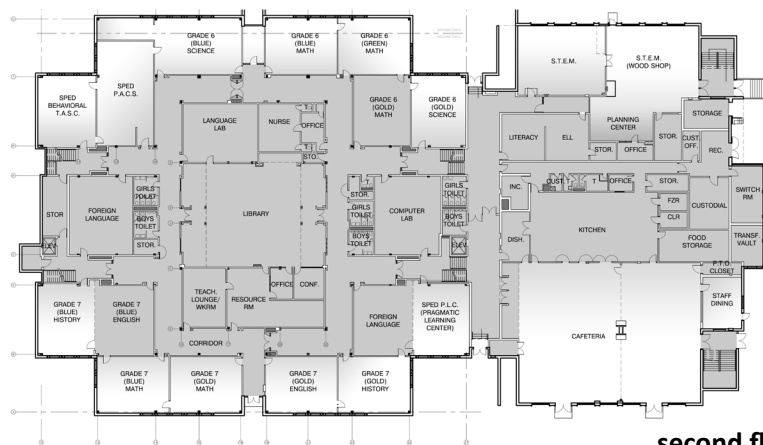
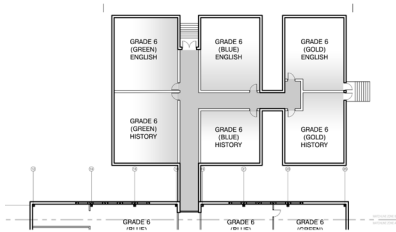


Feasibility Study & Long Range Plan - Norwood Public Schools

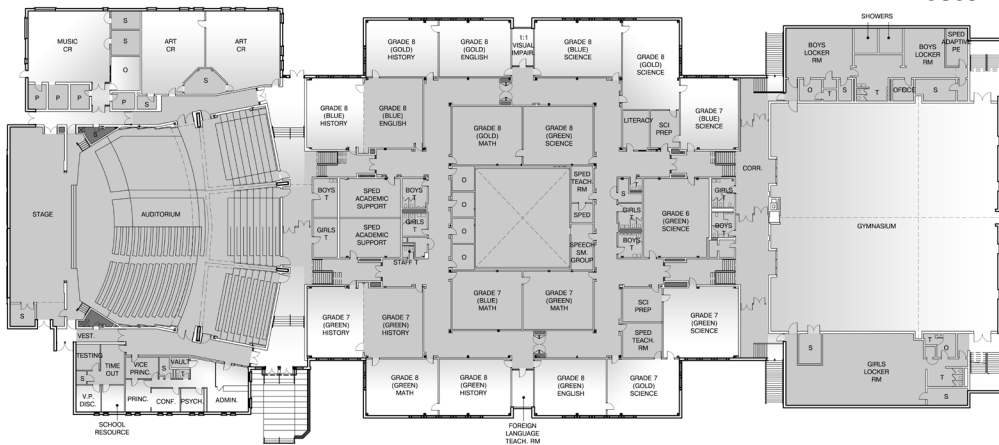
CUSTODIAL & MAINTENANCE			
Custodian's Office	97	1	97
Custodian's Workshop			0
Custodian's Storage	393	1	393
Storeroom			0
Recycling Room / Trash			0
Receiving and General Supply	301	1	301
Network / Telecom Room			0
OTHER			791
Other (specify)			
Auditorium	8,320	1	8,320
Stage Storage	109	1	109
Computer Lab	1,004	1	1,004
Transfer Vault	241	1	241
Switch Room	351	1	351
Outdoor Storage	255	1	255
P.T.O. Storage	91	1	91
Storage	93	1	93
Storage	72	2	144
Total Building Net Floor Area (NFA)			86,002
Proposed Student Capacity / Enrollment			756
Total Building Gross Floor Area (GFA) [†]			125,382
Grossing factor (GFA/NFA)			1.46

			2,231
150	1	150	
250	1	250	
375	1	375	
504	1	504	
400	1	400	
352	1	352	
200	1	200	
			0
Total			90,061
Enter grade enrollments to the right			756
Total			135,091
Total			1.50

Grades K-5	0	0%
Grades 6-8	756	100%



second floor



first floor

windowless rooms

Of additional concern is the number of core classrooms and shared spaces that do not receive any natural daylight, shown shaded in the diagram above. Experiencing natural daylight has been proven to be extremely important to students and staff who spend most of their days in a single classroom. The incorporation of daylighting also increases the performance of mechanical and electrical systems.

Visual Evidence of Deficiencies



Uninspiring and antiquated program organization



Isolated classrooms are a challenge for administrators to organize class schedules around



Corridors and classroom entries lack transparency, connectivity, and personality



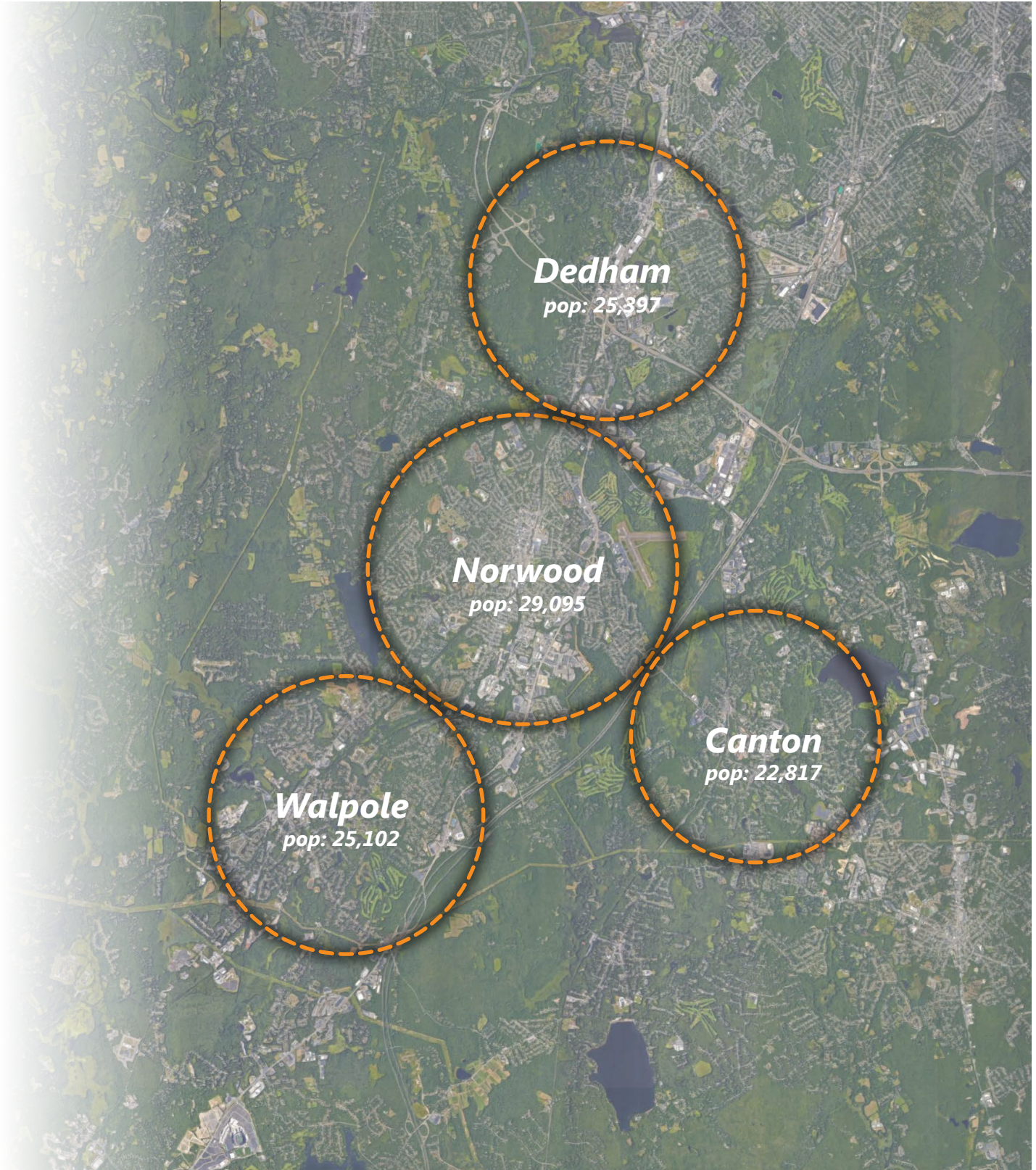
The only space dedicated to collaboration between students or staff is a storage-closet sized room at the interior of the school



Inadequate and outdated STEM facilities



Modular classrooms have become permanent fixtures, despite signs of deterioration

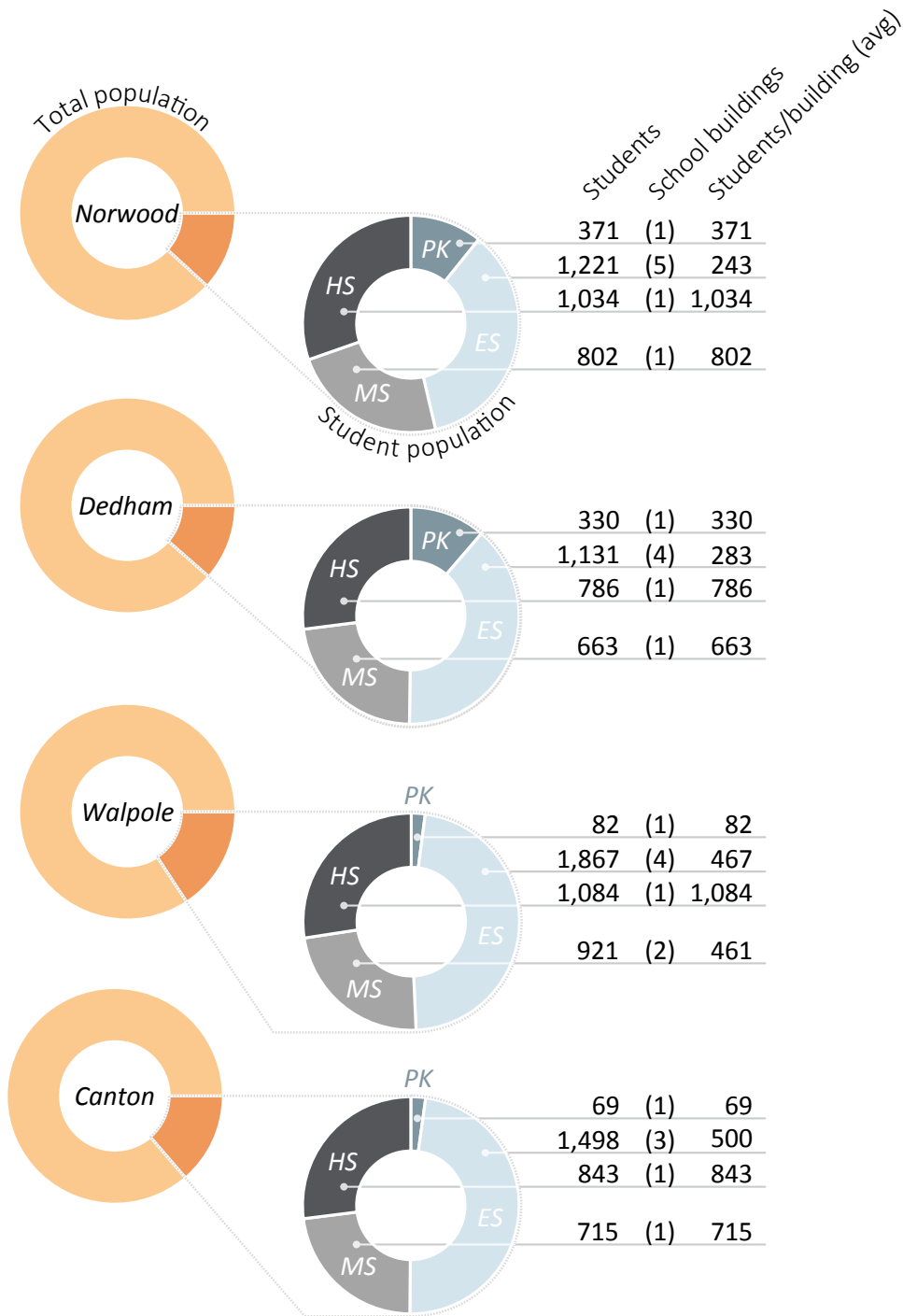


Communities that border the town of Norwood include Dedham, Canton, and Walpole; all of similar populations

Surrounding Communities

Analysis & Grade Configurations

On average, the elementary schools in communities surrounding Norwood house a greater number of students per building, and in less buildings. However, Norwood has the largest middle school population per building in comparison.



