



Facilities Master Plan

Community Kickoff Meeting

June 5, 2019



SMMA - Who We Are



Principal-in-Charge /
Educational Planner

Philip Poinelli
FAIA, ALEP



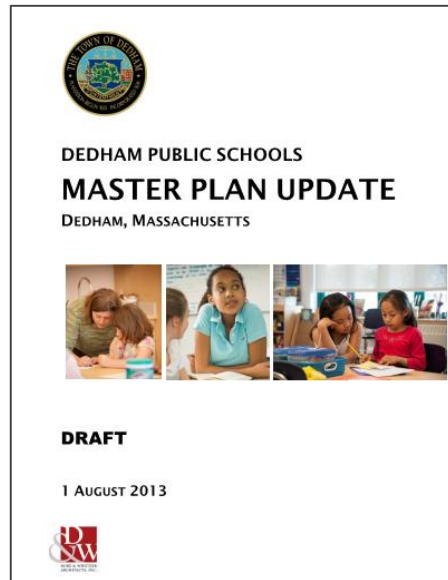
Project Manager

Kristen M. Olsen
AIA, MCPPO

Prior Studies

2013 Master Plan Update

Dore and Whittier Architects



Reviewed many options!
Resulted in the successful
prioritization and completion
of the new ECEC building.

2015 ECEC Feasibility Study

KBA Architects



Prior Studies

2016 Facility Condition Assessment

EMG Corp.

FACILITY CONDITION ASSESSMENT

Prepared for

Town of Dedham Schools
100 Whiting Avenue
Dedham, Massachusetts 02026



PREPARED BY:

EMG
10461 Mill Run Circle, Suite 1100
Owings Mills, Maryland 21117
800.733.0660
www.EMGcorp.com

EMG CONTACT:

C. Martin Nowland, PE, CEM
Program Manager
908-793-8461
mnowland@nowlandservices.com

EMG PROJECT #:

121711.16R000-007.322

DATE OF REPORT:

December 23, 2016

ONSITE DATE:

November 9, 2016

FACILITY CONDITION ASSESSMENT
OF

DEDHAM-GREENLODGE ELEMENTARY SCHOOL
191 GREENLODGE STREET
DEDHAM, MA 02026

FACILITY CONDITION ASSESSMENT

Prepared for

Town of Dedham Schools
100 Whiting Avenue
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EMG CONTACT:

Bill Champion
Program Manager
800.733.0660 x6234
bchampion@emgcorp.com

EMG PROJECT #:

121711.16R000-009.322

DATE OF REPORT:

December 27, 2016

ONSITE DATE:

November 10, 2016

FACILITY CONDITION ASSESSMENT
OF

DEDHAM-OAKDALE ELEMENTARY SCHOOL
147 CEDAR STREET
DEDHAM, MASSACHUSETTS 02026

FACILITY CONDITION ASSESSMENT

Prepared for

Town of Dedham Schools
100 Whiting Avenue
Dedham, Massachusetts 02026



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Bill Champion
Program Manager
800.733.0660 x6234
bchampion@emgcorp.com

EMG PROJECT #:

121711.16R000-010.322

DATE OF REPORT:

January 5, 2017

ONSITE DATE:

November 14, 2016

FACILITY CONDITION ASSESSMENT
OF THE

DEDHAM-RIVERDALE ELEMENTARY SCHOOL
143 NEEDHAM STREET
DEDHAM, MASSACHUSETTS 02026

Dedham Public Schools Completed Projects

**Riverdale
Elementary School**

High School

**Avery
Elementary School**

**New Early Childhood
Education Center**

Middle School

**Oakdale
Elementary School**

Capen

**Greenlodge
Elementary School**

- Dedham Middle School 2006
- Avery Elementary School 2012
- ECEC 2019

Integrated Planning & Design



K-12 BY THE NUMBERS

40+ MASTER
PLANS IN

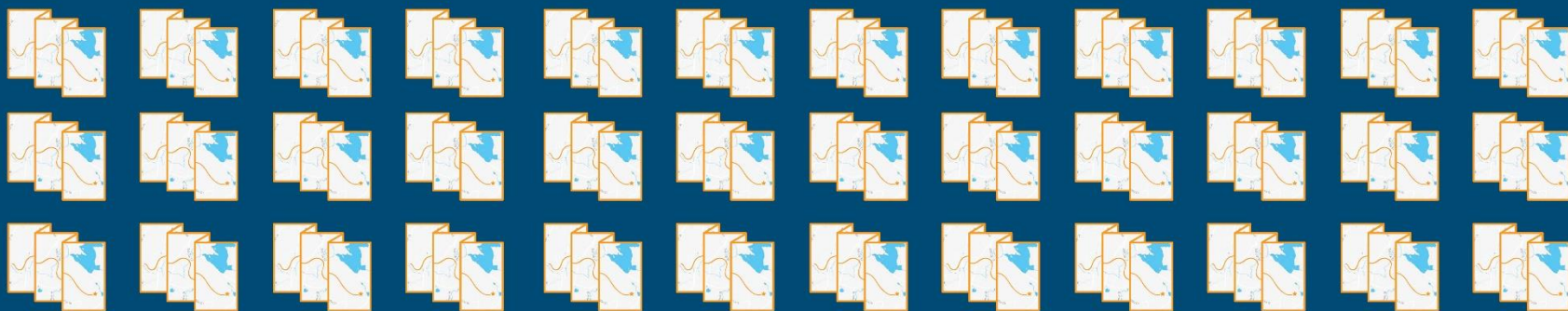


\$1.8
BILLION

TOTAL CONSTRUCTION
LAST 10 YEARS IN MA AND RI

250+

SCHOOL
STUDIES IN MA



Recent Master Planning Experience



Ashland School District
5 Schools



Belmont Public Schools
6 Schools



Boston Public Schools
134 Schools, Educational & Facilities Master Plan



Brookline High School
Educational Master Plan



East Longmeadow School District
5 Schools



Hamilton-Wenham Regional School District
5 Schools



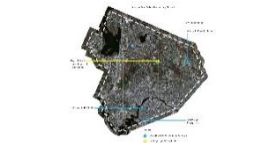
Lawrence Public Schools
21 Schools



Lexington Public Schools
9 Schools



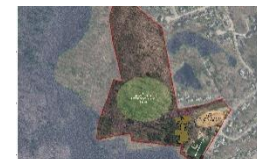
Sharon High School
High School Educational Master Plan



