



# Master Planning

**Many organizations recognize that master planning studies are a valuable management tool, and GreenAssociates has assisted many clients in developing these plans.**

**The need for a Master Plan can be triggered by several issues:**

a growth or change in manpower, new programs, or changes in the community. Other complex issues that put pressure on space needs include technological advancements; a need for additional services; and community requirements.

**A Master Plan should include the following:**

- List of All Services Offered
- Role of technology
- Community Services Study
- Existing Space Usage
- List of Existing and Desired Functional Areas
- Compilation of Adjacencies

From the above, a Master Plan will be developed that indicates the size and location of each space for the facility. These spaces are compared with planning guides and personal experience. The current building functional areas are compared with these, and a list of needs and desires is created.

The list of services desired by the community helps give direction to the plan. **This list of services is helpful in shaping and directing community desires.**

Finally, GreenAssociates recommends exploring the importance of the building in **serving the broader needs of the community at large**. In many areas, tax supported organizations are reviewing how their buildings can be better utilized by the diverse community who supports them.

The collected data will inevitably lead to what the present building needs in the way of space and what changes are necessary to better serve the public.





## 1: District Vision

- Collect and Document all Relevant Information
- District Strategic Plan
- Demographic Projections Provided by the District
- District Education Standards
- School Improvement Plans
- District Technology Plan
- Community Discussion



## 2: Facility Assessment

- Ten Year Life Safety Survey
- Collaboration with District & Maintenance Staff
- Educational Environment Compared to Educational Program Standards



## 3: Needs and Solutions

- Compare Facility Assessment to District Vision
- Specific Facility Assessments:  
Life Safety / Building Condition /  
Life Expectancy of Equipment
- Comparison of Current Educational Environment to Projected Demographic Needs
- Proposed Solutions and Costs Estimations



## 4: Priorities & Implementation Schedule

- Priorities Determined on a Consensus Basis
- Community Engagement via Public Review Session
- Establish Priority of Needs
- Implementation Schedule Developed



## 5: Communication

- Communicate Master Facility Plan to District
- District Involvement and Communication is Key
- Community Engagement.

### Phase 1 Documentation

- Executive Summary
- Meeting Minutes
- Appendix of Referenced Documents

### Phase 2 Documentation

- Building Information Management Database
- Educational Program Matrix

### Phase 3 Documentation

- Expanded Building Information Management Database
- Expanded Educational Program Matrix
- Modified Building and Site Plans

### Phase 4 Documentation

- Refined Building Information Management Database:  
1-2 year, 5 Year, and 10 Year Time Frames
- Master Project Schedule
- Meeting Minutes

### Final Documentation

- The Final Documentation is in a Record Document of all Previous Developments
- Outline Presentation Suitable for Publication
- Final Building Information Management Database
- Final Educational Program Matrix
- Final Building and Site Plans
- Master Project Schedule