Source: MSBA

IV. Evaluation of Alternatives

Primary Considerations

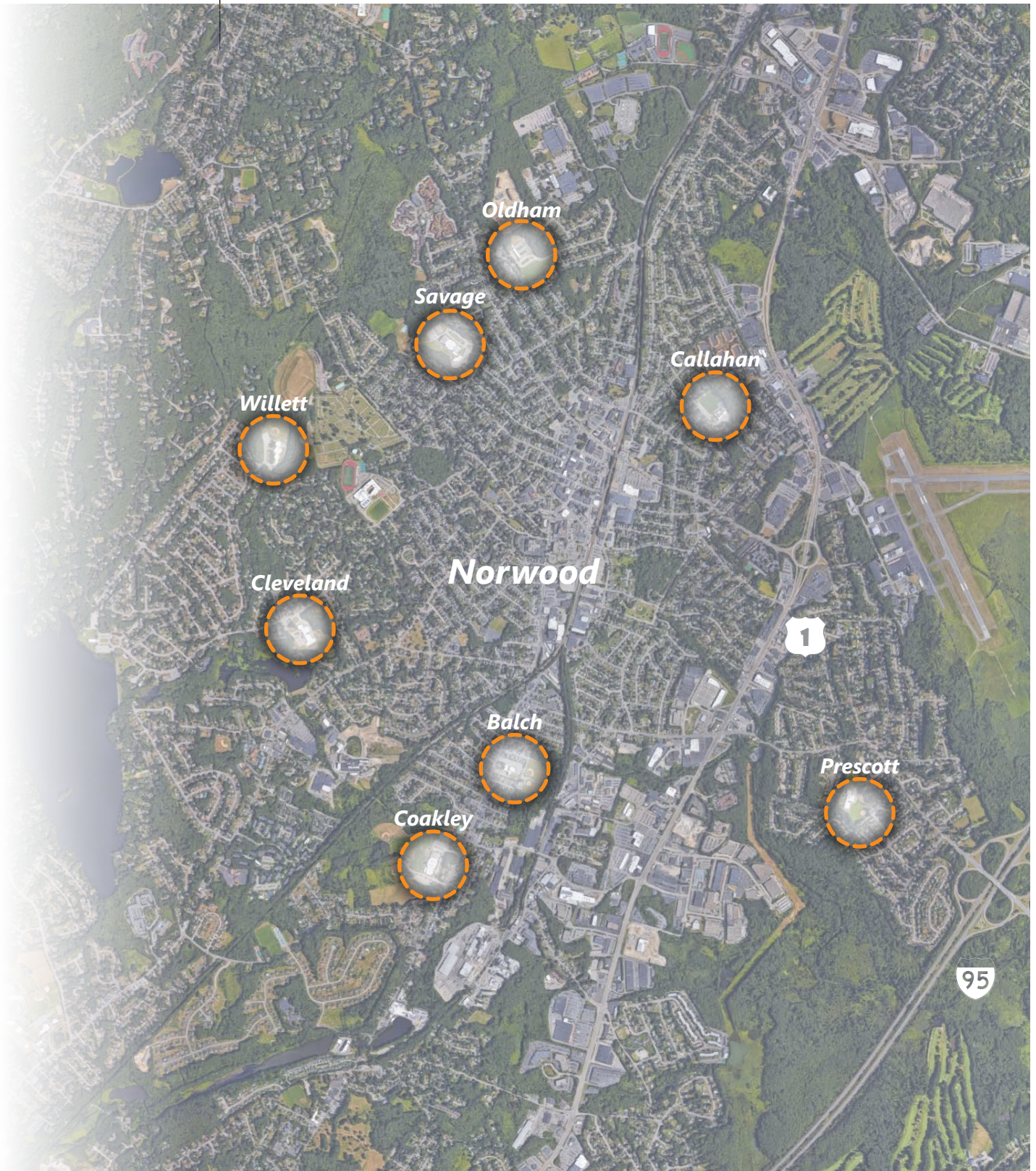
Subsequent to the submittal of the Preliminary Design Program, the Designer and the Building Committee have been working collaboratively with the Town of Norwood to further refine the Space Summary, review the Educational Program, and develop multiple options for overall consideration. Familiarity with the Town was established early on through organized walkthroughs of each building in question and scheduled meetings with key administrative personnel. Community outreach presentations were also prevalent in the establishment of alternative options.

The Town of Norwood is currently responsible for the operation and maintenance of nine educational buildings, including Norwood High School. The upkeep of this many buildings, most of which are over 50 years old, is a strain on town resources and staff. This means that the total available maintenance budget must be divided up nine times every year, with increasing difficulty as the buildings and their systems continue to age. Unfortunately, as each building ages, it does not increase in size. According to NESDEC, the New England School Development Council, enrollment in Norwood is projected to increase over the next decade. Not only will the existing facilities cost more to maintain, but they will struggle to comfortably accommodate the amount of students in attendance; in fact, all elementary schools (with the exception of Oldham) are already on the cusp of congestion.

Solutions to such a conflict range from building an additional elementary school in a new community, to consolidation of all through new construction. These are just a few considerations that were factored in when theorizing solutions. In summary, the following are the considerations that guided the options of this study:

- Consideration of reducing the number of buildings in operation
- Consideration of how to accommodate a growing student population
- Consideration of consolidating all elementary schools versus the continued operation of community elementary schools
- Consideration of the impact that adding and/or removing a facility in a location would affect that community
- Consideration of phasing; how students and programs will continue to be accommodated if an existing facility is to undergo renovations





Existing conditions:
Buildings in operation
within the Town of
Norwood, today

Existing Conditions

In establishing the real issues with the facilities of Norwood, a look at the purpose of architecture in general is helpful. A building serves its inhabitants; it acts as a vessel capable of facilitating the functions within. Successful buildings essentially operate on the periphery, where an inhabitant is in no way negatively affected by its deficiencies. There is a balance between flexibility and purpose, all within a comfortable amount of space. When the functions intended are inhibited, or are no longer possible because of the architecture itself, the building is rendered unsuccessful and in need of change.

For a school, the comfortable square footage per student is a critical factor. In truth, the highest performing school in the Town of Norwood is that with the highest square footage per student ratio: Oldham Elementary School. In the other buildings, the idea that the school is unable to pursue new curricula due to insufficient space is a common theme, and as a result, a justification that the buildings are unsuccessful.

Existing Grade Levels & Square Footages per School

	<i>Balch</i>	<i>Callahan</i>	<i>Cleveland</i>	<i>Oldham</i>	<i>Prescott</i>	<i>Willett</i>	<i>Coakley</i>	<i>Savage</i>
<i>Site Size (acres)</i>	3	10	18	15.5	10	22	14	17
<i>Existing Grades</i>	1 - 5	1 - 5	1 - 5	1 - 5	1 - 5	PK - K	6 - 8	N/A
<i>2017 Students (#)</i>	306	230	349	218	262	385	756	0
<i>2027 Students (#)</i>	318	242	361	230	274	406	787	0
<i>Existing (sf)</i>	51,800	33,500	49,000	39,500	36,000	38,500	128,000	122,000
<i>Existing sf per student (sf)</i>	169	146	140	181	139	100	169	N/A

Over-crowding

Over-crowding occurs when the total square footage is divided by the student population, and each student isn't receiving a comfortable amount of square feet. In this regard, the Norwood schools suffering from over-crowding are: Cleveland Elementary by 40 students, Willett by 50 students, and Coakley Middle School by 60 students.

Comparison of Options

Summary of Options

The proposed options are detailed in the following pages, but fall into these categories, which range from most buildings in operation to least:

Type 1: retain 5+ neighborhood elementary schools

- *Option 1A* - Construct a sixth elementary school to alleviate over-crowding
- *Option 1B* - Redistribute pre-K and kindergarten to each community school
- *Option 1C* - Construct additions at Willett and Cleveland
- *Option 1D* - Move fifth grade to a new middle school, and kindergarten classes return to neighborhood elementary schools

Type 2: retain 4 neighborhood elementary schools

- *Option 2A* - Cleveland absorbs Callahan population; reuse Callahan for district
- *Option 2B* - Cleveland absorbs Callahan population; close Callahan
- *Option 2C* - Cleveland absorbs Willett population
- *Option 2D* - Combine middle school and early education; 4 elementary schools

Type 3: retain 3 neighborhood elementary schools

- *Option 3A* - Oldham absorbs Callahan population; close Callahan
- *Option 3B* - Oldham absorbs Callahan population; reuse Callahan for district
- *Option 3C* - Oldham and Cleveland receive additions; Prescott also remains

Type 4: partial consolidation

- *Option 4A* - Combine elementary school and early education in 1 new school, with a 5-8 middle school
- *Option 4B* - Combine elementary school and early education in 2 new schools, with a 5-8 middle school
- *Option 4C* - Combine elementary school and early education in 2 new schools, with a 6-8 middle school

Type 5: total consolidation

- *Option 5A* - Combine elementary schools and middle into 1 new school; separate early education facility
- *Option 5B* - Combine elementary schools, middle, and early education into 1 new school

The following table and chart compare total project costs of all options, as well as the number of buildings that will continue in operation after all phasing is complete.

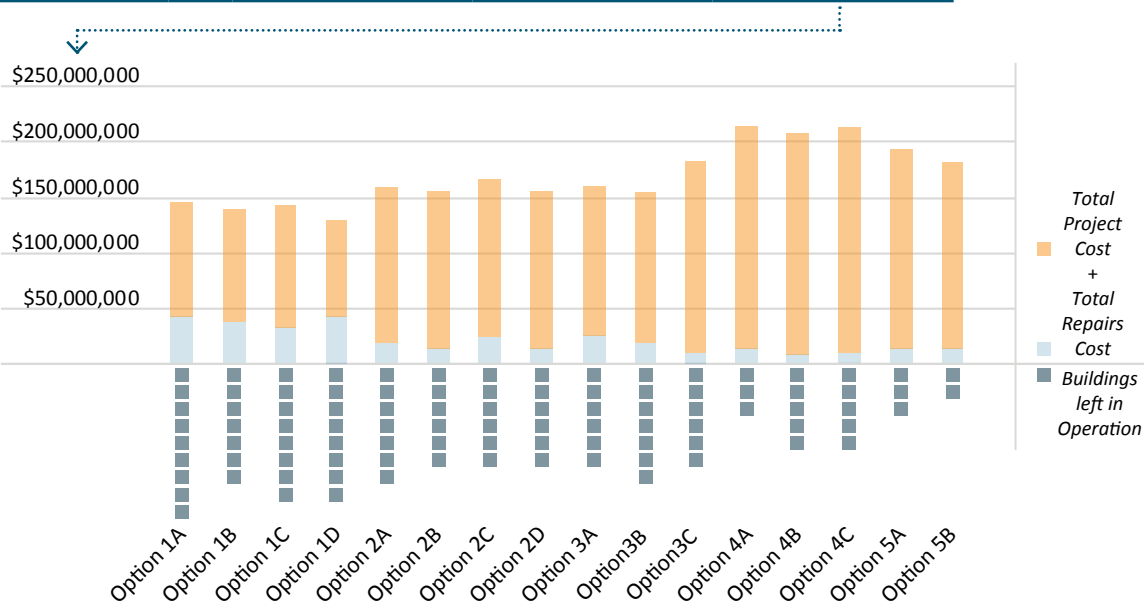


↑ indicates highest priority project per option

**(\\$) amounts represent the magnitude of cost per option based on 2017 values, and have been included to provide a datum of comparison between options.*

Summary of Costs per Option

Option and # of buildings left		Total Capital Repairs (\$)	Total Project Cost (\$)	Total Sum (\$)*	
Option 1A	9	43,417,675	102,435,697	145,853,372	Type 1: retain 5+ community elementary schools
Option 1B	7	38,903,550	100,678,354	139,581,904	
Option 1C	8	33,158,300	115,083,220	148,241,520	
Option 1D	8	43,417,675	86,783,760	130,201,435	
Option 2A	7	18,853,800	141,323,770	160,177,570	Type 2: retain 4 community elementary schools
Option 2B	6	14,925,925	141,323,770	156,249,695	
Option 2C	6	24,599,050	142,191,420	166,790,470	
Option 2D	6	30,344,300	128,224,600	158,568,900	
Option 3A	6	26,123,300	136,919,860	163,043,160	Type 3: retain 3 community elementary schools
Option 3B	7	20,260,800	136,919,860	157,180,660	
Option 3C	6	12,663,000	173,966,170	186,629,170	
Option 4A	3	14,304,500	199,453,037	213,757,537	Type 4: partial consolidation
Option 4B	5	10,001,425	198,283,820	208,285,245	
Option 4C	5	10,001,425	201,102,510	211,103,935	
Option 5A	3	14,304,500	179,125,639	193,430,139	Type 5: total consolidation
Option 5B	2	14,304,500	166,518,450	180,822,950	





Option 1A:
Buildings remaining in
operation within the
Town of Norwood

Option 1A

This option builds an additional elementary school on the Hennessey site; a centrally-located, 11-acre plot also owned by the Town of Norwood. By adding a sixth elementary school, crowding at the existing schools will be eliminated, allowing the re-implementation of kindergarten per neighborhood school and freeing up Willett to be used solely for pre-k. This option also includes a new middle school on the Coakley site.

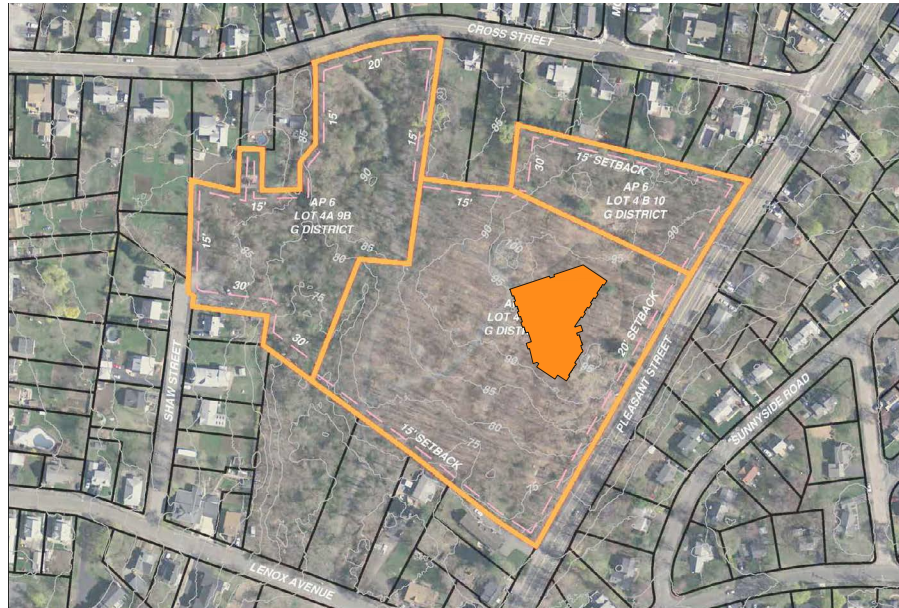
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage	NEW
<i>Proposed Grades</i>	K - 5	K - 5	K - 5	K - 5	K - 5	PK	6 - 8	N/A	K - 5
<i>2027 Students (#)</i>	292	216	309	210	250	162	779	0	400
<i>Existing (sf)</i>	51,800	33,500	49,000	39,500	36,000	38,500		122,000	
<i>Proposed Add (sf)</i>									
<i>Existing + Add (sf)</i>									
<i>New (sf)</i>							151,080		67,333
<i>Cap. Repairs (\$)</i>	6,073,550	3,927,875	5,745,250	4,631,375	4,221,000	4,514,125		14,304,500	
<i>Renovations (\$)</i>									
<i>Additions (\$)</i>									
<i>New Project (\$)</i>							70,856,520		31,579,177
<i>Priority Rating</i>	III	III	III	III	III	III	I	III	II