Waltham School District
9 Schools



Wellesley School District
9 Schools



Westwood School District
7 Schools



Dedham Public Schools Facilities Master Plan

**Riverdale
Elementary School**

**New Early Childhood
Education Center**

High School

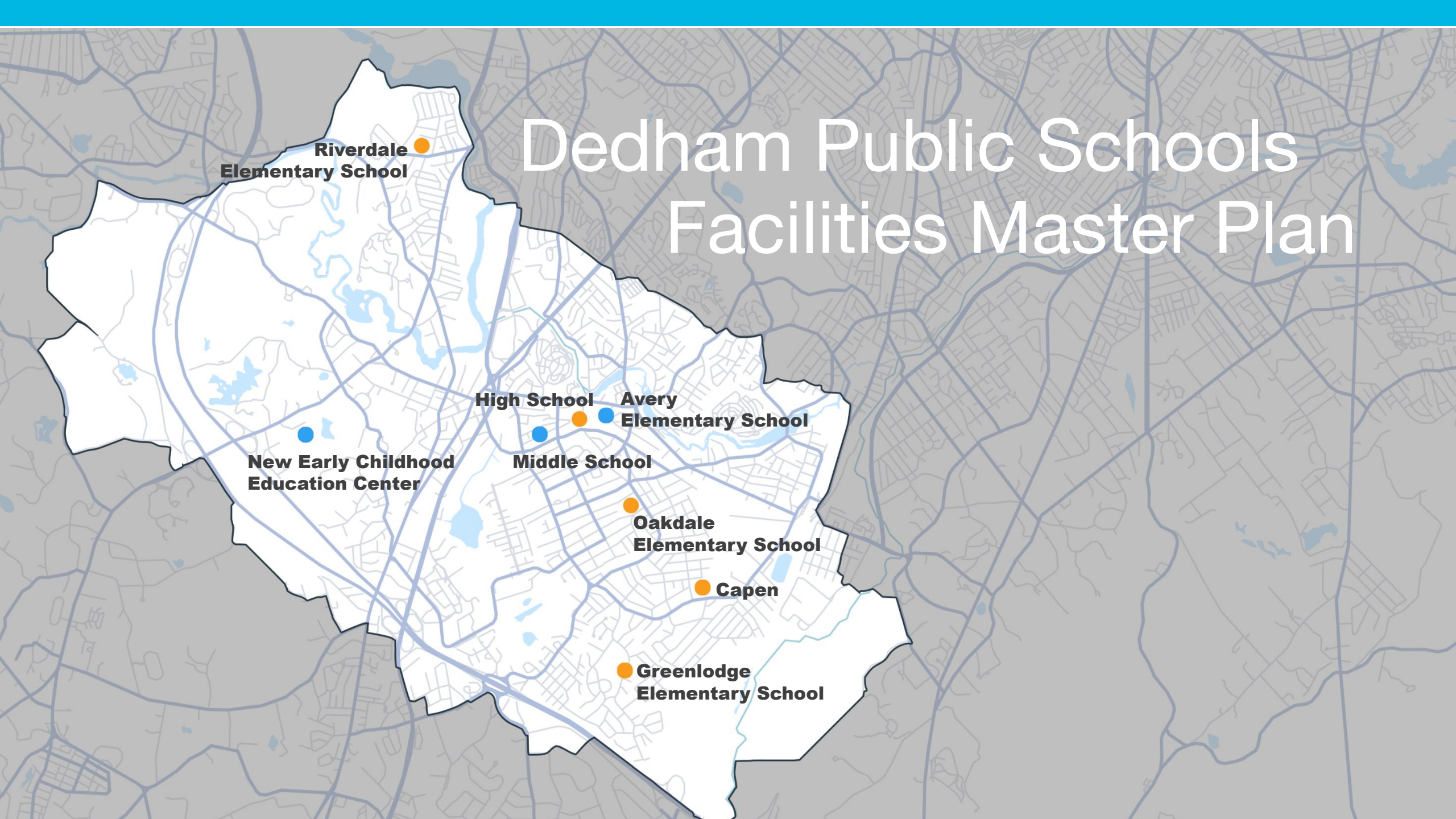
Middle School

**Avery
Elementary School**

**Oakdale
Elementary School**

Capen

**Greenlodge
Elementary School**



Current Study focus on three
Elementary Schools
the High School
and the Capen

**Riverdale
Elementary School**

**New Early Childhood
Education Center**

High School

Middle School

**Avery
Elementary School**

**Oakdale
Elementary School**

Capen

**Greenlodge
Elementary School**

Massachusetts School Building Authority – 2016 School Survey Report

District	School	Type	Year Founded	2016/2017 Enrollment	Total GSF	SF/ Student	Classroom Count	Students/ Classroom	Building Conditions Rating	Capacity Rating	General Environmental Rating
Dedham	Avery	ES	2012	308	61,000	116.8	-	-	-	-	-
Dedham	Dedham High	HS	1969	739	307,323	415.9	72	10.3	1	Under	1
Dedham	Dedham Middle School	MS	2006	631	162,000	256.7	-	-	-	-	-
Dedham	Early Childhood Center	PreK/K	1931	282	26,000	92.2	-	-	-	-	-
Dedham	Greenlodge	ES	1955	278	51,084	183.8	19	14.6	2	Average	1
Dedham	Oakdale	ES	1902	272	53,524	179.8	21	13.0	3	Average	1
Dedham	Riverdale	ES	1920	183	37,299	203.8	16	11.4	2	Average	1

Scoring Rubric (Ratings 1 – 4) *best to poorest*

1. Building Condition

2. General Environment

- Learning Environments
- Building Safety
- Universal Accessibility
- Academic Sufficiency
- Program Sufficiency
- Instructional Technology

3. Capacity Utilization

- Underutilized (less than 80% capacity utilization)
- Average Utilization (between 80% - 125% capacity utilization)
- Over Utilization (equal to or greater than 125 % -capacity utilization)

http://www.massschoolbuildings.org/programs/school_survey

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Dedham High School



Quick Facts:

- Built in 1959
- Renovations in 1967 & 1974
- 767 Students
- Site 11.4 acres
- Classrooms are undersized
- Public spaces are oversized

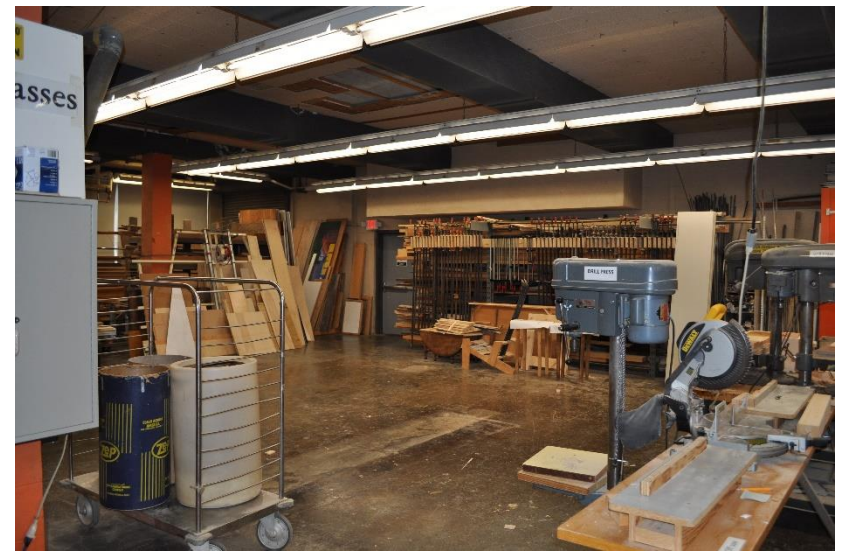


Dedham High School Uses

- High School Academics
- DPS Central Administration including Business Office
- DPS Facilities Department use
- DPS Commissary Kitchen for all schools
- Youth Commission Offices
- Athletics and Fitness Center
- If New, MSBA Guidelines: 159,000 GSF