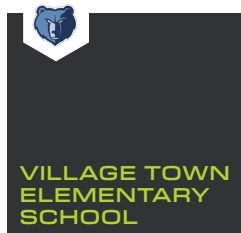


# Reports



## School District 00 Facility Capacity and Utilization VILLAGE TOWN ELEMENTARY

Room Number	Room/Grade	Room/Type	SF						
B02	5TH GRADE BILINGUAL	CLASSROOM	797						
B04	5TH GRADE	CLASSROOM	807						
B06	5TH GRADE	CLASSROOM	802						
B08	5TH GRADE	CLASSROOM	808						
B10	4TH GRADE	CLASSROOM	802						
B12	4TH GRADE	CLASSROOM	803						
B15	4TH GRADE BILINGUAL	CLASSROOM	810						
B17	4TH GRADE	CLASSROOM	803						
C09	3RD GRADE	CLASSROOM	806						
C11	4TH GRADE	CLASSROOM	802						
C15	3RD GRADE	CLASSROOM	801						
C17	3RD GRADE	CLASSROOM	804						
C19	2ND GRADE	CLASSROOM	801						
C21	2ND GRADE	CLASSROOM	803						
C23	2ND GRADE	CLASSROOM	804	15	900	30	31	26	5 63%
C25	3RD GRADE BILINGUAL	CLASSROOM	808	15	900	30	31	26	5 63%
D01	1ST GRADE	CLASSROOM	798	15	900	30	31	26	5 63%
D03	2ND GRADE	CLASSROOM	804	15	900	30	31	26	5 63%
D07	KINDERGARTEN	CLASSROOM	1091	15	1200	22	55	20	5 63%
D11	KINDERGARTEN	CLASSROOM	1086	15	1200	22	55	20	5 63%
D13	KINDERGARTEN	CLASSROOM	1090	15	1200	22	55	20	5 63%
D15	1ST GRADE	CLASSROOM	807	15	900	30	31	26	5 63%
D17	1ST GRADE	CLASSROOM	793	15	900	30	31	26	5 63%
Total			19329				578		
A15	MUSIC	BAND/MUSIC	1110	15	1250	30	42	26	5 63%
A17	ART	ART	1084	15	1250	30	42	26	5 63%
B03	ELL	CLASSROOM	570	15	900	30	31	18	5 63%
			2763				71		
A23	MPR	MPR	3450	15	7000	60	177	19	5 63%
			3450				19		
C10	SUPPORT SERVICES	CLASSROOM	460	15	1000	13	77	6	5 63%
D09	INCLUSION/SPEECH	CLASSROOM	1091	15	1000	13	77	14	5 63%
D16	CLINICAL	SPEECH	569	15	1000	13	77	7	5 63%
E01	INSTRUCTIONAL	CLASSROOM	481	15	1000	13	77	6	5 63%
E02	INSTRUCTIONAL	CLASSROOM	562	15	1000	13	77	7	5 63%
E03	LIFE SKILLS	CLASSROOM	571	15	1000	13	77	7	5 63%
E04	LIFE SKILLS	CLASSROOM	569	15	1000	13	77	7	5 63%



1220 Boulevard Avenue  
Village Town, IL 60412



Grades K - 5  
Built in 1911 with 2 additions  
34,534 Overall Square Footage

Educational Adequacy Rating:  
**32%**

Projected 5-Year Expenditure Cost:  
**\$1,341,204**

Projected 20-Year Expenditure Cost:  
**\$4,076,427**

Current Enrollment:  
**263**

Functional Capacity:  
**375**

Utilization Rating:  
**GOOD**

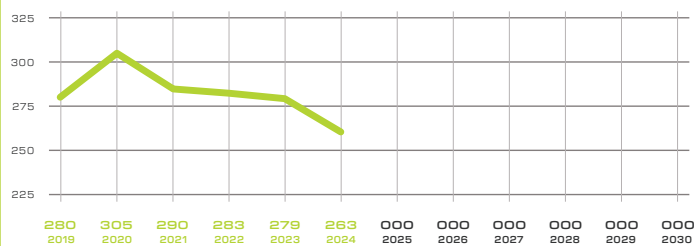
### SQUARE FOOTAGE VALUES

Recommended SF per Student: 125-155 SF  
Actual: 131.31 SF

Recommended SF per Kindergarten: 1200 SF  
Actual: 983 SF

Recommended SF per Classroom: 900 SF  
Actual: 844 SF

### ENROLLMENT BY YEAR





## Educational Adequacy ELEMENTARY SCHOOL



		Unsatisfactory	Poor	Fair	Good	Excellent	Comments
		0	1	2	3	4	
<b>School Location and Site</b>							
Circulation/Traffic	Site is easily accessible and conveniently located					4	
Parking	Parking is adequate for staff and visitors				3		
Playgrounds	Adequate size and separated from street and parking			2			
Playfields	Adequate size and separated from street and parking			2			
Future Expansion	Logical area for future expansion			2			
Exterior Learning Opportunities	Opportunities for outdoor learning areas			2			
Landscape	Site is well landscaped			2			
Sidewalk Route to School	Route to school is safe and direct				3		
<b>Section Total</b>						20	