Summary of Costs

<i>Total Cost Capital Repairs (\$)</i>	43,417,675
<i>Total Project Cost (\$)</i>	102,435,697
<i>Total Sum (\$)</i>	\$145,853,372



Proposed new elementary school, with kindergarten included, at the additional centrally-located site

— property line

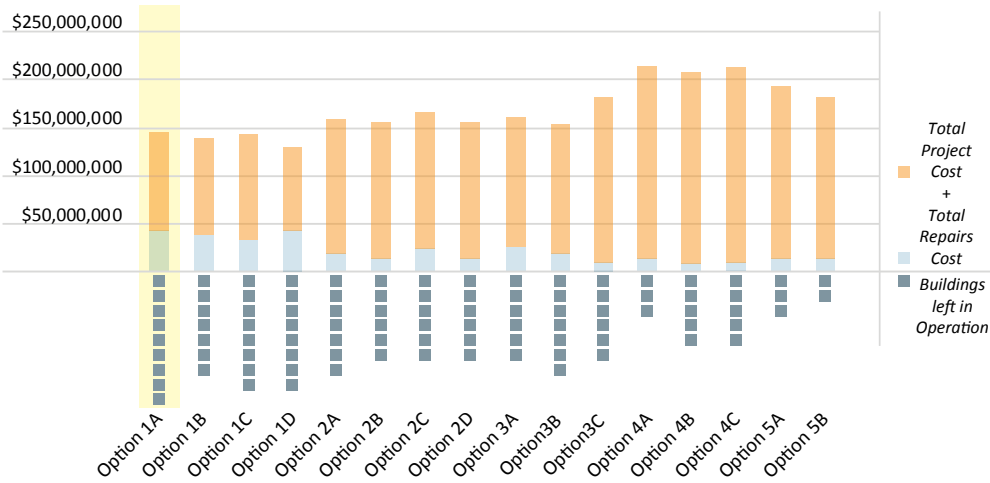
NEW Elementary School

- new construction
- renovations



Note: Use of Hennessey Field is one example of a new school site; however, further investigation into the best available site will occur if this option is chosen.

Compared to Other Options



Advantages

- By constructing a sixth elementary school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- By eliminating over-crowding, the town is better able to meet the goals of its educational visioning and program
- Elementary schools are still easily accessible from any neighborhood
- Early education will be easily accessible from any neighborhood
- Phasing is simple and does not disrupt students at all

Disadvantages

- Increases the number of buildings that the department of Buildings and Grounds will be responsible for from eight to nine, plus the high school
- Kindergarten classes will have to decrease in the number of students per class in order to fit comfortably within the existing, smaller classrooms at the other schools
- Extended time frame required to complete all renovations and capital improvement projects required at each elementary school to re-distribute grades
- Extremely high cost over time to maintain so many buildings
- Site is topographically varied and requires much clearing and excavation

Operatives & Phasing

Phase I = complete 2020

- New middle school for grades 6 to 8 on Coakley site

Phase II = complete 2023

- (+) kindergarten to grade 5 at new elementary school on Hennessey site

Phase III = ongoing

- Savage operates as is with capital repairs
- (+) kindergarten to Balch with capital repairs
- (+) kindergarten to Callahan with capital repairs
- (+) kindergarten to Cleveland with capital repairs
- (+) kindergarten to Oldham with capital repairs
- (+) kindergarten to Willett with capital repairs
- Willett operates as is, but with pre-k only



Option 1B:
Buildings remaining in
operation within the
Town of Norwood

Option 1B

This option constructs a new middle school that removes all fourth and fifth grades from the elementary level in the first phase. As a result, early childhood programs are able to return to all neighborhood elementary schools and over-crowding is eliminated.

Proposed Grade Levels & Square Footages per School

	<i>Balch</i>	<i>Callahan</i>	<i>Cleveland</i>	<i>Oldham</i>	<i>Prescott</i>	<i>Willett</i>	<i>Coakley</i>	<i>Savage</i>
<i>Proposed Grades</i>	PK - 3	PK - 3	PK - 3	PK - 3	PK - 3		4 - 8	N/A
<i>2027 Students (#)</i>	298	228	309	217	251		1,315	0
<i>Existing (sf)</i>	51,800	33,500	49,000	39,500	36,000			122,000
<i>Proposed Add (sf)</i>								
<i>Existing + Add (sf)</i>								
<i>New (sf)</i>							214,666	
<i>Cap. Repairs (\$)</i>	6,073,550	3,927,875	5,745,250	4,631,375	4,221,000			14,304,500
<i>Renovations (\$)</i>								
<i>Additions (\$)</i>								
<i>New Project (\$)</i>							100,678,354	
<i>Priority Rating</i>	II	II	II	II	II		I	II

Summary of Costs

<i>Total Cost Capital Repairs (\$)</i>	38,903,550
<i>Total Project Cost (\$)</i>	100,678,354
<i>Total Sum (\$)</i>	\$139,581,904





Proposed new construction for a school that houses grades four through eight, on the Coakley site

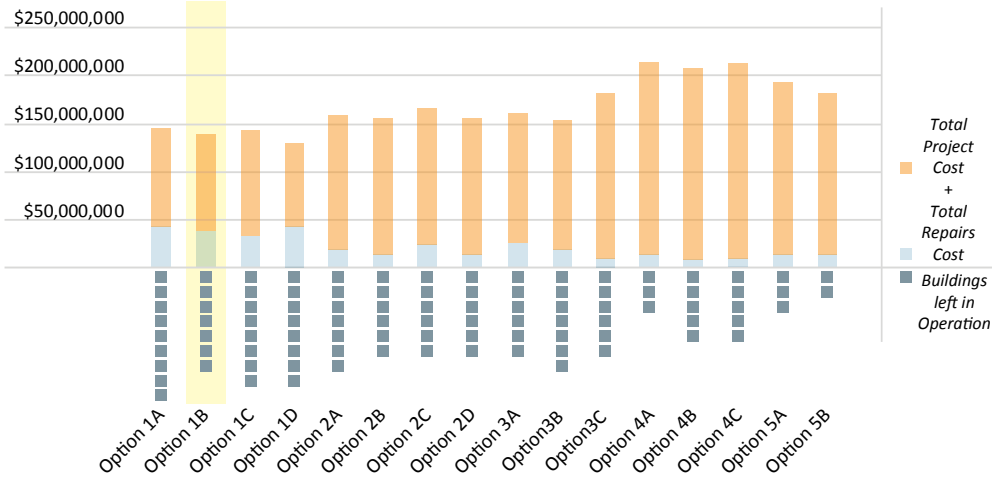
— property line

Coakley Middle School

- new construction
- renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to seven
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- By eliminating over-crowding, the town is better able to meet the goals of its educational visioning and program
- Elementary schools are still easily accessible from any neighborhood
- Early education will be easily accessible from any neighborhood

Disadvantages

- Early education classes will have to decrease in the number of students per class in order to fit comfortably within the existing, smaller classrooms at the other schools
- Extended time frame required to complete all renovations and capital improvement projects required at each elementary school to re-distribute grades
- The department of Buildings and Grounds will still be responsible for maintaining seven buildings, plus the high school

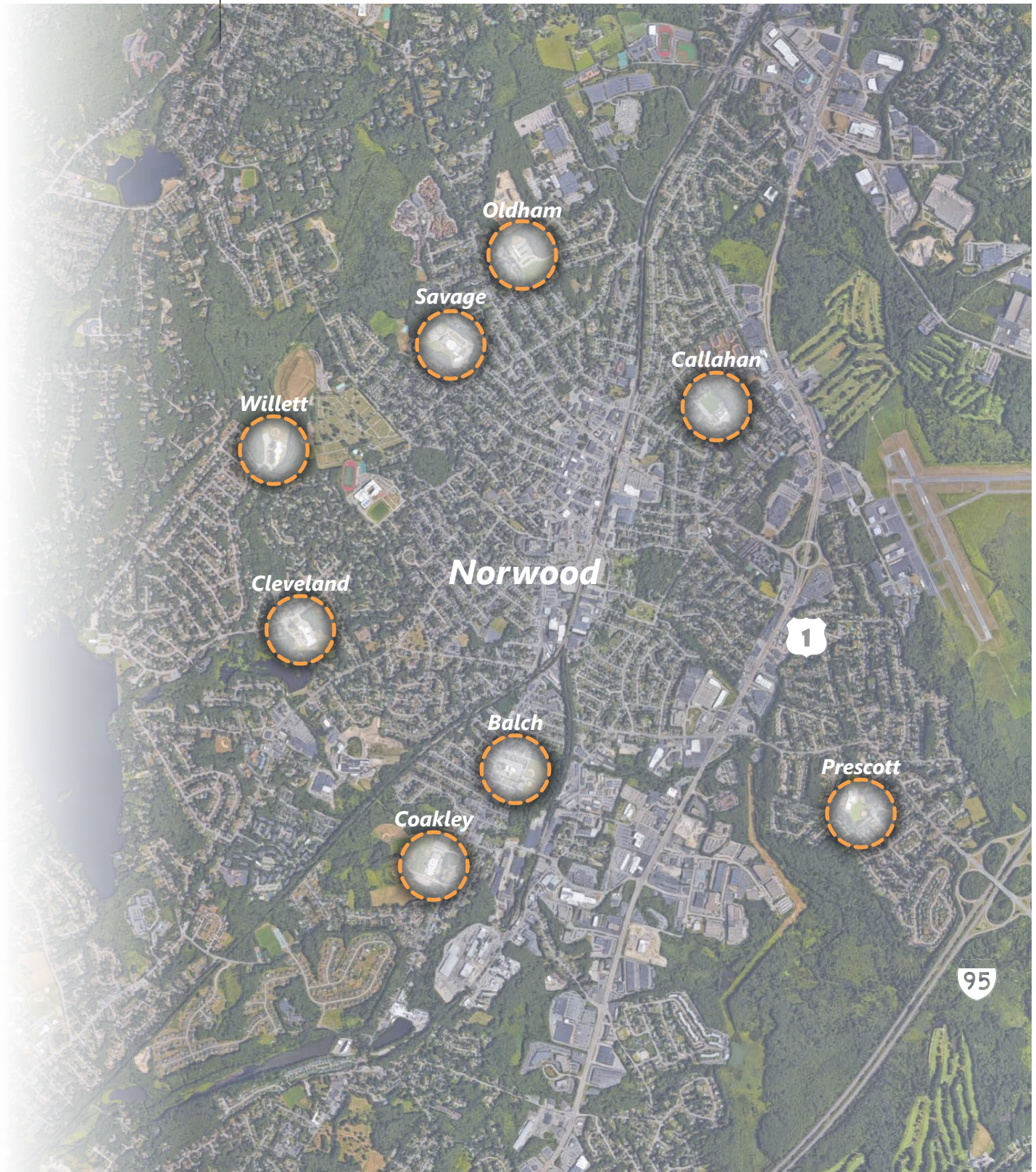
Operatives & Phasing

Phase I = complete 2020

- (+) grades 4 and 5 to new middle school on Coakley site
- (+) kindergarten and pre-k divided amongst elementary schools; close Willett

Phase II = ongoing

- Capital repairs to existing elementary schools
- Savage operates as is with capital repairs



Option 1C:
Buildings remaining in
operation within the
Town of Norwood

Option 1C

This option directly addresses the existing over-crowding at Cleveland Elementary and Willett by providing additions to both. Though the most expensive of Type 1 proposals, this option includes full renovations of Cleveland and Willett because of their additions. A new middle school on the Coakley site is also proposed.

Proposed Grade Levels & Square Footages per School

	<i>Balch</i>	<i>Callahan</i>	<i>Cleveland</i>	<i>Oldham</i>	<i>Prescott</i>	<i>Willett</i>	<i>Coakley</i>	<i>Savage</i>
<i>Proposed Grades</i>	1 - 5	1 - 5	1 - 5	1 - 5	1 - 5	PK - K	6 - 8	N/A
<i>2027 Students (#)</i>	306	214	396	218	251	454	779	0
<i>Existing (sf)</i>	51,800	33,500	49,000	39,500	36,000	38,500		122,000
<i>Proposed Add (sf)</i>			15,500			17,500		
<i>Existing + Add (sf)</i>			64,500			56,000		
<i>New (sf)</i>							151,080	
<i>Cap. Repairs (\$)</i>	6,073,550	3,927,875		4,631,375	4,221,000			14,304,500
<i>Renovations (\$)</i>			16,086,700			12,639,550		
<i>Additions (\$)</i>			7,292,950			8,207,500		
<i>New Project (\$)</i>							70,856,520	
<i>Priority Rating</i>	IV	IV	III	IV	IV	II	I	IV

Summary of Costs

<i>Total Cost Capital Repairs (\$)</i>	33,158,300
<i>Total Project Cost (\$)</i>	115,083,220
<i>Total Sum (\$)</i>	\$148,241,520