Quick Facts:

- 307,323 square feet



Capen



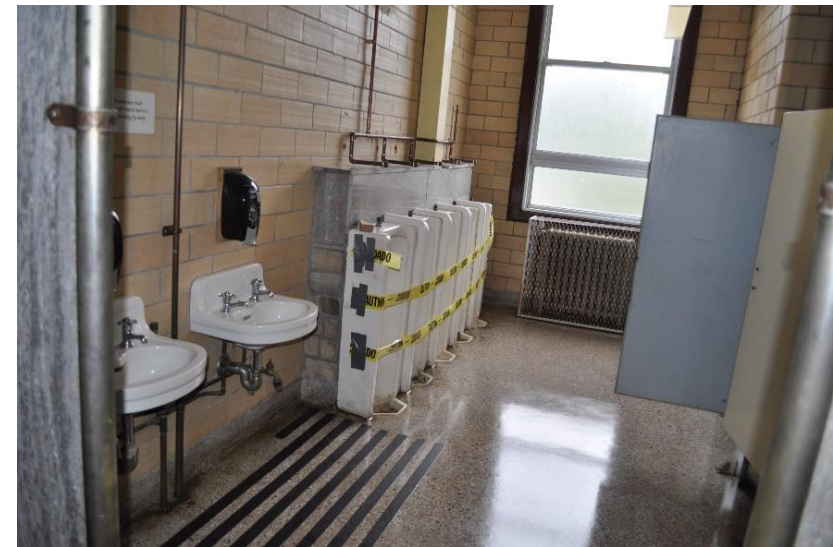
Quick Facts

- Built in 1931
- Additions in 1970
- 250 Student Capacity (PK-K)
- Historic Status – none
- Modest Site Size (4-5 acres)
- Classrooms are undersized
- Traditional Layout



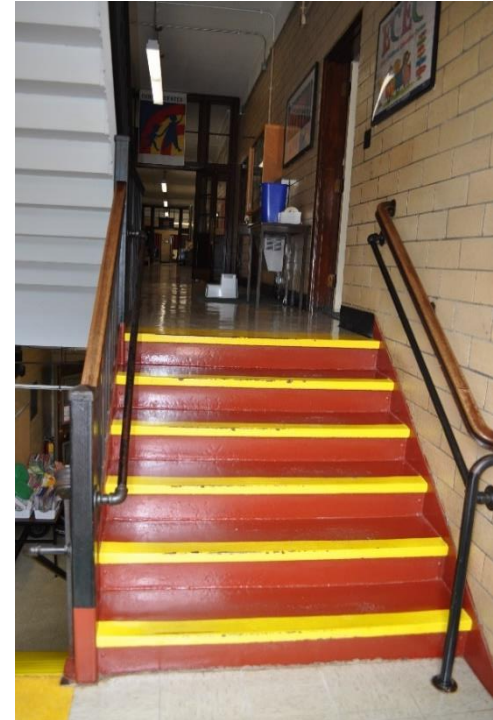
Capen - Building Conditions

- Lack of handicapped access to the 2nd floor + significant parts of the building
- Numerous other issues of accessibility
- Wood construction in original building
- Lack of automatic fire protection system
- Obsolete mechanical H&V system, no air conditioning
--frequent too hot / too cold for T&L
- Inadequate electrical systems
- Window replacement needed
- Cosmetic issues
--floors, ceilings, walls (work might be categorized as minor)



Capen - Educational Facility Effectiveness

- Typical classrooms are significantly undersized
- No cafeteria (meals in classrooms)
- Undersized gym & library/media center
- Numerous issues with building conditions that support teaching and learning:
--lighting; temperature; ventilation, acoustics
- Issues related to safe and secure learning environments
- Need for additional Special Education space



Capen as Swing Space?



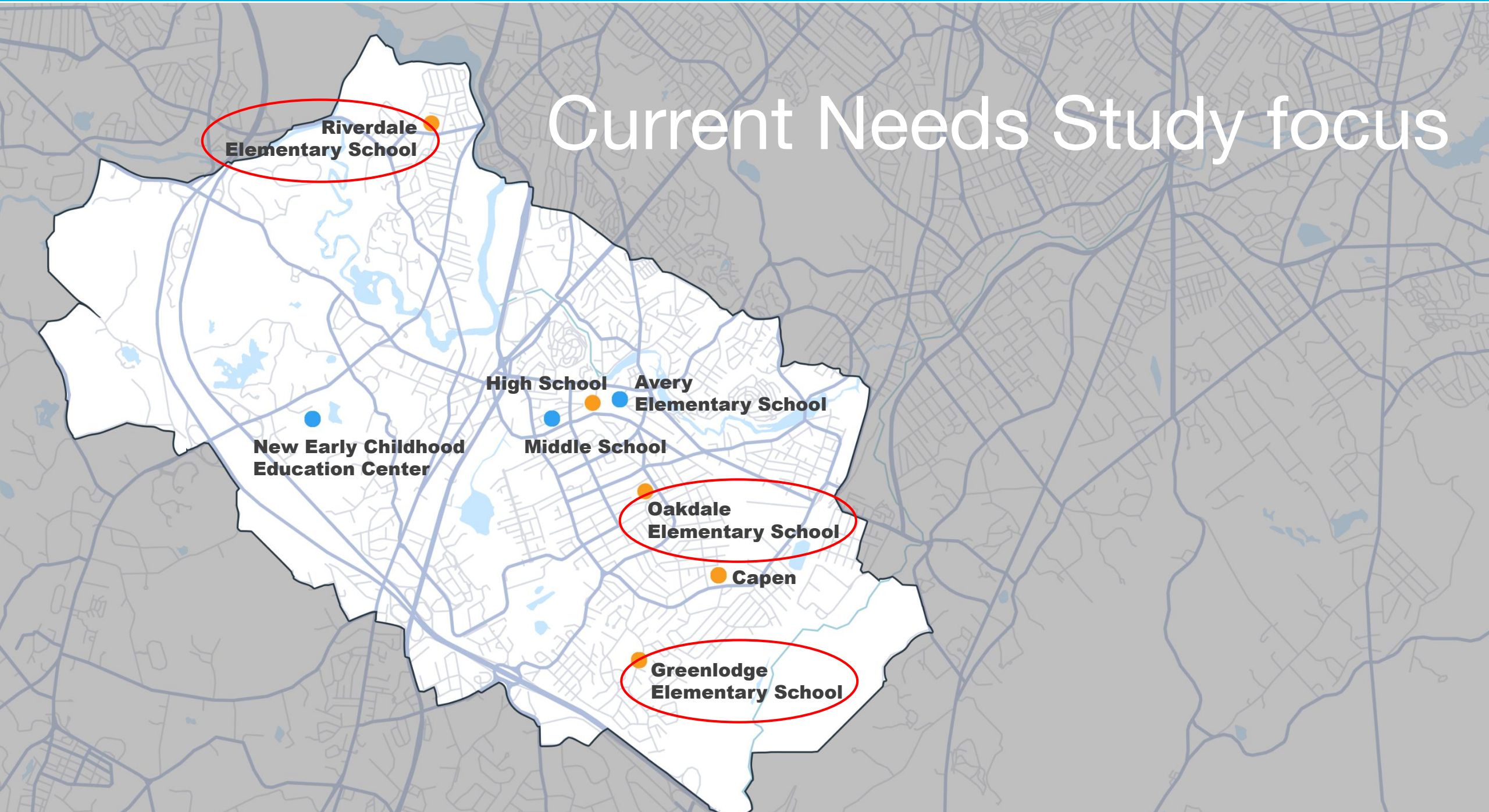
- Comparable Educational Needs:

- General Education Classrooms
- Additional Special Education Space
- Art Room
- Music Room
- Handicapped Accessibility

Schedule:

- Would not be needed for 4+ years!
- Will require heating and ventilation in “moth-balled” state.

Current Needs Study focus



Massachusetts School Building Authority – 2016 School Survey Report

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2. General Environment

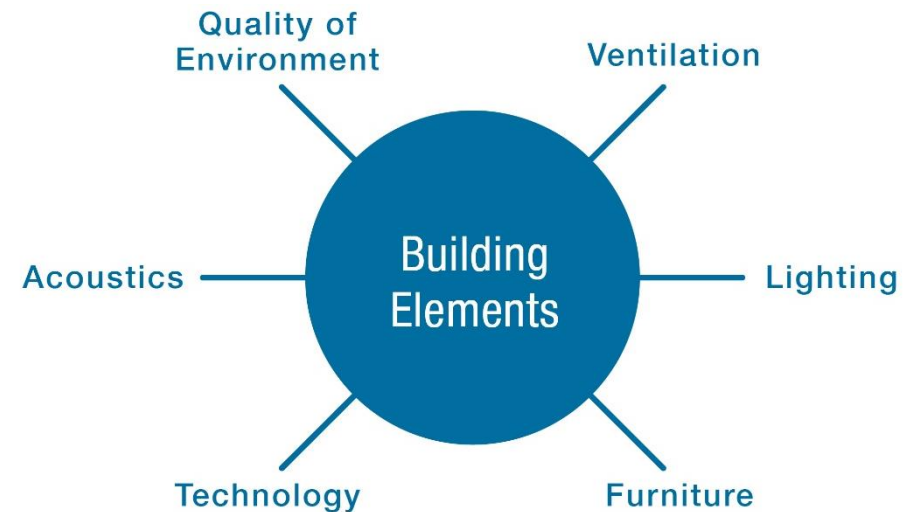
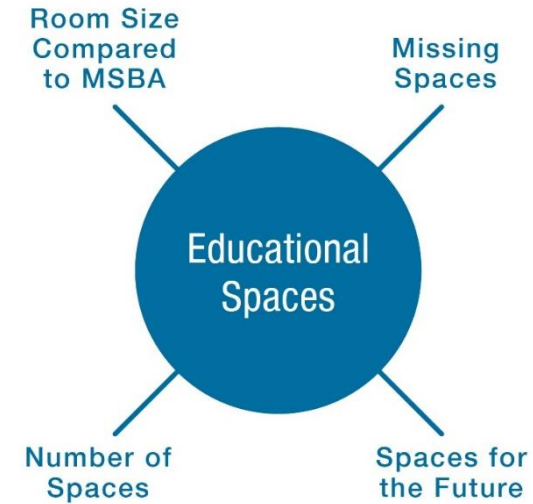
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- Building Safety
- Universal Accessibility
- Academic Sufficiency
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Elements of Educational Facility Effectiveness



Greenlodge Elementary School



Quick Facts

- Built in 1955
- Additions 1961 & 1970
- 247 Students
- Large Site (partially hilly)
- Traditional Layout



Oakdale Elementary School



Quick Facts

- Built in 1902
- Additions in 1951 & 1970
- 271 Students
- Historic Status – none
- Modest Site Size
- Classrooms are undersized
- Traditional Layout



Riverdale Elementary School



Quick Facts

- Built in 1921
- Additions in 1930 & 1970
- 172 Students
- Historic Status – none
- Modest Site Size
- Classrooms are undersized
- Traditional Layout



Educational Facility Effectiveness

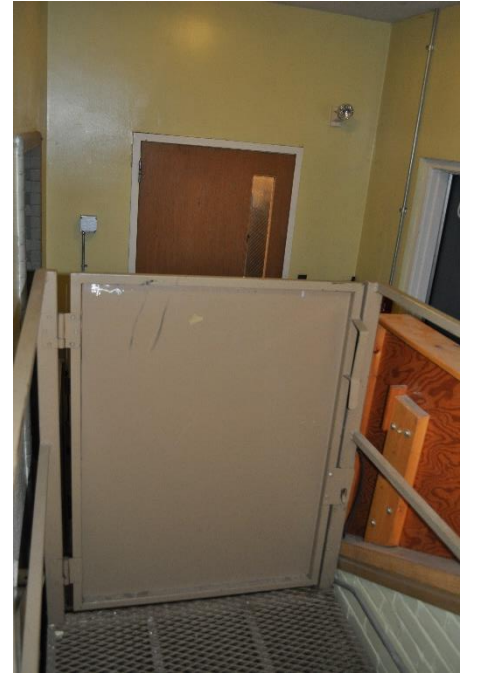
Conditions at the three schools vary somewhat but generally:

- Classroom vary in sizes - some meet MSBA Guidelines but oldest buildings have significantly small rooms
- No cafeteria (meals in classrooms)
- Undersized gym, undersized libraries in 2 schools
- Numerous issues with building conditions that impede teaching and learning:
--lighting, temperature, ventilation, acoustics
- Issues related to safe and secure learning environments
- Need for additional Special Education spaces



Building Conditions Issues

- Limited handicapped access to significant parts of the building
- Wood construction in two of the oldest buildings, including stairs
- Numerous other issues of accessibility
- Obsolete mechanical heating and ventilation system, no air conditioning
 - frequently too hot / too cold for teaching and learning*
- Inadequate electrical systems
- Obsolete plumbing systems, lack of automatic fire protection
- Window replacement needed
- Cosmetic issues
 - floors, ceilings, walls (work might be categorized as minor)*