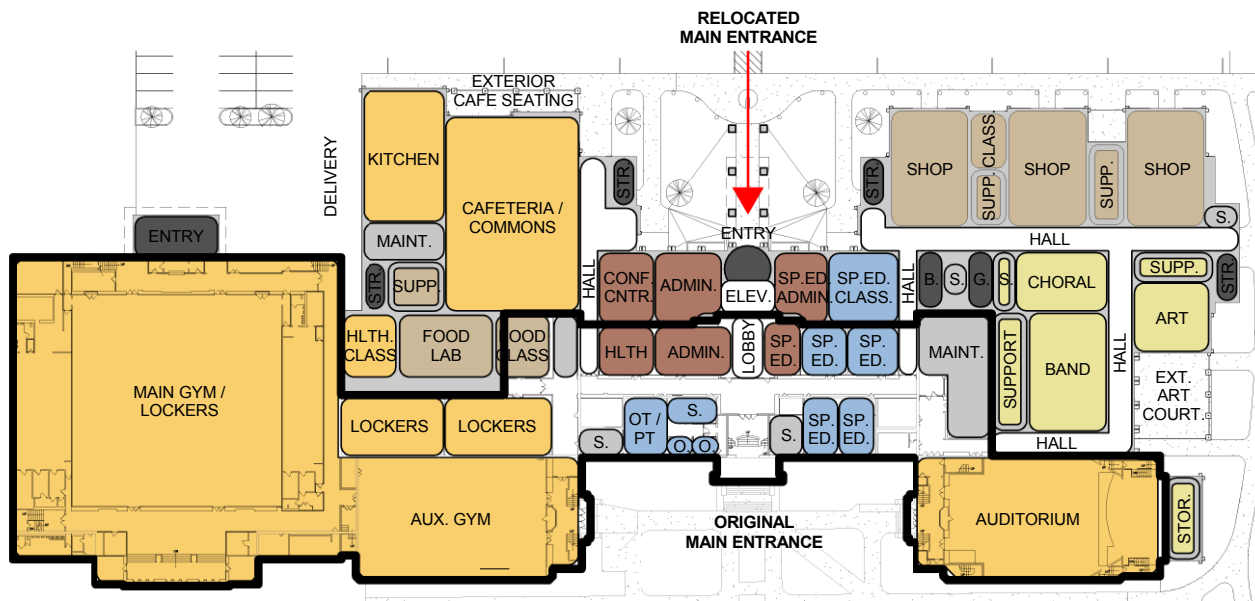


## Facility Recommendations Summary Village Town School District 00










Recommendation Category	Estimated Cost and Recommendation		
	Year 5	Year 10	Year 15
<b>BUILDING SUPPORT SERVICES</b>			
1.0 Building Interior	\$395,514	\$134,267	\$0
2.0 Building Exterior and Site	\$506,488	\$5,686,142	\$91,782
3.0 Heating, Ventilation, and Air Conditioning	\$699,985	\$7,020	\$0
4.0 Plumbing	\$113,425	\$0	\$0
5.0 Power and Lighting	\$74,386	\$9,641	\$0
6.0 Electrical Systems	\$0	\$0	\$0
7.0 Proposed Improvements	\$0	\$0	\$0
<b>Building Subtotal</b>	\$1,789,798	\$5,837,071	\$91,782
<b>Additional 30% for Soft Costs and Contingencies*</b>	\$2,326,738	\$7,588,192	\$119,316
<b>Additional 5% Escalation Per Year</b>	\$2,326,738	\$8,286,495	\$142,287
<b>CULBERTSON</b>			
1.0 Building Interior	\$963,537	\$984,055	\$0
2.0 Building Exterior and Site	\$1,321,405	\$909,194	\$247,686
3.0 Heating, Ventilation, and Air Conditioning	\$31,525	\$0	\$0
4.0 Plumbing	\$185,055	\$0	\$0
5.0 Power and Lighting	\$144,001	\$0	\$0
6.0 Electrical Systems	\$22,100	\$0	\$0
7.0 Proposed Improvements	\$0	\$0	\$0
<b>Building Subtotal</b>	\$2,667,622	\$1,893,249	\$247,686
<b>Additional 30% for Soft Costs and Contingencies*</b>	\$3,467,909	\$2,461,224	\$321,992
<b>Additional 5% Escalation Per Year</b>	\$3,467,909	\$2,687,718	\$383,982



# Historical Restoration Case Study: Dixon Public School District 170



### Legend

-  CLASSROOM SPACES
  ENCORE SPACES
  SUPPORT SPACES
-  SPECIAL EDUCATION SPACES
  ASSEMBLY SPACES
  ENTRY / VERTICAL CIRCULATION
-  CAREER EDUCATION SPACES
  ADMINISTRATION SPACES
  OUTLINE OF EXISTING BUILDING





Dixon CUSD 170 is a rural district with multiple aging buildings. GreenAssociates have been their architects for the past 25 years, and have continuously helped them maintain and improve their facilities as they were able.