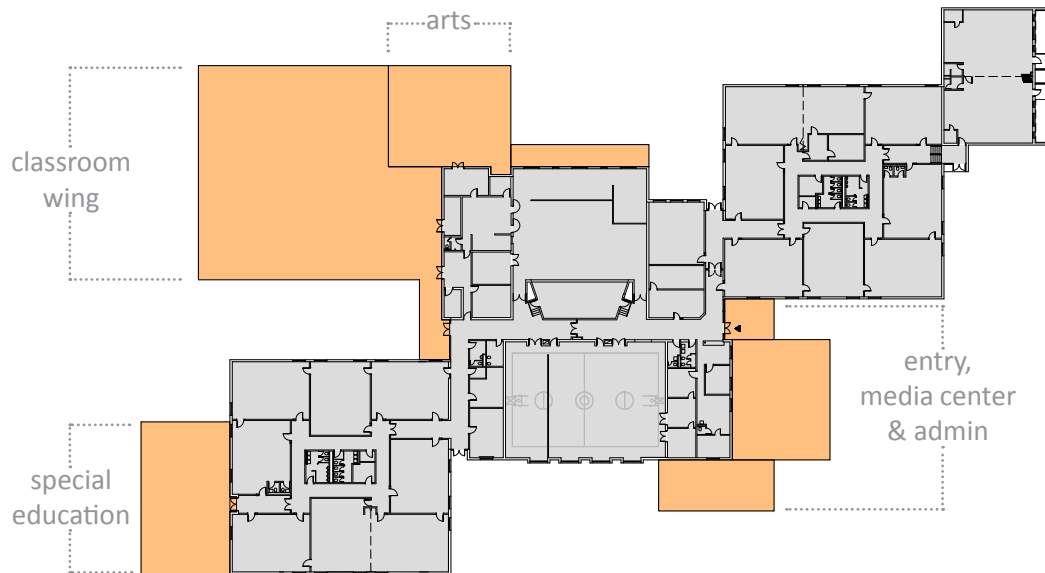


Proposed addition to the Willett to directly address the overcrowding there

— property line

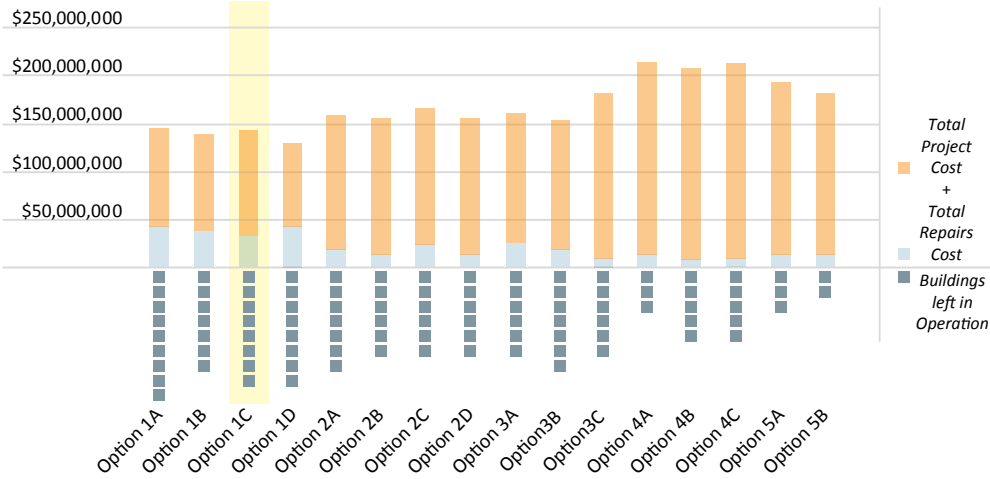
Willett Early Childhood Center

- new construction
- renovations



first floor

Compared to Other Options



Advantages

- By constructing a new middle school, the design can be tailored to fit the needs of the community
- By eliminating over-crowding, the town is better able to meet the goals of its educational visioning and program
- Elementary schools are still easily accessible from any neighborhood
- Single-phase construction possible
- Additions can be constructed over summer break to avoid disruption to students

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining eight buildings, plus the high school
- Does not plan for the long-term projection of over-crowding in the other community schools

Operatives & Phasing

Phase I = complete 2020

- New middle school on Coakley site for grades 6 to 8

Phase II = complete 2022

- Addition to Willett and comprehensive renovation

Phase III = complete 2024

- Addition to Cleveland Elementary and comprehensive renovation

Phase IV = ongoing

- Balch, Callahan, Oldham, Prescott, and Savage operate as they are with capital repairs



Option 1D:
Buildings remaining in
operation within the
Town of Norwood

Option 1D

This option constructs a new middle school that removes all fifth grades from the elementary level in the first phase. As a result, kindergarten classes are able to return to all neighborhood elementary schools and over-crowding is eliminated. Willett can operate purely as a pre-k facility, without congestion.

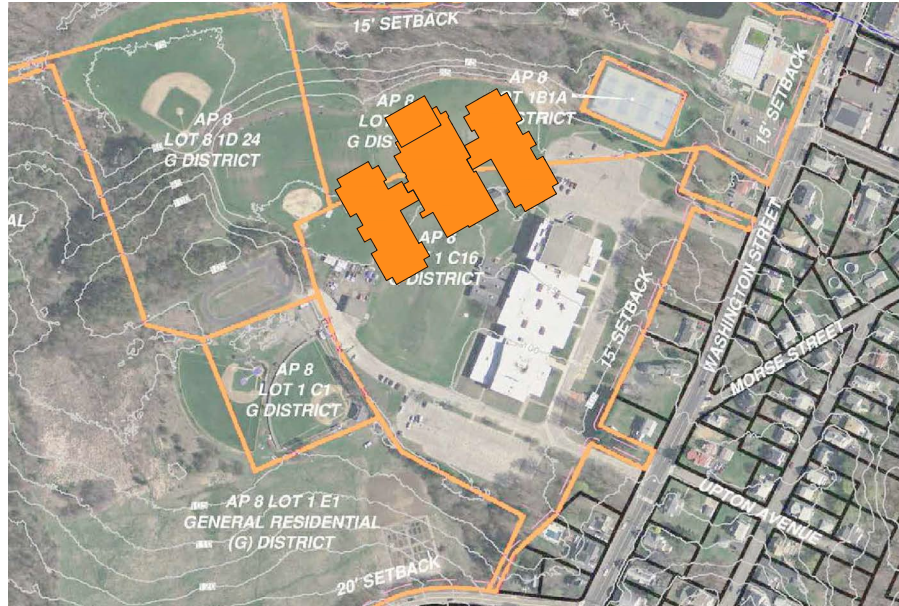
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
<i>Proposed Grades</i>	K-4	K-4	K-4	K-4	K-4	PK	5-8	N/A
<i>2027 Students (#)</i>	293	217	336	205	249	274	1,044	0
<i>Existing (sf)</i>	51,800	33,500	49,000	39,500	36,000	38,500		122,000
<i>Proposed Add (sf)</i>								
<i>Existing + Add (sf)</i>								
<i>New (sf)</i>							180,040	
<i>Cap. Repairs (\$)</i>	6,073,550	3,927,875	5,745,250	4,631,375	4,221,000	4,514,125		14,304,500
<i>Renovations (\$)</i>								
<i>Additions (\$)</i>								
<i>New Project (\$)</i>							86,783,760	
<i>Priority Rating</i>	II	II	II	II	II	II	I	II

Summary of Costs

<i>Total Cost Capital Repairs (\$)</i>	43,417,675
<i>Total Project Cost (\$)</i>	86,783,760
<i>Total Sum (\$)</i>	\$130,201,435





Proposed new construction for a school that houses grades six through eight, on the Coakley site

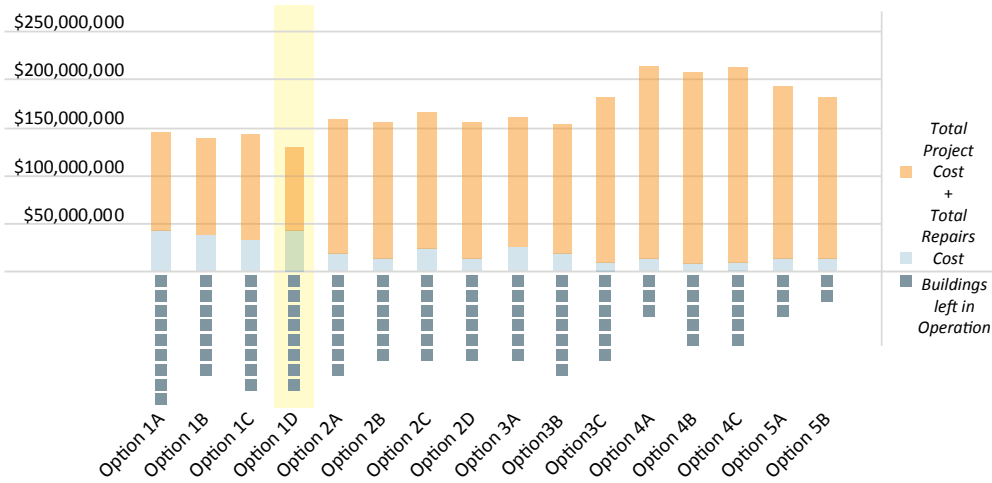
— property line

Coakley Middle School

- new construction
- renovations



Compared to Other Options



Advantages

- By constructing a new middle school, the design can be tailored to fit the needs of the community
- By moving grade 5 and eliminating over-crowding, the town is better able to meet the goals of its educational visioning and program
- By moving kindergarten classes to neighborhood elementary schools, the Willett will no longer be over-crowded
- Elementary schools are still easily accessible from any neighborhood
- Single-phase construction with only one MSBA-funded project required

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining eight buildings, plus the high school
- Does not plan for the long-term projection of over-crowding in the other community schools

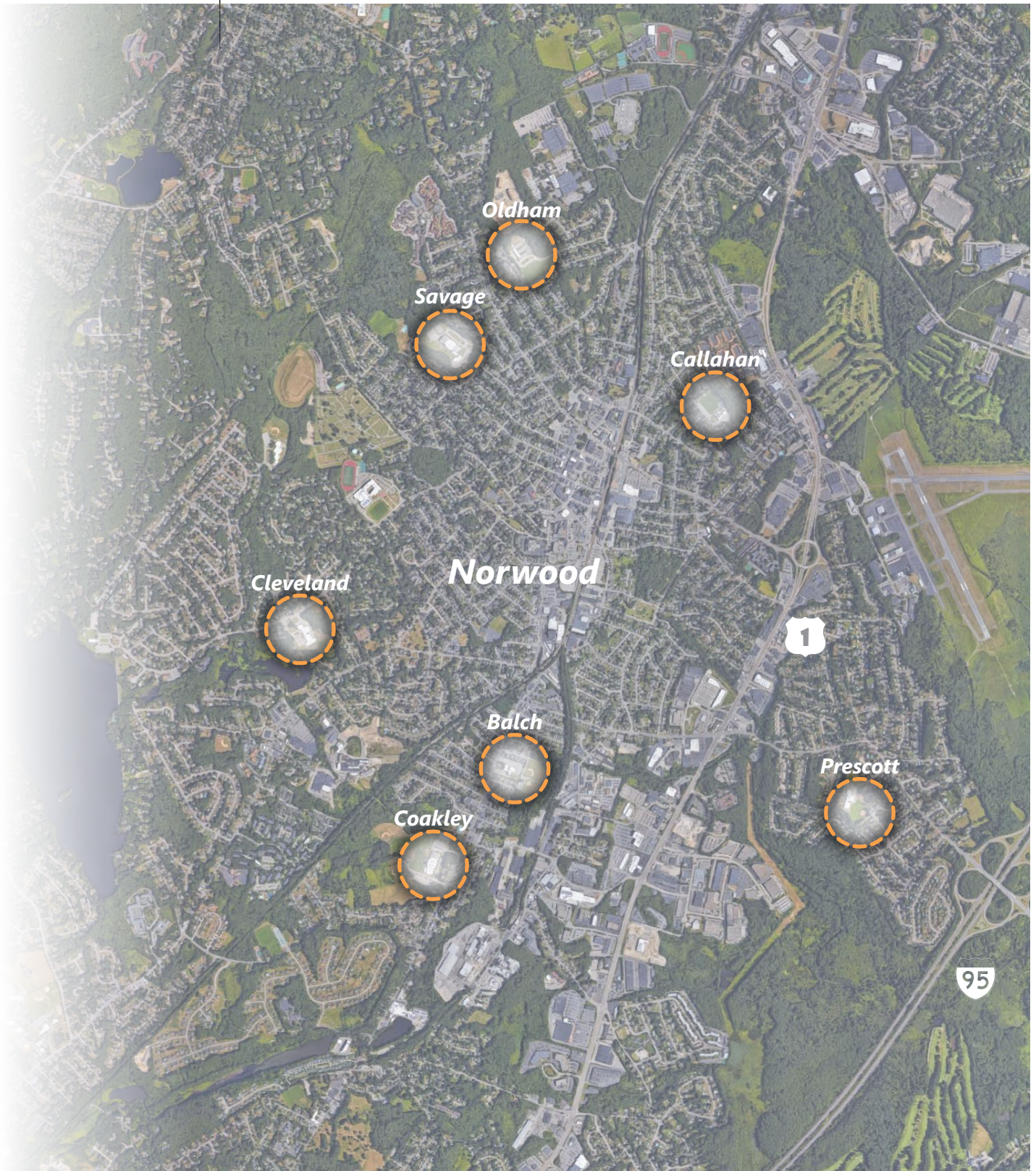
Operatives & Phasing

Phase I = complete 2020

- New middle school on Coakley site for grades 5 to 8
- Re-distribute kindergarten classes to elementary schools

Phase II = ongoing

- Balch, Callahan, Cleveland, Oldham, Prescott, Willett and Savage operate as they are with capital repairs



Option 2A:
Buildings remaining in
operation within the
Town of Norwood

Option 2A

This option makes use of the existing buildings by re-using Callahan for district offices and adding the early childhood programs into the Savage Center, while also reducing the number of buildings in operation by one.