MSBA Statement of Interest (SOI) Process

- Submitting an SOI is the first critical step in the MSBA's program to partially fund the construction, renovation, addition or repair of municipally owned school facilities located in cities, towns and regional school districts.
- The SOI allows districts to inform us (MSBA) about deficiencies that may exist in a local school facility and how those deficiencies inhibit the delivery of the district's educational program.
- Core (Capital) Program vs. Accelerated Repairs
- Initially identify one school but may be asked to document all three schools

Massachusetts School Building Authority (MSBA) - SOI Priorities:

1. Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children.
2. Elimination of **existing severe overcrowding**;
3. Prevention of the **loss of accreditation**;
4. Prevention of **severe overcrowding expected** to result from increased enrollments, which must be substantiated;
5. Replacement, renovation or **modernization of school facility systems**, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility;
6. **Short term enrollment** growth;
7. Replacement of or addition to **obsolete buildings** in order to provide a full range of programs consistent with state and approved local requirements; and
8. Transition from **court-ordered** and approved racial balance school districts to walk-to, so-called, or other school districts.

Feasibility Study

- With the Owner's Project Management and Designer in place: The District and its team collaborate with the MSBA to document their educational program / initial space summary, document existing conditions, develop and evaluate alternatives, and recommend the most cost effective and educationally appropriate preferred solution
- Test alternative sites, site solutions
- Possibly explore alternative school sizes (populations)
- Select a preferred solution
- At this stage, the project becomes reimbursable

Massachusetts School Building Authority (MSBA) - SOI Process:

January 2020 SOI period opens

April 2020 SOI period closes

Review SOI for Completeness

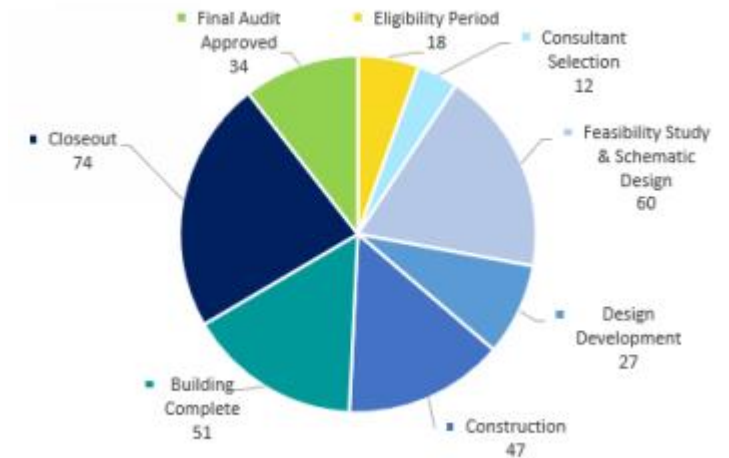
Review SOI and accompanying documents for content

Conduct Senior study visits if required

Recommend SOIs for initiation into Eligibility Period

Typically MSBA release accelerated repair projects in June/July and Core Program Projects in December.

Capital Pipeline Overview



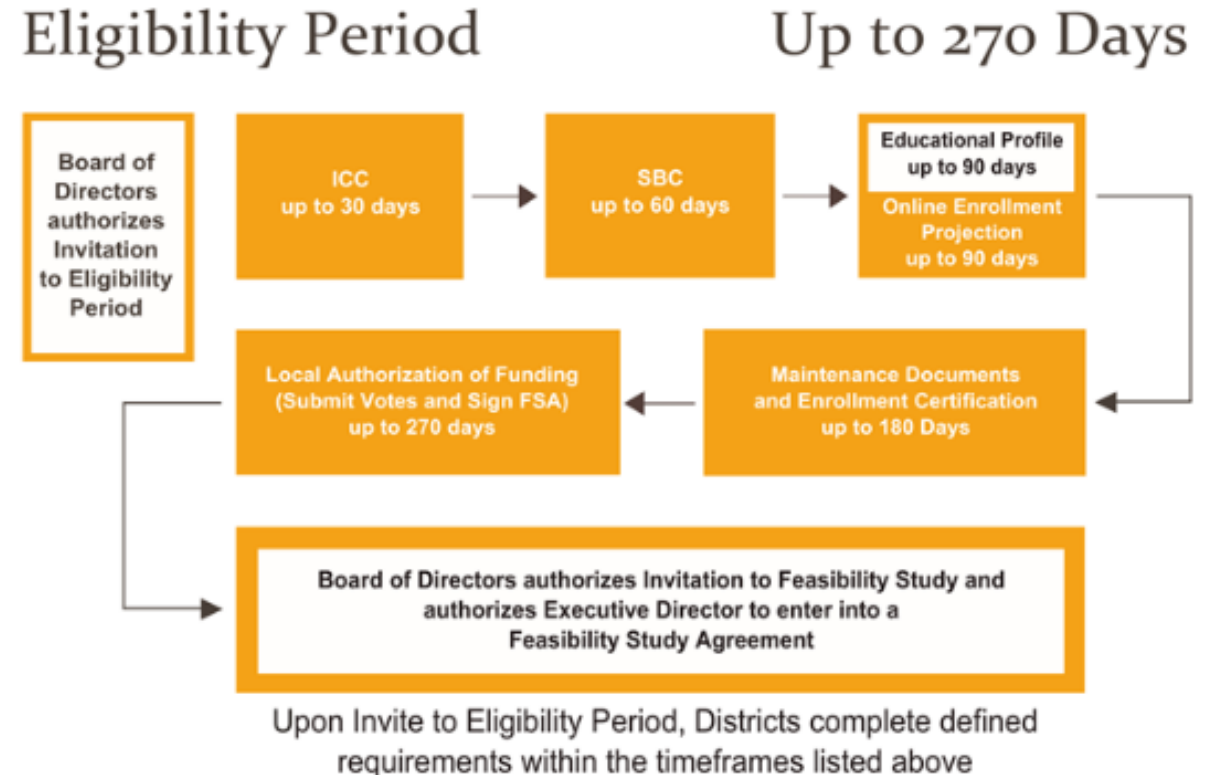
2018 (70) SOI's Submitted, 12 invited into Eligibility

2019 (83) SOI's Submitted

Massachusetts School Building Authority (MSBA) - Eligibility Period:

- Initial Compliance Certificate
- Form the School Building Committee
 - In place with the permanent SBRC
- Complete educational profile
- Submit District's Maintenance Practices
- Certify Design Enrollment
- **VOTE** the Feasibility Study Phase funding
- Execute Feasibility Study Agreement (FSA)
- Receive authorization to begin Feasibility Study
- Process has up to **10 Months** to complete

Module 1 – Eligibility Period



Massachusetts School Building Authority (MSBA) - Building Process:

SOI Process – Approx. 12 months

Eligibility Period - Approx. 10 months

Feasibility Study – Approx. 9 months

Schematic Design– Approx. 6 months

Development Design– Approx. 5 months

Construction Documents– Approx. 8 months

Construction– Approx. 24 months

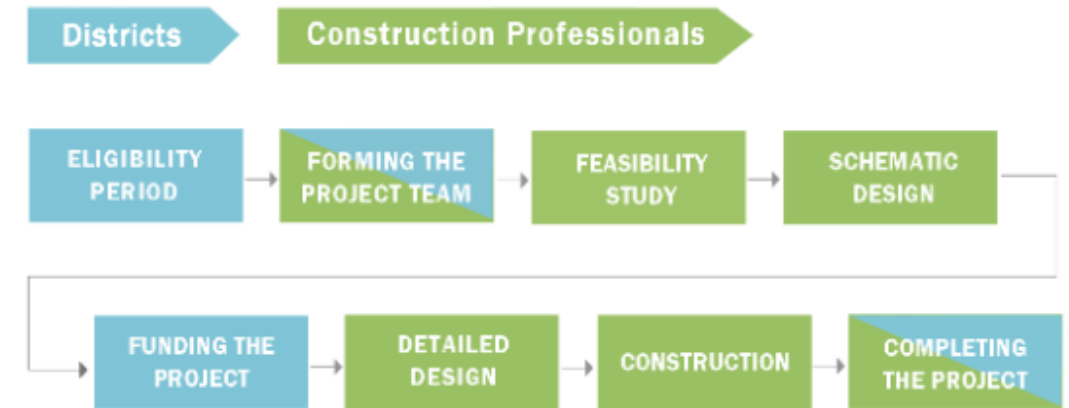
Close Out– Approx. 3 months

Total: 77 months (6.5 years) -

Assumes an “Invitation” based on the SOI initial submission

MSBA Building Process

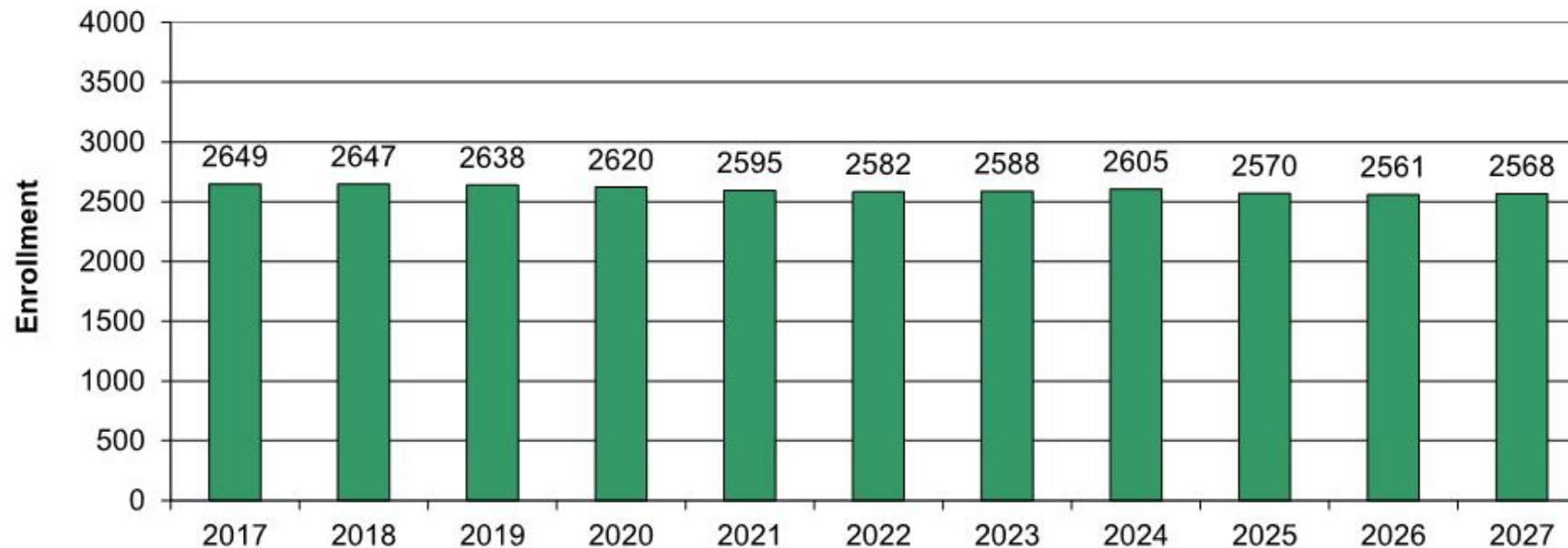
Steps primarily for:



Enrollment Projections



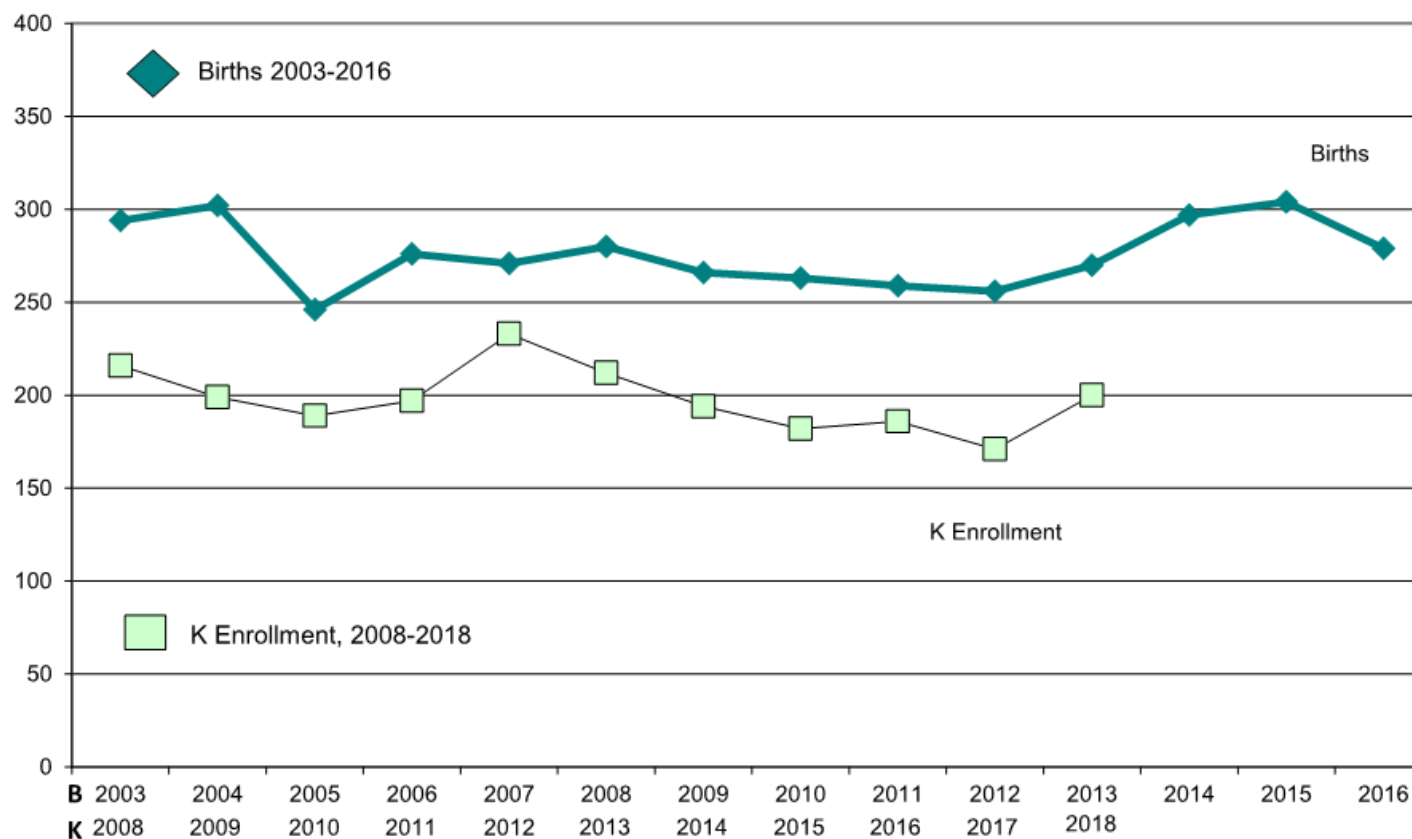
PK-12 TO 2027 Based On Data Through School Year 2017-18



