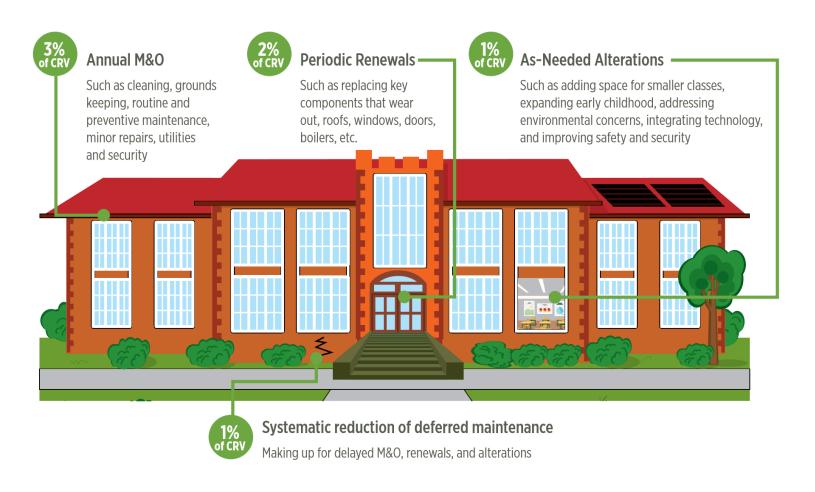


"The scale of U.S. public K-12 school facilities is staggering: every school day, nearly 50 million students and 6 million adults are in close to 100,000 buildings, encompassing an estimated 7.5 billion gross square feet and 2 million acres of land."

The annual modern standard for responsible stewardship of U.S. schools is 4% of the replacement cost (CRV) or ~ \$87 billion per year.

Planning Considerations: Benchmark Annual Expenditures

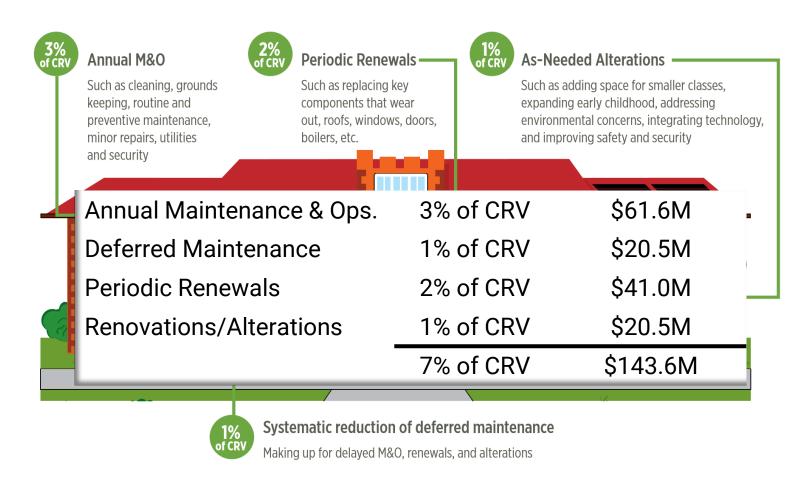
Modern Standards for Maintaining and Upgrading Current K−12 Public School Facilities



Filardo, Mary. "State of Our Schools: America's K-12 Facilities 2016." 21st Century School Fund (2016).

Planning Considerations: Benchmark Annual Expenditures

Modern Standards for Maintaining and Upgrading Current K−12 Public School Facilities



Filardo, Mary. "State of Our Schools: America's K-12 Facilities 2016." 21st Century School Fund (2016).



Move 6th grade to middle schools → creates space at elementary level

Identify location for 9th MS

Assess needed levels of renovation, addition, etc. at MS level

Recommendations to address defined U-46 Priorities



Adjustment of school attendance boundaries needed

Revisit program placement district-wide



Review elementary schools' ability to accommodate districtwide pre-K program students to home elementary schools Evaluate need for renovations, additions, replacement or decommissioning/

consolidation

Move pre-K







DLR Group and the Finance & Operations team:

- Continue scenario planning at all school levels
- Confirm communication path forward (w/Steering Committee, BOE & committees, general public)



Administration and Board of Education to confirm scenarios



Review timeline, phasing, high-level costs of confirmed scenarios



Finalize recommendations for final board approval

Stay informed

PLANS AND PRIORITIES

- Educational Facility
 Master Plan
 - Phase 1: Deeper Understanding
 - → Phase 2: Discover and Explore
 - → Phase 3: Program
 - Phase 4: Conceptualization
 - → Phase 5: Game Plan
 - Phase 6: Adoption and Implementation
- Strategic Plan
- Equity Plan
- ICARE Standards
- Plans and Priorities

Planning For Our Future



Developing an Educational Facility Master Plan

School District U-46 has embarked on an Educational Facility Master Plan (EFMP) process to assess our infrastructure, classrooms, furnishings and overall facility use and efficiency. The Board selected DLR Group, a Chicago-based design firm, as its partner to develop a facilities master plan.

This is long-range work that the District undertook in early 2020, just before the onset of the COVID-19 pandemic. But with some modifications and minor delays, the process has continued, and students, faculty, parents, and community members have been able to participate in the beginning stages of developing a thoughtful, long-term master plan to support our future.



Thank you for your support as the District works to provide equitable access to 21st century learning environments that support academic success for all. If you have any questions about DLR Group's work, please reach out to the District's Operations Department by clicking on the "Educational Facility Master Plan" on Let's Talk.

Steering Committee Members

Cathy Russell

Chief Executive Officer, Boys & Girls Club

Juanita Crear-Price

Community Member, Educator and Psychologist, Substitute Teacher

Kim Wascher

Director of Parks and Recreation for City of South Elgin, Parent, PTO and CAC member

Nathan Gac

Fire Department Employee, CAC Committee, Bartlett High School Booster Club President, U-46 Parent

Trisha Morgan

Vouth and Family Manager Taylor Family VMCA Parent of II-46 Students

DESIGNING OUR FUTURE

Phase 1: Deeper Understanding

Phase 2: Discover and Explore

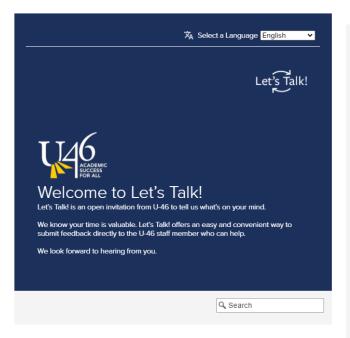
Phase 3: Program

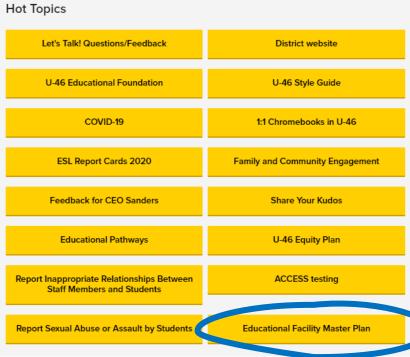
Phase 4: Conceptualization

How To Ask Questions

STEP 1

https://www.u-46.org/letstalk





STEP 3