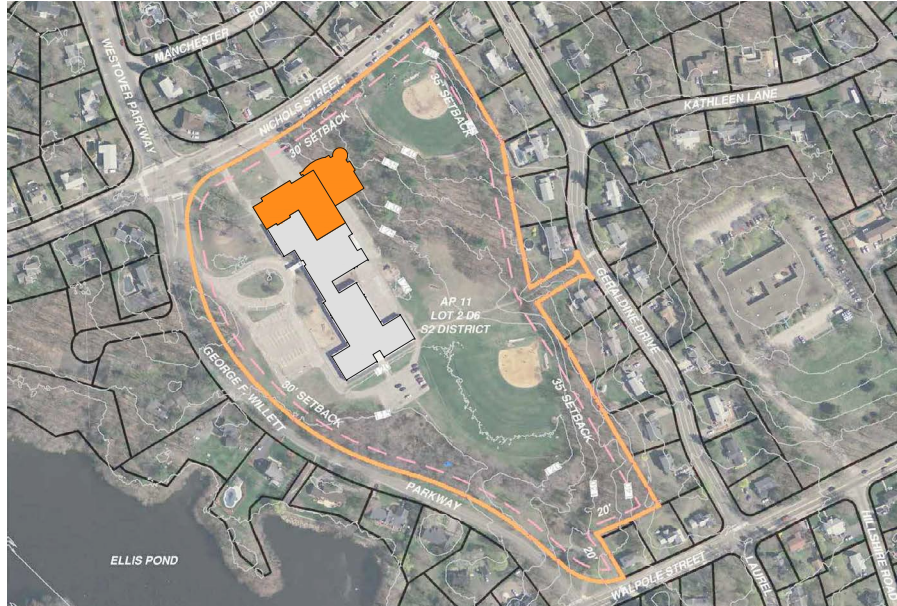
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades	1 - 5	N/A	1 - 5	1 - 5	1 - 5		6 - 8	PK - K
2027 Students (#)	306	0	610	218	251		779	454
Existing (sf)	51,800	33,500	49,000	39,500	36,000			122,000
Proposed Add (sf)			30,550					
Existing + Add (sf)			79,550					
New (sf)							151,080	
Cap. Repairs (\$)	6,073,550	3,927,875		4,631,375	4,221,000			
Renovations (\$)			16,086,700					40,052,600
Additions (\$)			14,327,950					
New Project (\$)							70,856,520	
Priority Rating	IV	IV	II	IV	IV		I	III



Summary of Costs



Total Cost Capital Repairs (\$)	18,853,800
Total Project Cost (\$)	141,323,770
Total Sum (\$)	\$160,177,570

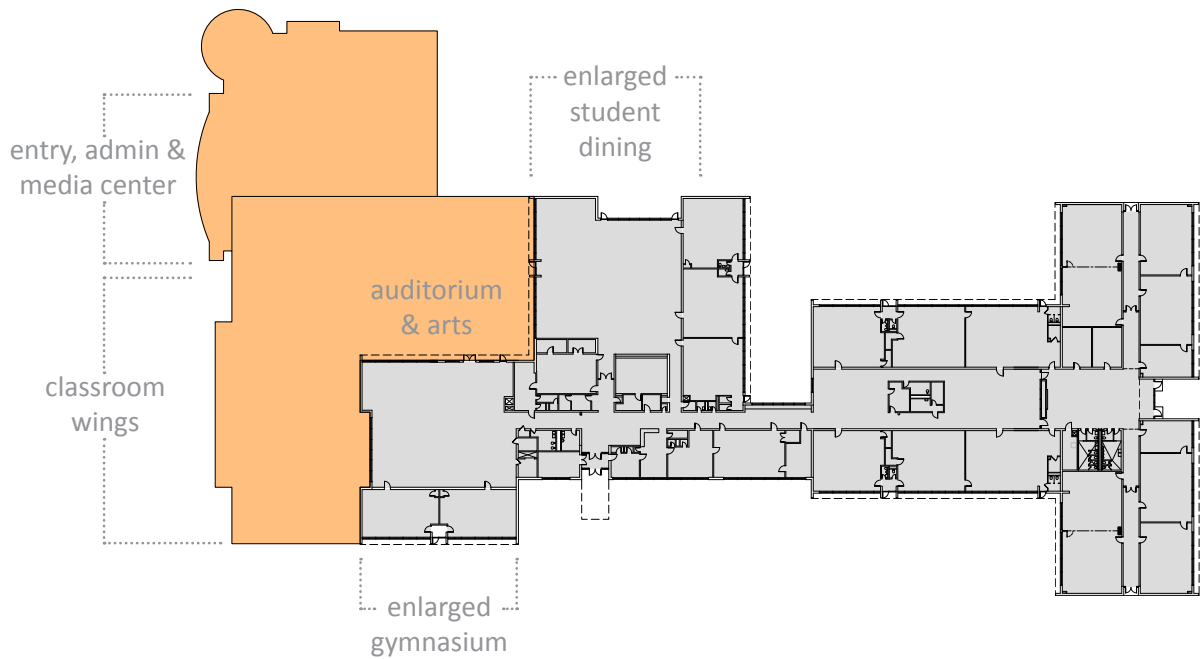


Proposed addition at Cleveland in order to absorb the students from Callahan

— property line

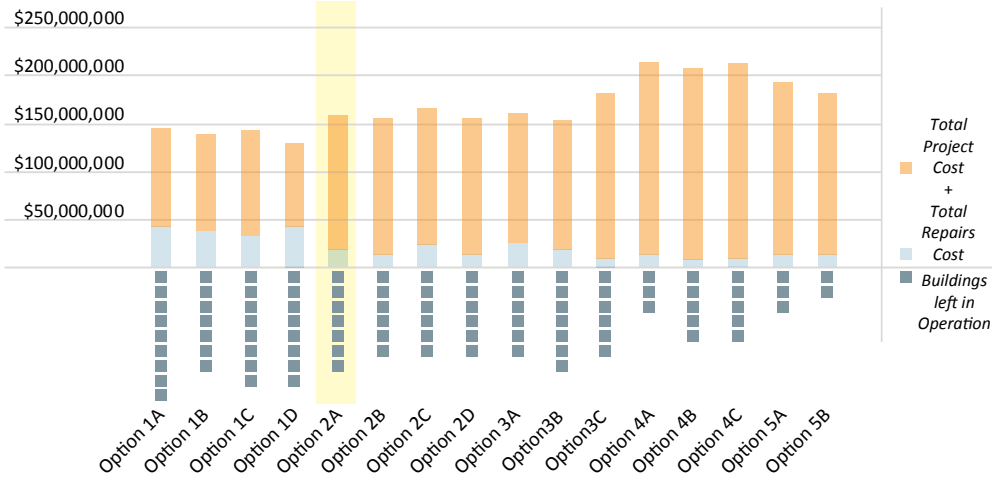
Cleveland Elementary School

-  new construction
-  renovations



first floor

Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to seven
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- The addition to Cleveland will relieve its current congestion
- Elementary schools are still easily accessible from any neighborhood

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining seven buildings, plus the high school
- Does not increase square footage per student at Balch, Oldham, or Prescott

Operatives & Phasing

Phase I = complete 2020

- New middle school on Coakley site for grades 6 to 8

Phase II = complete 2022

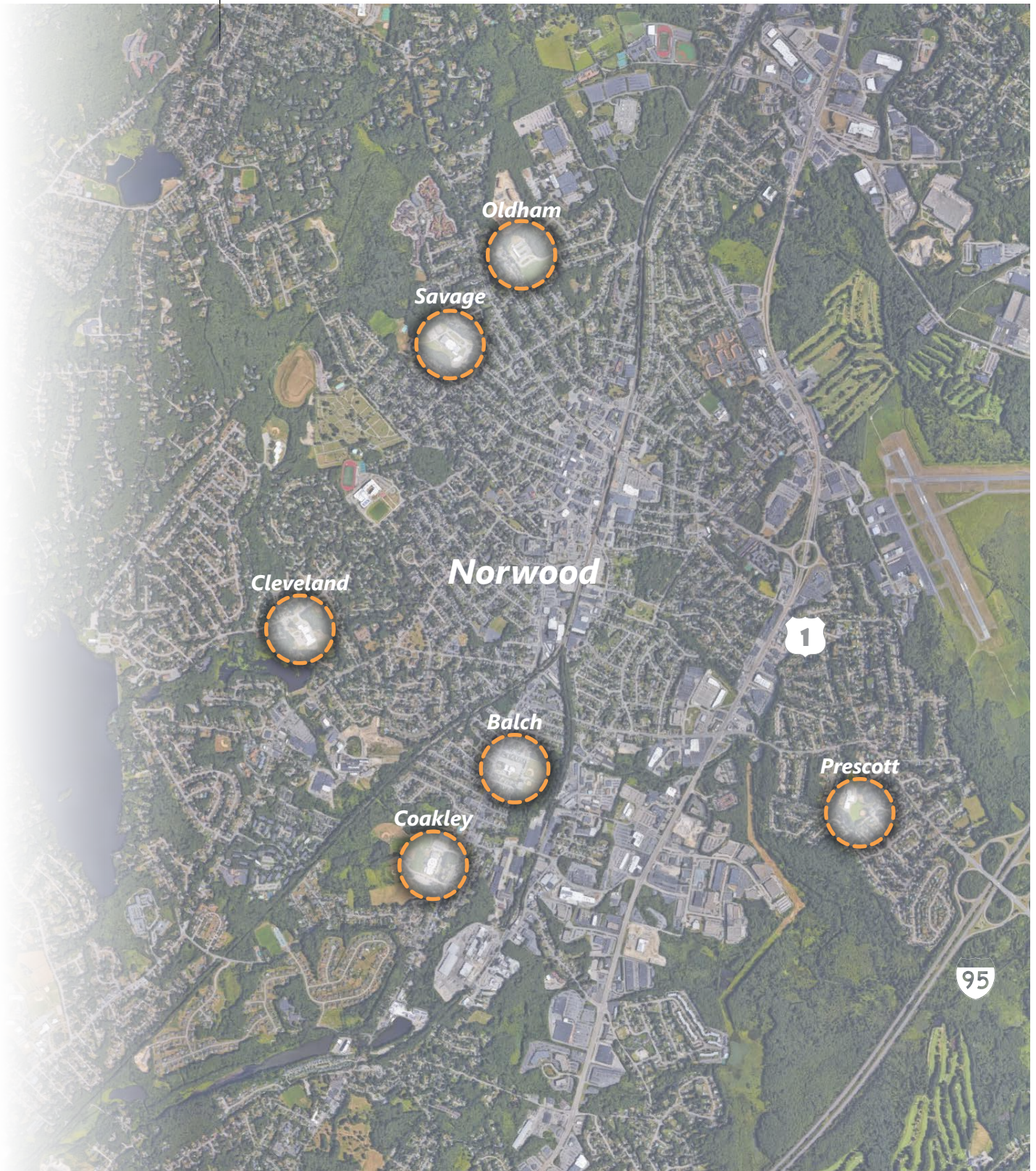
- Addition to Cleveland Elementary and comprehensive renovation; absorbs Callahan population

Phase III = complete 2024

- (+) kindergarten and pre-k moved to Savage, which receives comprehensive renovation to accommodate the new programs; close Willett

Phase IV = ongoing

- Balch, Oldham and Prescott operate as they are with capital repairs
- Callahan becomes district offices



Option 2B:
Buildings remaining in
operation within the
Town of Norwood

Option 2B

This option is a variation of Option 2A, as it also moves the early childhood programs into the Savage Center but keeps the district offices there as well. As a result, two buildings can be closed, leaving six in full operation.

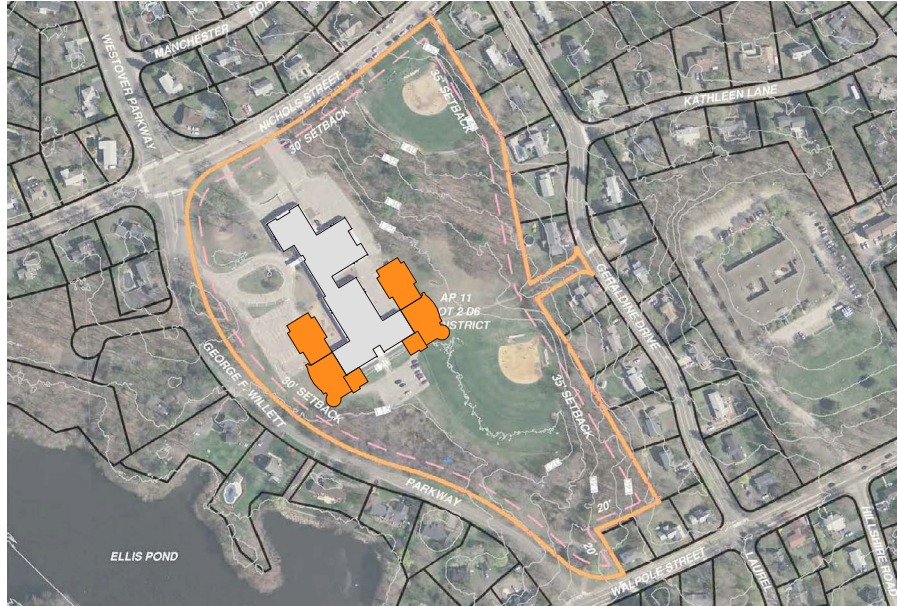
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades	1 - 5		1 - 5	1 - 5	1 - 5		6 - 8	PK - K
2027 Students (#)	306		610	218	251		779	454
Existing (sf)	51,800		49,000	39,500	36,000			122,000
Proposed Add (sf)			30,550					
Existing + Add (sf)			79,550					
New (sf)							151,080	
Cap. Repairs (\$)	6,073,550			4,631,375	4,221,000			
Renovations (\$)			16,086,700					40,052,600
Additions (\$)			14,327,950					
New Project (\$)							70,856,520	
Priority Rating	IV		II	IV	IV		I	III



Summary of Costs

Total Cost Capital Repairs (\$)	14,925,925
Total Project Cost (\$)	141,323,770
Total Sum (\$)	\$156,249,695