During a recent Life Safety Survey of their High School facility, it was determined that the magnitude of the cost of the life safety improvements to an aging facility warranted consideration of an entirely new replacement building.

The district engaged GreenAssociates to perform a multi-year, District Wide Master Plan. This included engaging the district staff, administration team, and participating in community engagement.

This culminated in the closing and consolidating of two schools, and forming a long range plan for the balance of the district buildings including the disposition of the high school building.

## Program Summary of Space Requirements

SPACE CATEGORY	EXISTING	DRAFT: 08.18.15				PROPOSED	
	Net Area sub-total (sq. ft.)	Net Area Sub total (sq. ft.)	Total Spaces	Capacity @ 80% Utilization	Student Capacity 100%	Net Area Sub total (sq.ft.)	Total Spaces
<b>1.0 ACADEMIC CORE COMMUNITIES</b>	<b>EXISTING</b>	<b>DRAFT 08.18.15</b>				<b>PROPOSED</b>	
1.01 Academic Core (M, E, SS)	14,643	18,400	16	307	384	18,820	19
1.02 Science	5,802	7,000	6	115	144	7,243	6
1.03 Student Support & Resource	6,373	6,200	2	38	48	7,352	2
1.04 Teacher Centers	1,075	3,200	0	0	0	4,400	0
Sub-Total:	<b>27,893</b>	<b>34,800</b>	<b>24</b>	<b>460</b>	<b>576</b>	<b>37,815</b>	<b>27</b>
<b>2.0 SPECIALTY PROGRAMS</b>							
2.01 World Languages	1,264	2,100	2	38	48	2,535	2
2.02 Special Ed Learning Environ.	7,414	8,800	7	56	70	10,110	7
Sub-Total:	<b>8,678</b>	<b>10,900</b>	<b>9</b>	<b>94</b>	<b>118</b>	<b>12,645</b>	<b>9</b>
<b>3.0 CAREER EDUCATION</b>							
3.01 CTE	6,046	12,000	5	96	120	12,800	5
3.02 Foods/Nutrition Program	1,145	2,900	2	38	48	3,215	2
3.03 Entrepreneurial Program	661	2,700	2	38	48	2,954	2
3.04 Multi-Media Communications	0	1,600	2	29	36	1,477	2
Sub-Total:	<b>7,852</b>	<b>19,200</b>	<b>11</b>	<b>201</b>	<b>252</b>	<b>20,446</b>	<b>11</b>
<b>4.0 FINE &amp; PERFORMING ARTS</b>							
4.01 Visual Arts	1,817	2,000	1	19	24	2,050	1
4.02 Performing Arts: Music	4,144	5,400	2	38	48	5,164	2
4.03 Performing Arts: Theater	9,322	10,300	0	0	0	9,322	0
Sub-Total:	<b>15,283</b>	<b>17,700</b>	<b>3</b>	<b>57</b>	<b>72</b>	<b>16,536</b>	<b>3</b>
<b>5.0 LIBRARY &amp; TECHNOLOGY</b>							
5.01 Library/Media Resources	3,781	4,500	0	0	0	4,780	0
5.02 Technology Support	209	900	0	0	0	990	0
5.03 Media Café/Student Activities	0	1,800	0	0	0	1,972	0
Sub-Total:	<b>3,990</b>	<b>7,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,742</b>	<b>0</b>
<b>6.0 PE, HEALTH &amp; ATHLETICS</b>							
6.01 Physical Instruction	27,224	26,900	6	115	144	28,074	6
6.02 PE Support	1,417	4,100	0	0	0	1,417	0
6.03 Athletics Support	9,135	7,300	0	0	0	9,135	0
Sub-Total:	<b>37,776</b>	<b>38,300</b>	<b>6</b>	<b>115</b>	<b>144</b>	<b>38,626</b>	<b>6</b>
<b>7.0 ADMIN &amp; STUDENT SERVICES</b>							
7.01 Administration	2,881	2,400	0	0	0	2,100	0
7.02 Guidance/Student Services	1,094	1,300	0	0	0	1,280	0
7.03 College/Career Center	0	700	0	0	0	640	0
7.04 Health Office	1,072	700	0	0	0	700	0
7.05 Teacher Center (centralized)	984	800	0	0	0	750	0
7.06 Special Ed Administration	0	1,000	0	0	0	1,400	0
7.07 Shared Conference Center	226	1,100	0	0	0	1,025	0
Sub-Total:	<b>6,257</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,895</b>	<b>0</b>
<b>8.0 STUDENT COMMONS/DINING</b>							
8.01 Dining Commons	5,116	5,000	0	0	0	6,940	0
8.02 Kitchen & Servery	2,926	3,000	0	0	0	2,856	0
Sub-Total:	<b>8,042</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,796</b>	<b>0</b>
<b>9.0 BUILDING SERVICES</b>							
9.01 Custodial Support	736	2,000	0	0	0	1,800	0
9.02 Building Services	758	1,600	0	0	0	780	0
Sub-Total:	<b>1,494</b>	<b>3,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,580</b>	<b>0</b>
<b>SUB-TOTALS:</b>							
	Net Area sub-total (sq. ft.)	Net Area sub-total (sq. ft.)	Total Spaces	Capacity @ 80% Utilization	Student Capacity 100%	Net Area sub-total (sq.ft.)	Total Spaces
		147,700	53	927	1,162	154,081	56