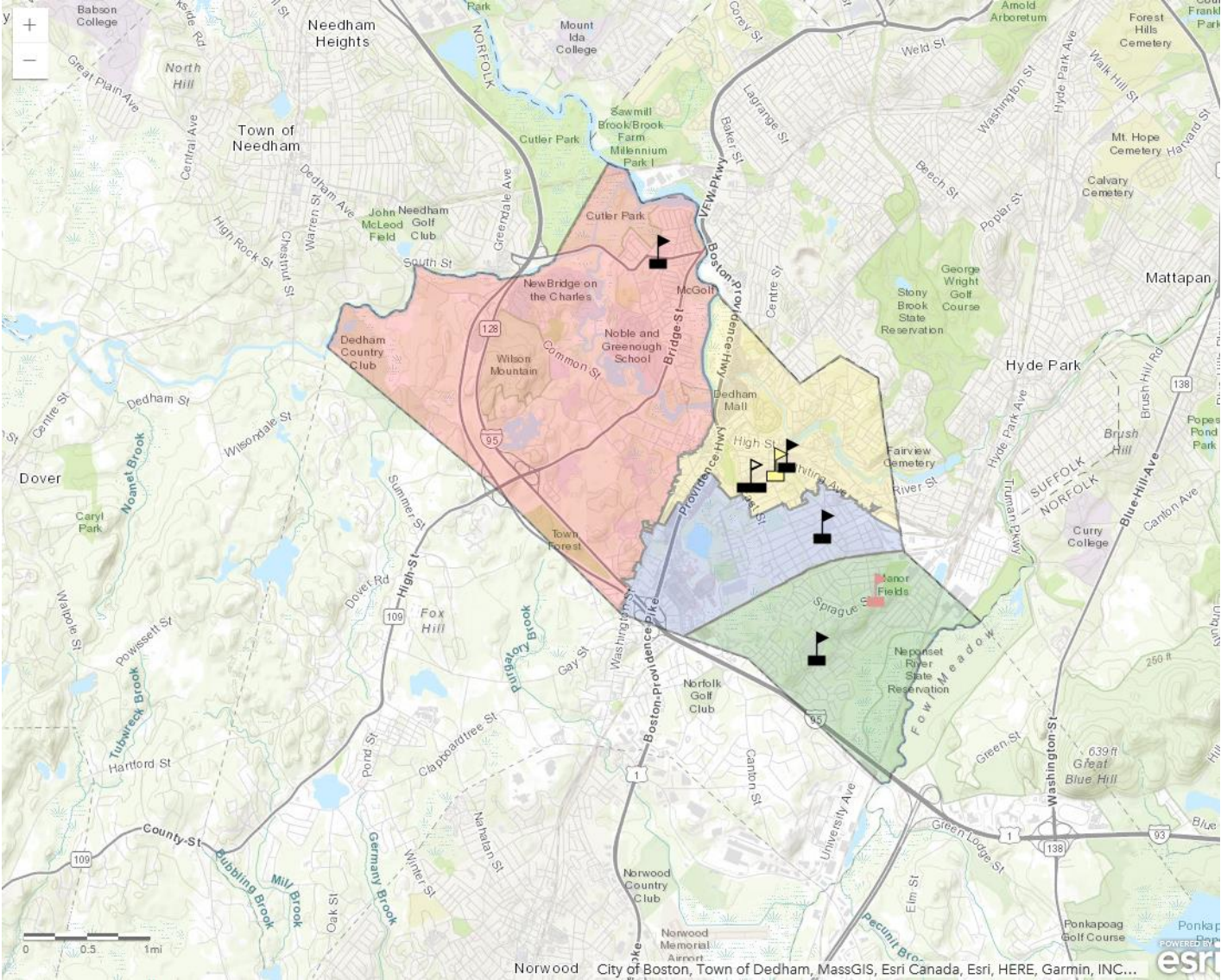
Birth Rate

NESDEC

Dedham, MA Birth-to-Kindergarten Relationship



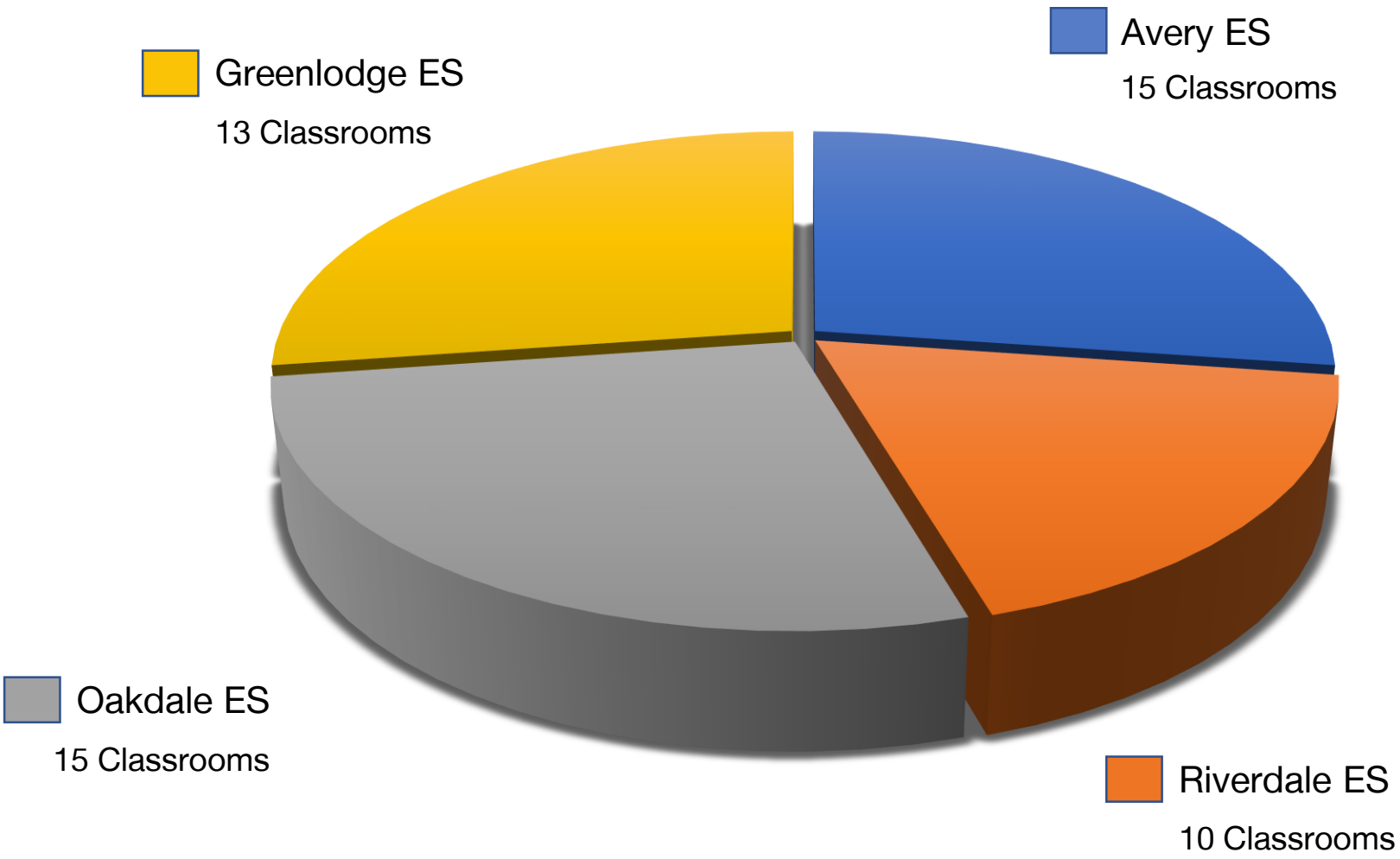
Current Elementary School Districts



Current Schools Configuration / Classrooms

Mostly Undersized Classrooms

Total:
53 Classrooms
994 Students



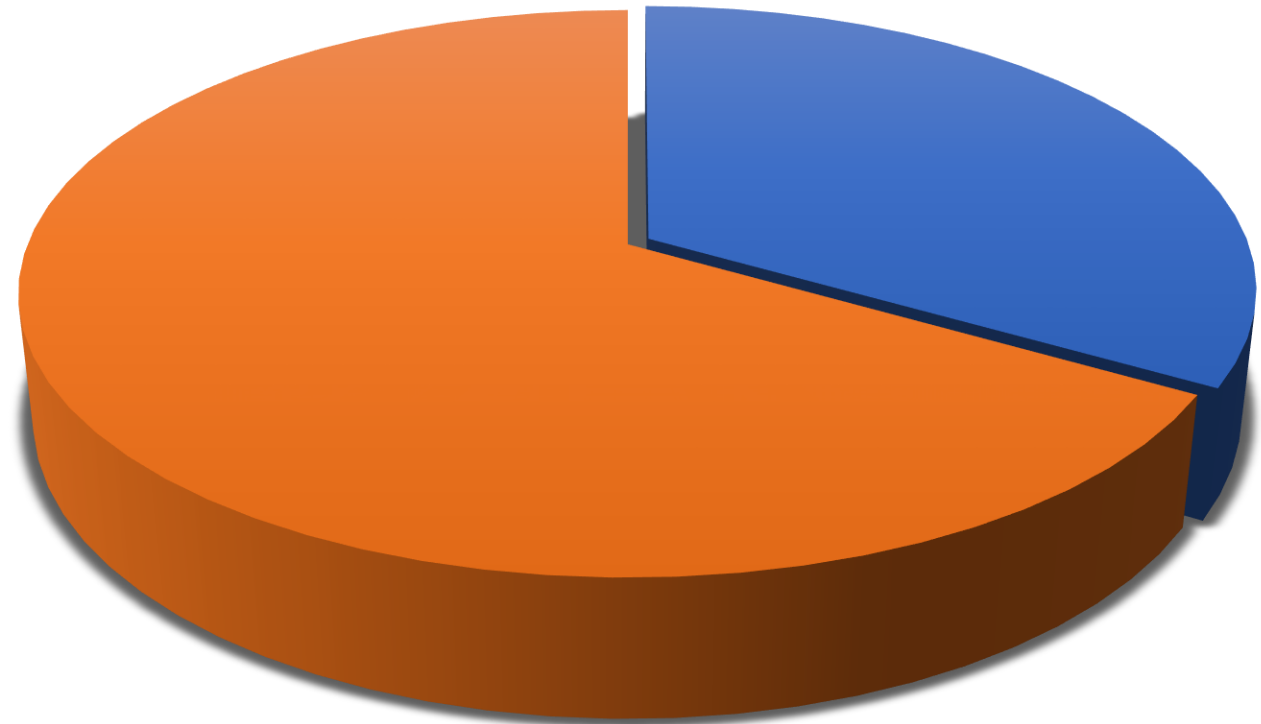
2028 - 29 School / Classroom Need

Assumes:

- Properly sized classrooms 900-950sf
- 23 Students/Classroom (MSBA Guidelines)

Avery ES
15 Classrooms
345 Students

All Other ES
31 Classrooms



Total:
46 Classrooms
1,060 Students

Next Steps

	Current				2028 – 29 Needs w/ MSBA Criteria		
	2018-19 Population	Classrooms / Grade	Total Classrooms	Average Class Size	Class Size	Classrooms / Grade	Population
Avery	304	3	15	20.3	23	15	345
Riverdale	172	2	10	17.2	23	31	715
Oakdale	271	3	15	18	23		
Greenlodge	247	3	14	17.6	23		
	994	11	54	18.4		46	1,060

Community Engagement and Input

- Fall Meetings
 - Meeting 1 – September 2019
at each School
Building Conditions, Site(s), Enrollment
Community Priorities and Goals
- SOI Development
 - Meeting 2 – October 2019
Options & Discussion
 - Meeting 3 – Early December 2019
Follow-up & Development of Direction
Elements of the SOI



Discussion

**Riverdale
Elementary School**

**New Early Childhood
Education Center**

High School

Middle School

**Avery
Elementary School**

**Oakdale
Elementary School**

Capen Building

**Greenlodge
Elementary School**