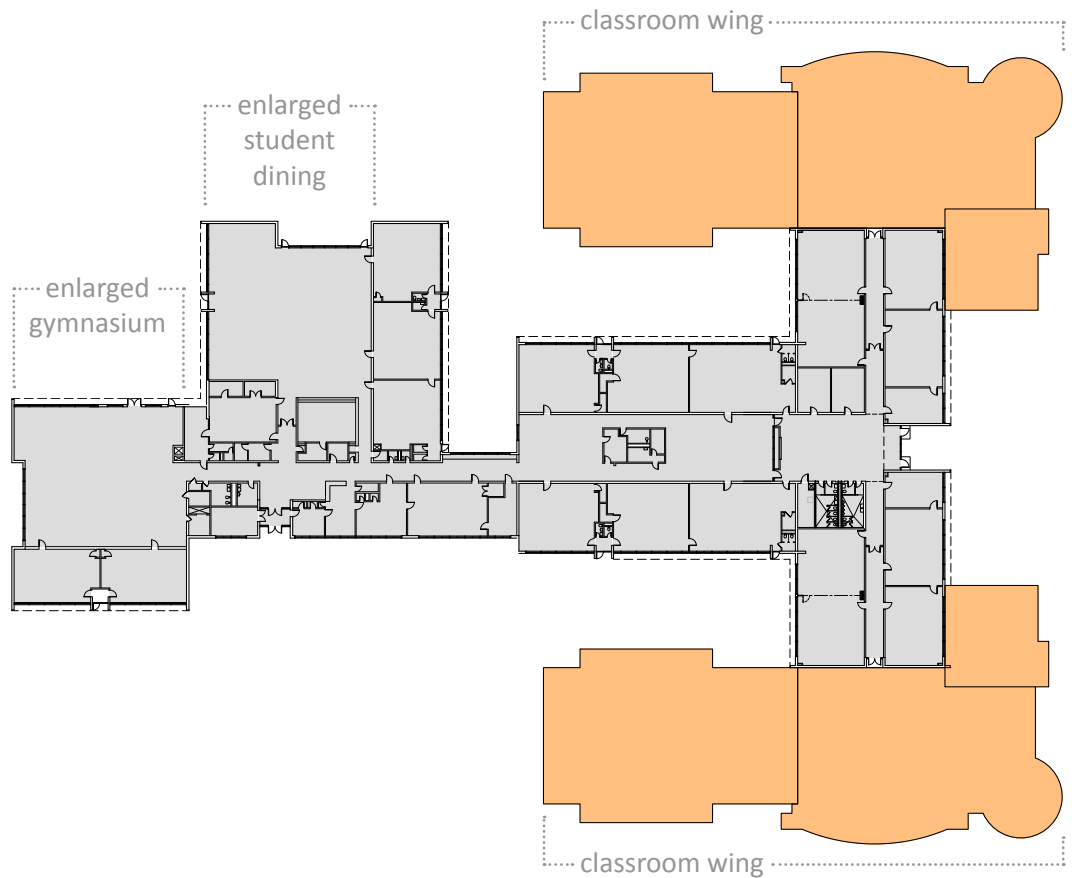


Proposed addition at Cleveland in order to absorb the students from Callahan

— property line

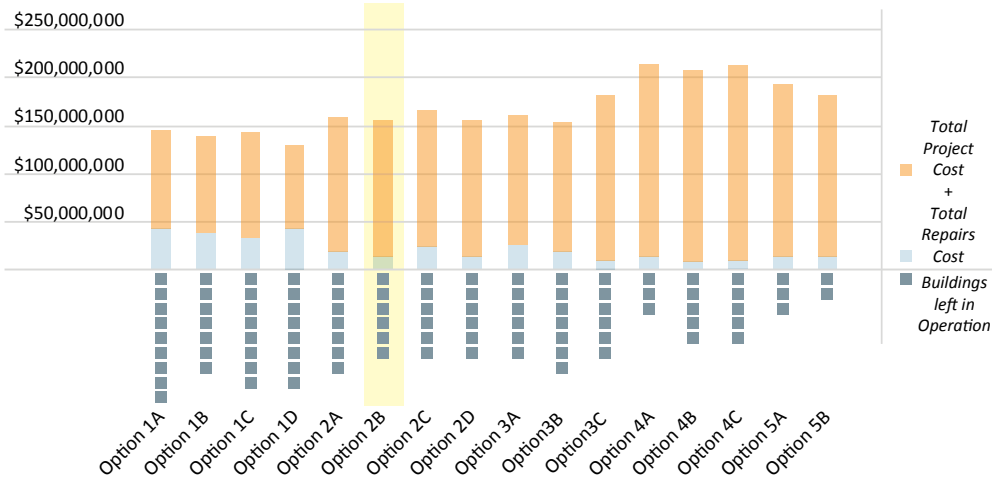
Cleveland Elementary School

- new construction
- renovations



first floor

Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to six
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- The addition to Cleveland will relieve its current congestion
- Elementary schools are still easily accessible from any neighborhood
- Shorter time frame to complete phases because district offices are not moving

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining six buildings, plus the high school
- Does not increase square footage per student at Balch, Oldham, or Prescott

Operatives & Phasing

Phase I = complete 2020

- New middle school on Coakley site for grades 6 to 8

Phase II = complete 2022

- Addition to Cleveland Elementary and comprehensive renovation; absorbs Callahan population and close Callahan

Phase III = complete 2024

- (+) kindergarten and pre-k moved to Savage, which receives comprehensive renovation to accommodate the new programs; close Willett

Phase IV = ongoing

- Balch, Callahan, Oldham and Prescott operate as they are with capital repairs



Option 2C:
Buildings remaining in
operation within the
Town of Norwood

Option 2C

This option reduces the number of buildings in operation, re-distributes students to retain community schools that are low in population, and moves early education to Cleveland in order to minimize the number of newly constructed additions required.

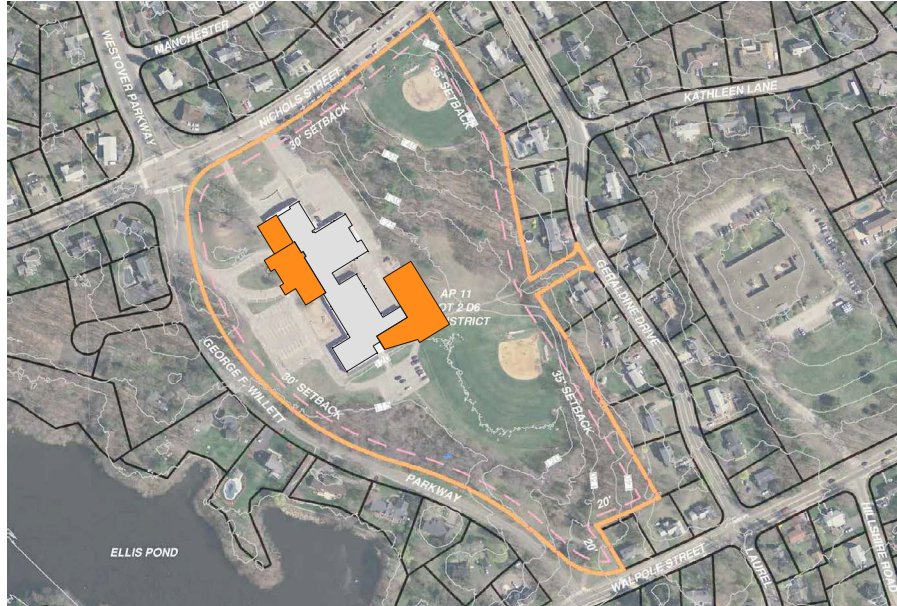
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Cookley	Savage
Proposed Grades	1 - 5		PK - 5	1 - 5	1 - 5		6 - 8	N/A
2027 Students (#)	315		811	438	275		779	0
Existing (sf)	51,800		49,000	39,500	36,000			122,000
Proposed Add (sf)			56,250	33,900				
Existing + Add (sf)			105,250	73,400				
New (sf)							151,080	
Cap. Repairs (\$)	6,073,550				4,221,000			14,304,500
Renovations (\$)			16,086,700	12,967,850				
Additions (\$)			26,381,250	15,899,100				
New Project (\$)							70,856,520	
Priority Rating	IV		II	III	IV		I	IV



Summary of Costs

Total Cost Capital Repairs (\$)	24,599,050
Total Project Cost (\$)	142,191,420
Total Sum (\$)	\$166,790,470

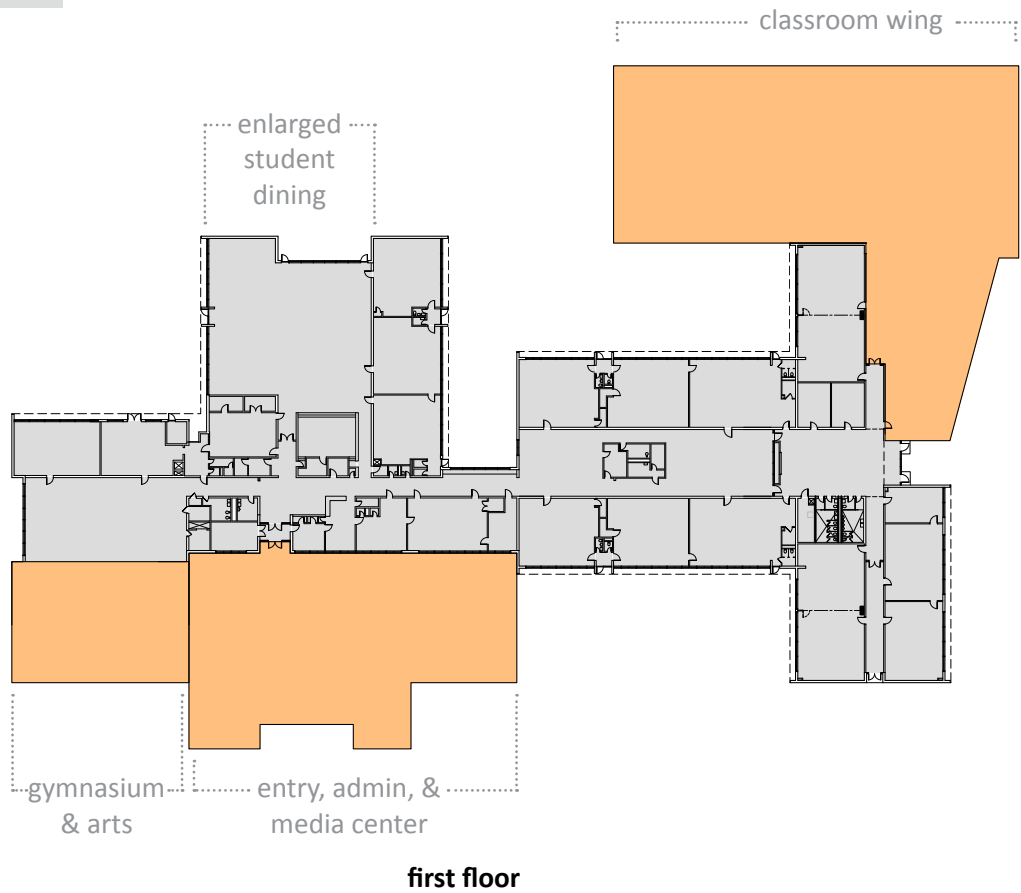


Proposed addition at Cleveland in order to absorb early education students from Willett and eliminate congestion

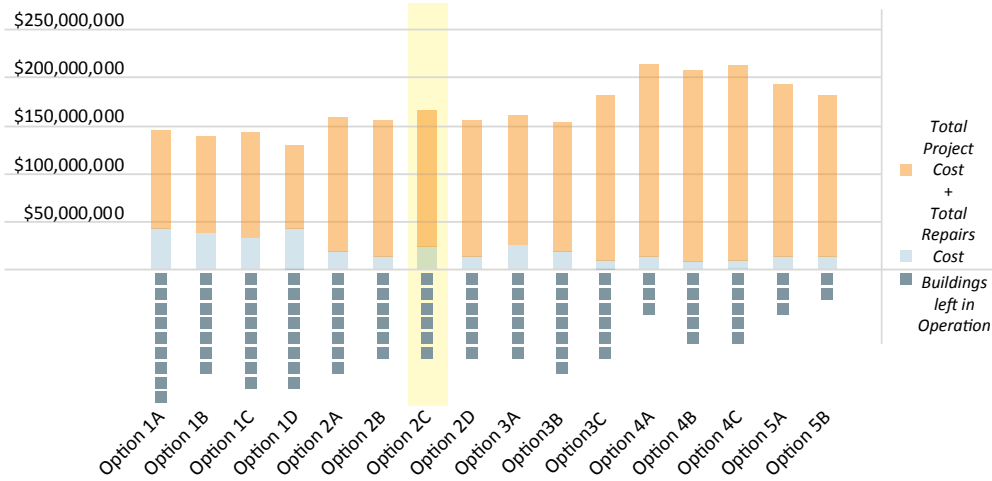
— property line

Cleveland Elementary School

- new construction
- renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to six
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- The addition to Cleveland will relieve its current congestion
- Elementary schools are still easily accessible from any neighborhood

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining six buildings, plus the high school
- Does not increase square footage per student at Balch or Prescott