Target Student Capacity = 900  
Target Utilization Rate = 80%

Estimated Gross Area = 250,000  
Estimated Net/Gross Area Percentage = 62%





# Facility Capacity Analysis Case Study: Community High School District 117



			Minnesota Guidelines		Illinois Guidelines		Semester 1			Semester 2			Both Semesters		Minnesota Guidelines	Illinois Guidelines
			Minnesota Guidelines Loading Factor	Minnesota Guidelines Rec. Max. Capacity	Illinois Guidelines Loading Factor	Illinois Guidelines Rec. Max. Capacity	Total Enrollment All Periods, Semester 1	Number of Periods Occupied for Instruction	Average Enrollment during Occupied Periods	Total Enrollment All Periods, Semester 2	Number of Periods Occupied	Average Enrollment during Occupied Periods	Average Number of Periods Occupied for Instruction	Average Enrollment during Occupied Periods	Average Enrollment Under or Over Rec. Max. Capacity	Average Enrollment Under or Over Rec. Max. Capacity
Rm No.	Name / Space Function		Existing Room Area													
Classroom / General																
C102	World Languages	770	34	23	30	26	183	7	26.1	180	7	25.7	7.0	25.9	Over	Under
C103	World Languages	770	34	23	30	26	187	8	23.4	191	8	23.9	8.0	23.6	Over	Under
C104	World Languages	770	34	23	30	26	133	6	22.2	143	6	23.8	6.0	23.0	Over	Under
C105	World Languages	750	34	22	30	25	155	7	22.1	151	7	21.6	7.0	21.9	Under	Under
C108	World Languages	770	34	23	30	26	132	5	26.4	133	5	26.6	5.0	26.5	Over	Over
C109	World Languages	770	34	23	30	26	142	6	23.7	142	6	23.7	6.0	23.7	Over	Under
C117	Social Studies	770	34	23	30	26	146	6	24.3	138	6	23.0	6.0	23.7	Over	Under
C118	Social Studies	770	34	23	30	26	165	7	23.6	158	7	22.6	7.0	23.1	Over	Under
C121	Social Studies	750	34	22	30	25	186	7	26.6	191	7	27.3	7.0	26.9	Over	Over
C122	Social Studies	770	34	23	30	26	145	6	24.2	141	6	23.5	6.0	23.8	Over	Under
C123	Social Studies	770	34	23	30	26	141	6	23.5	140	6	23.3	6.0	23.4	Over	Under
C124	Social Studies	770	34	23	30	26	196	8	24.5	193	8	24.1	8.0	24.3	Over	Under
C201B	Science, Drivers Ed	770	34	23	30	26	84	4	21.0	79	4	19.8	4.0	20.4	Under	Under
C235A	Math	874	34	26	30	29	109	5	21.8	109	5	21.8	5.0	21.8	Under	Under
C235B	Math	770	34	23	30	26	107	6	17.8	100	6	16.7	6	17.3	Under	Under
C302	English	770	34	23	30	26	171	7	24.4	184	8	23.0	7.5	23.7	Over	Under
C305	English	750	34	22	30	25	195	8	24.4	177	7	25.3	7.5	24.8	Over	Under
C306	English	755	34	22	30	25	175	7	25.0	162	7	23.1	7	24.1	Over	Under
C307	English	770	34	23	30	26	177	7	25.3	179	7	25.6	7	25.4	Over	Under
C308	English	770	34	23	30	26	199	8	24.9	197	8	24.6	8	24.8	Over	Under

## Community High School District 117 engaged GreenAssociates to perform a Facility Capacity Analysis Study of one of their two high schools.