Operatives & Phasing

Phase I = complete 2020

- New middle school on Coakley site for grades 6 to 8

Phase II = complete 2022

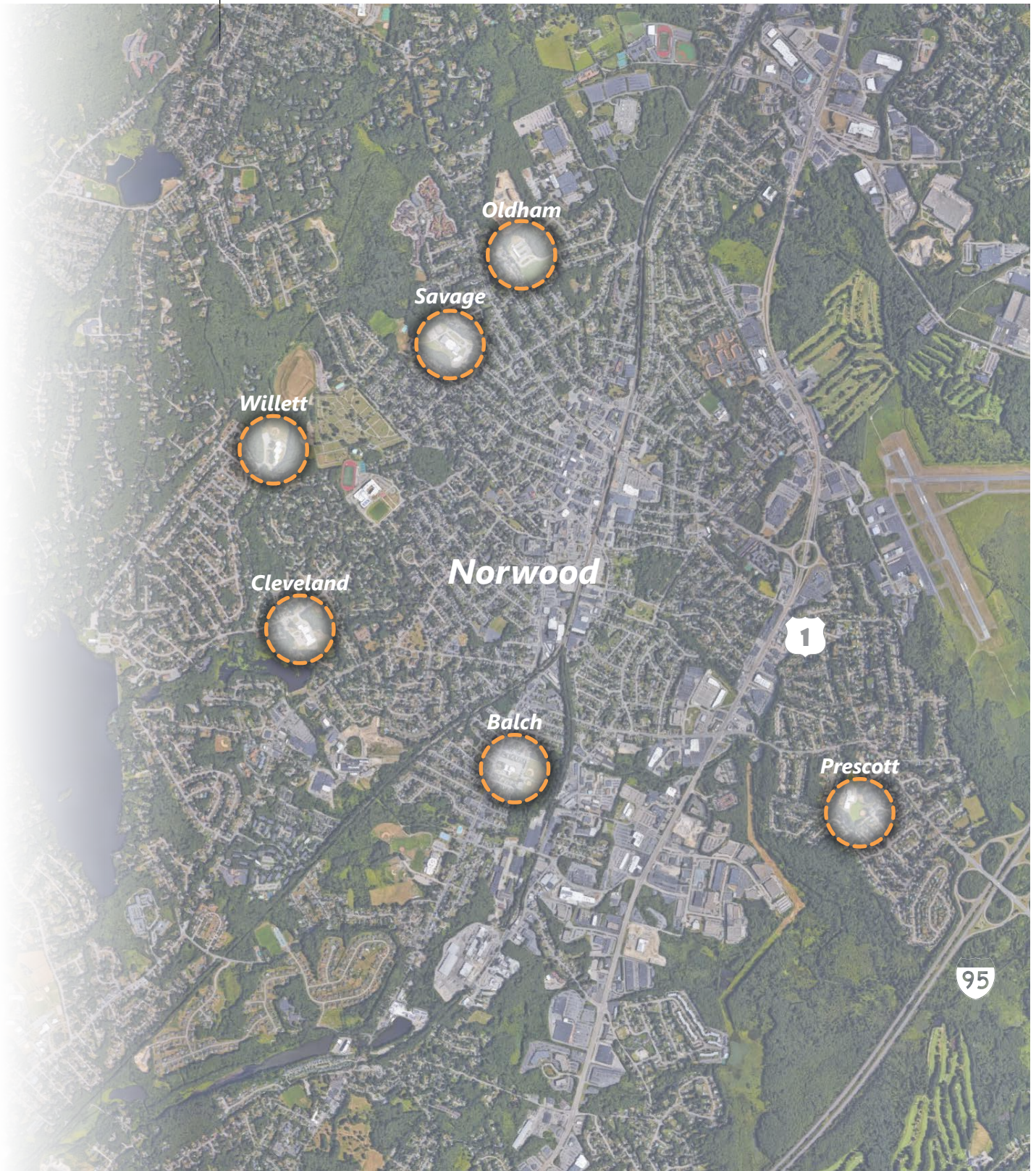
- (+) kindergarten and pre-k to Cleveland Elementary, which receives an addition and comprehensive renovation; absorbs Willett population and close Willett

Phase III = complete 2024

- Addition to Oldham Elementary and comprehensive renovation; absorbs Callahan population and close Callahan

Phase IV = complete 2024

- Balch, Prescott, and Savage operate as they are with capital repairs



Option 2D:
Buildings remaining in
operation within the
Town of Norwood

Option 2D

This option accommodates student population by moving grade five to a newly constructed middle school added onto the Willett, and re-distributes students to retain community schools that are low in population. Oldham receives an addition.

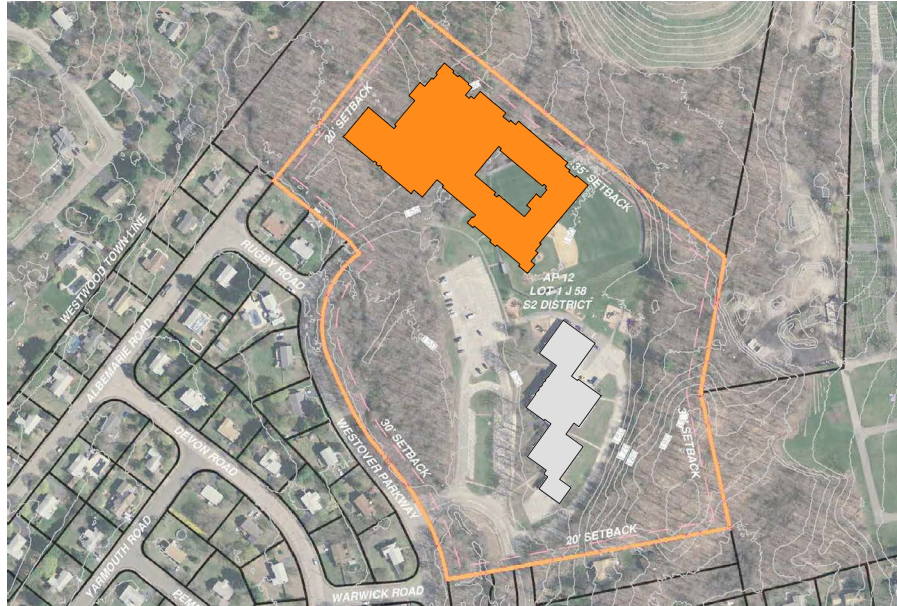
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades	1 - 4		1 - 4	1 - 4	1 - 4	PK - K, 5 - 8		N/A
2027 Students (#)	302		308	254	256	1,498		0
Existing (sf)	51,800		49,000	39,500	36,000	38,500		122,000
Proposed Add (sf)				6,500		212,300		
Existing + Add (sf)				46,000		250,800		
New (sf)								
Cap. Repairs (\$)	6,073,550		5,745,250		4,221,000			14,304,500
Renovations (\$)				12,967,850		12,639,550		
Additions (\$)				3,048,500		99,568,700		
New Project (\$)								
Priority Rating	III		III	II	III	I		III



Summary of Costs

Total Cost Capital Repairs (\$)	30,344,300
Total Project Cost (\$)	128,224,600
Total Sum (\$)	\$158,568,900

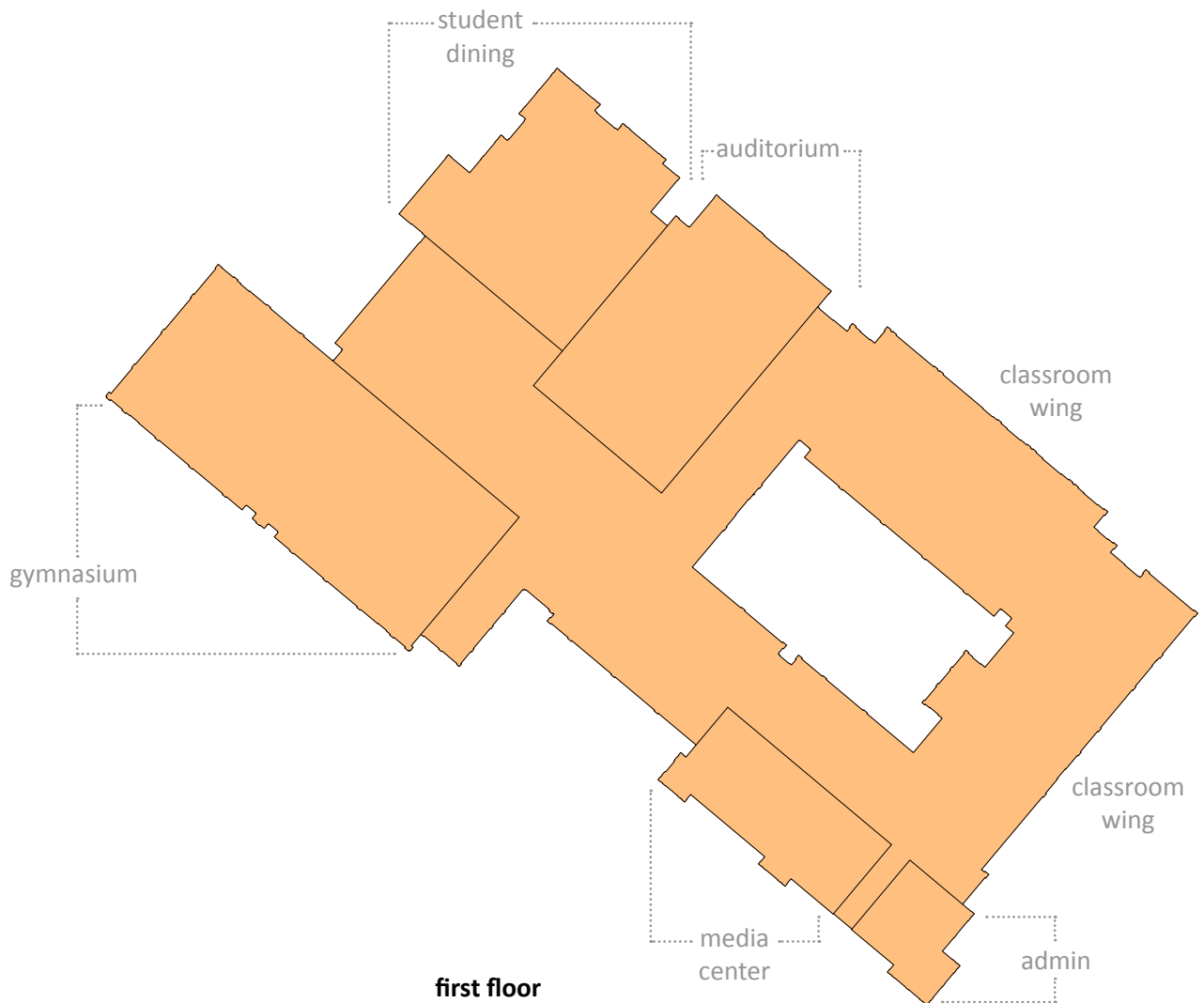


Proposed addition of a new middle school at Willett in order to relieve congestion there and at the other elementary schools

— property line

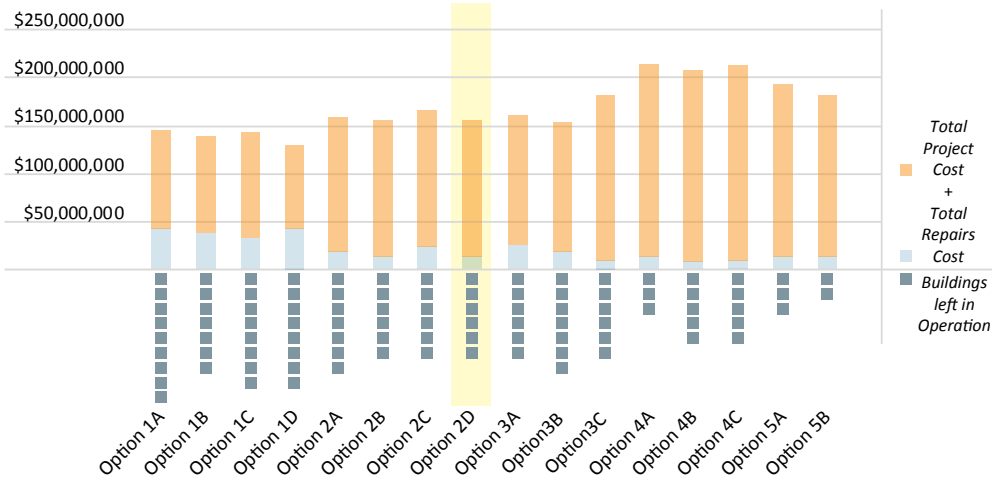
Willett with Coakley Middle School

- new construction
- renovations



first floor

Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to six
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- The addition to Willett will relieve its current congestion
- Elementary schools are still easily accessible from any neighborhood
- Single phase resolution

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining six buildings, plus the high school

Operatives & Phasing

Phase I = complete 2020

- comprehensive renovation to Willett with addition of the middle school
- (+) grade 5 to new middle school on Willett site for grades 5 to 8

Phase II = complete 2022

- Addition to Oldham Elementary and comprehensive renovation

Phase III = ongoing

- Balch, Cleveland, Prescott and Savage operate as they are with capital repairs



Option 3A:
Buildings remaining in
operation within the
Town of Norwood

Option 3A

This option reduces the number of buildings in operation, accommodates student population by moving grade five to a newly constructed middle school, and re-distributes students to retain community schools that are low in population.

Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades	1 - 4		1 - 4	1 - 4	PK - K		5 - 8	N/A
2027 Students (#)	302		347	471	454		1,044	0
Existing (sf)	51,800		49,000	39,500	36,000			122,000
Proposed Add (sf)				34,050	20,000			
Existing + Add (sf)				73,550	56,000			
New (sf)							180,040	
Cap. Repairs (\$)	6,073,550		5,745,250					14,304,500
Renovations (\$)				12,967,850	11,818,800			
Additions (\$)				15,969,450	9,380,000			
New Project (\$)							86,783,760	
Priority Rating	IV		IV	III	II		I	IV

Summary of Costs

Total Cost Capital Repairs (\$)	26,123,300
Total Project Cost (\$)	136,919,860
Total Sum (\$)	\$163,043,160