The state of Illinois does not offer standards for school and classroom design, so we analyzed their space using the interpretation of classroom space as defined by the Minnesota Guide for Planning and School Construction. **This allows for more flexible classroom space, and moveable furniture for small and large group learning activities.**

We identified all of their instructional spaces and their function, assigned them a load factor based on their educational program, and proceeded to identify their gross and functional capacity for the school.

**It was determined that the current enrollment exceed the Minnesota guidelines for functional capacity, but were slightly below the maximum capacity as defined by the state of Illinois.** This hybrid approach to space planning showed room for growth in Drama, Music, Art, Career & Tech Ed, and Special Ed classrooms. It also determined that the Science classrooms were over functional capacity, and the ILC being used as classroom space was less than ideal.

This study helped the district decide how their space could be better utilized, as well as helping them with planning for future enrollment growth.









## Experience

### **Benjamin School District 25**

Dr. Jim Woell, Superintendent  
28W250 St. Charles Road  
West Chicago, Illinois 6018  
630-876-7800 jwoell@bendist25.org  
2016 • Long Range Planning

### **Community High School District 117**

Ms. Aryan Haren  
Superintendent of Business, CSBO Administration  
847-838-7268 aryan.haren@chsd117.org  
Mr. Ken Mlincsek  
Facilities Manager  
847-838-7174 kenneth.mlincsek@chsd117.org  
1625 Deep Lake Road Lake Villa, IL 60046  
2016 • Facility Capacity Analysis

### **Dixon Public School District 170**

Mr. Kevin Schultz  
Director of Buildings and Grounds  
1335 Franklin Grove Road  
Dixon, Illinois 61021  
815-373-4966 kschultz@dps.k12.il.us  
2015 • Long Range Master Planning

### **Gower School District 62**

Dr. Victor Simon, Superintendent  
7700 Clarendon Hills Road  
Willowbrook, Illinois 60527  
630-986-5383 vsimon@gower62.com  
2011-22 • District Master Planning

### **Joliet School District 86**

Dr. Matt Wilkinson  
Assistant Superintendent for  
Business & Financial Services  
420 N Raynor Avenue Joliet, IL 60435  
815-740-3196 mwilkinson@joliet86.org

### **Lake Forest Elementary School District 67**

Ms. Jennifer Hermes  
Chief Operating Officer of Business Services K-12  
300 South Waukegan Road  
Lake Forest, Illinois 60045  
847-604-7402 jhermes@lfschools.net  
2017 • Learning Spaces Planning

### **Mundelein School District 75**

Ms. Cathy Johnson  
Assistant Superintendent of Finance & Operations  
470 North Lake Street, Mundelein, Illinois 60060  
847-949-2200 x1231 cjohnson@d75.org  
2019 • Capital Planning  
2014 • Facilities Assessment Report

### **North Chicago Community Unit School District 187**

Mr. Greg Volan  
Director of Finance and Operation  
2000 Lewis Avenue  
North Chicago, Illinois 60064  
847-689-8150 jprice@d187.org  
2019 • Master Facilities Plan

### **Ottawa Elementary School District 141**

Mr. Cleve Threadgill  
Superintendent  
320 West Main Street, Ottawa, IL 61350  
815-433-1133 cthreadgill@d141.lasall.k12.il.us  
815-433-1133 mlee@oes141.org  
2018 • Facility Assessment and Maintenance Plan

### **Skokie School District 73.5**

Ms. Karen Hayes  
Interim Chief School Business Official / Operational  
Services Coordinator  
8000 East Prairie Road, Skokie, IL 60076  
847-676-8317 khayes@sd735.org  
2022 • Facility Master Plan  
2015 • School Capacity Study  
• Concept Planning