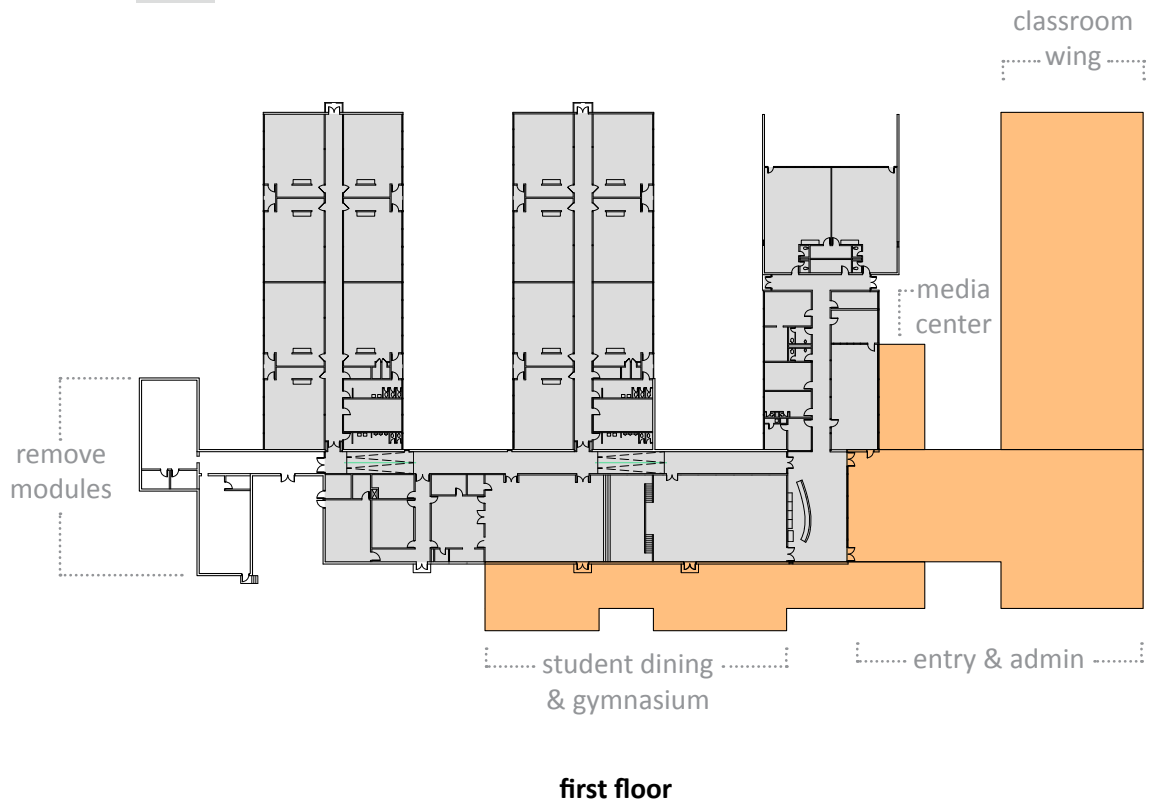


Proposed addition at Oldham in order to absorb additional students from Prescott and Callahan

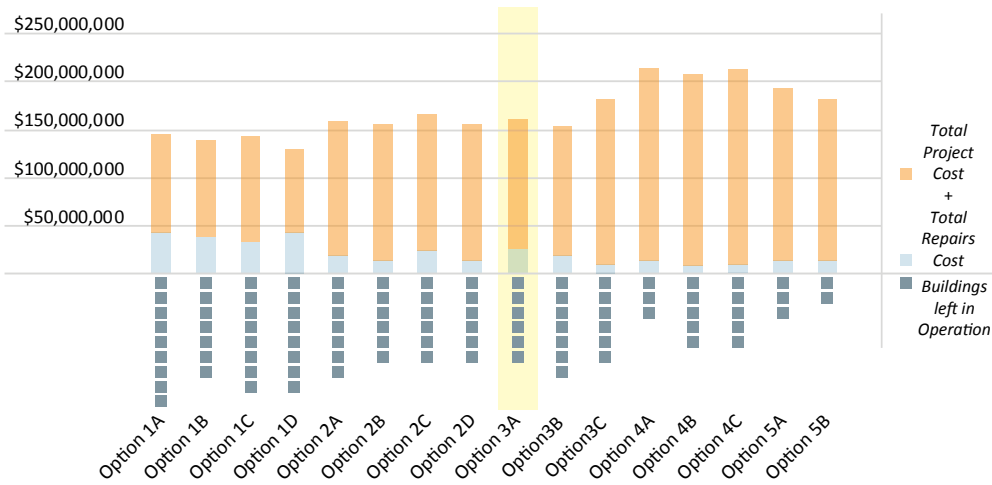
— property line

Oldham Elementary School

- new construction
- renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to six
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- By eliminating over-crowding, the town is better able to meet the goals of its educational visioning and program
- Elementary schools are still easily accessible from any neighborhood

Disadvantages

- Longer construction time frame required to complete one new building, two additions, and the remaining renovations/capital improvement projects
- The department of Buildings and Grounds will still be responsible for maintaining six buildings, plus the high school

Operatives & Phasing

Phase I = complete 2020

- (+) grade 5 to new middle school on Coakley site for grades 5 to 8

Phase II = complete 2022

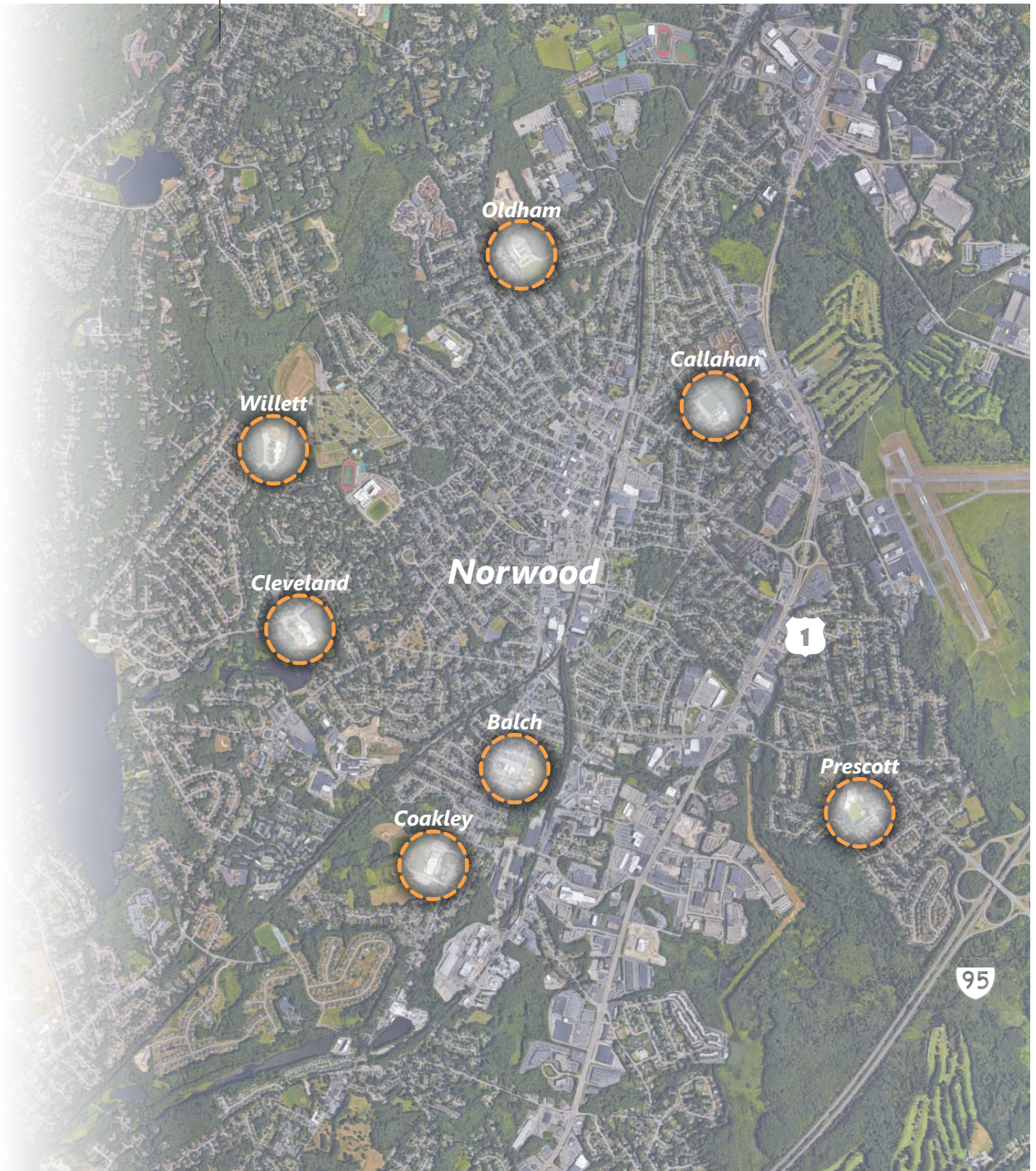
- (+) kindergarten and pre-k to Precott Elementary, which receives an addition and comprehensive renovation; absorbs Willett population and close Willett
- (-) grades 1 to 4 of Prescott; population re-distributed to other elementary schools

Phase III = complete 2024

- Addition to Oldham Elementary and comprehensive renovation; absorbs Callahan population and close Callahan

Phase IV = ongoing

- Balch, Cleveland and Savage operate as they are with capital repairs



Option 3B:
Buildings remaining in
operation within the
Town of Norwood

Option 3B

This option accommodates student population by moving grade five to a newly constructed middle school, re-distributes students to retain community schools that are low in population, and recycles two elementary schools for use as district offices and community program space.

Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
<i>Proposed Grades</i>	1 - 4	N/A	1 - 4	1 - 4	PK - K	N/A	5 - 8	
<i>2027 Students (#)</i>	298	0	308	492	476	0	1,044	
<i>Existing (sf)</i>	51,800	33,500	49,000	39,500	36,000	38,500		
<i>Proposed Add (sf)</i>				34,050	20,000			
<i>Existing + Add (sf)</i>				73,550	56,000			
<i>New (sf)</i>							180,040	
<i>Cap. Repairs (\$)</i>	6,073,550	3,927,875	5,745,250			4,514,125		
<i>Renovations (\$)</i>				12,967,850	11,818,800			
<i>Additions (\$)</i>				15,969,450	9,380,000			
<i>New Project (\$)</i>							86,783,760	
<i>Priority Rating</i>	IV	III	IV	III	II	IV	I	

Summary of Costs

<i>Total Cost Capital Repairs (\$)</i>	20,260,800
<i>Total Project Cost (\$)</i>	136,919,860
<i>Total Sum (\$)</i>	\$157,180,660



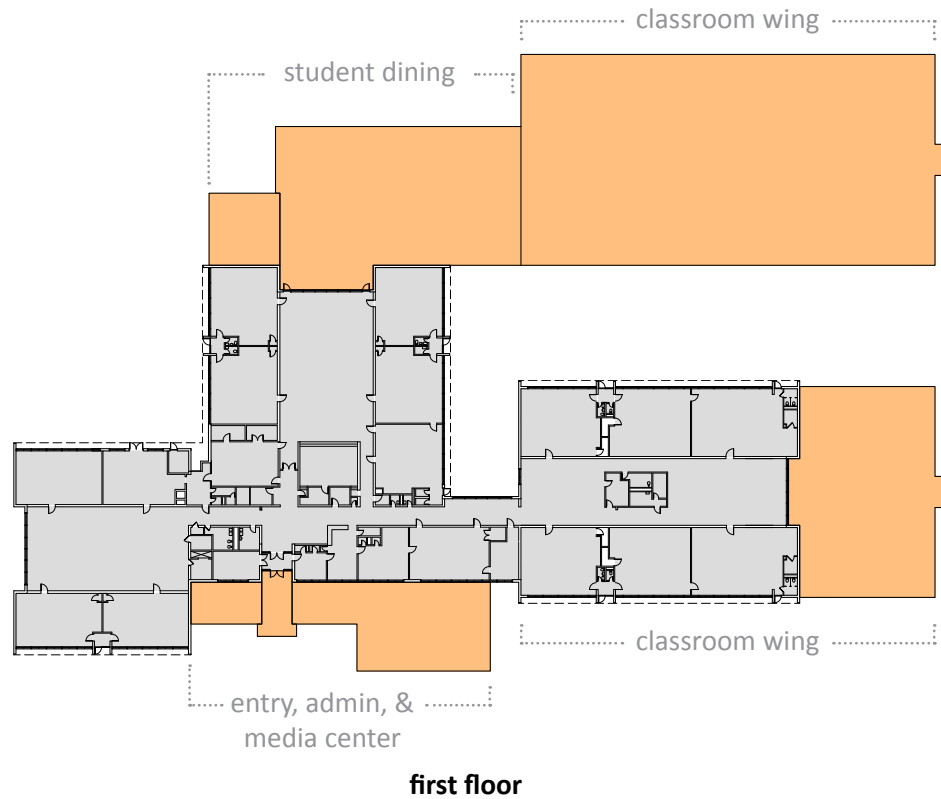


Proposed addition at Prescott in order to accommodate the entire pre-k and kindergarten student body

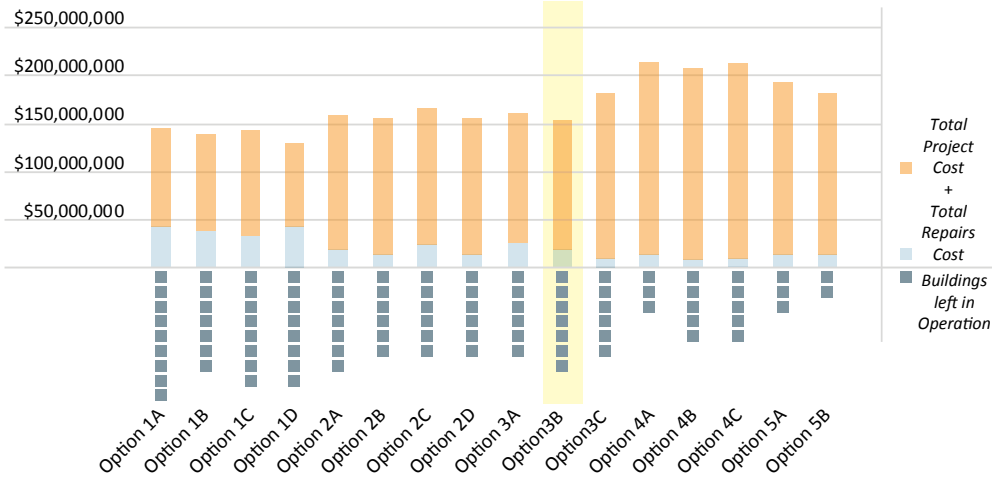
— property line

Prescott Elementary School

- new construction
- renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to seven
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- By eliminating over-crowding, the town is better able to meet the goals of its educational visioning and program
- Elementary schools are still easily accessible from any neighborhood

Disadvantages

- Longer construction time frame required to complete one new building, two additions, and the remaining renovations/capital improvement projects
- The department of Buildings and Grounds will still be responsible for maintaining seven buildings, plus the high school

Operatives & Phasing

Phase I = complete 2020

- (+) grade 5 to new middle school on Coakley site for grades 5 to 8

Phase II = complete 2022

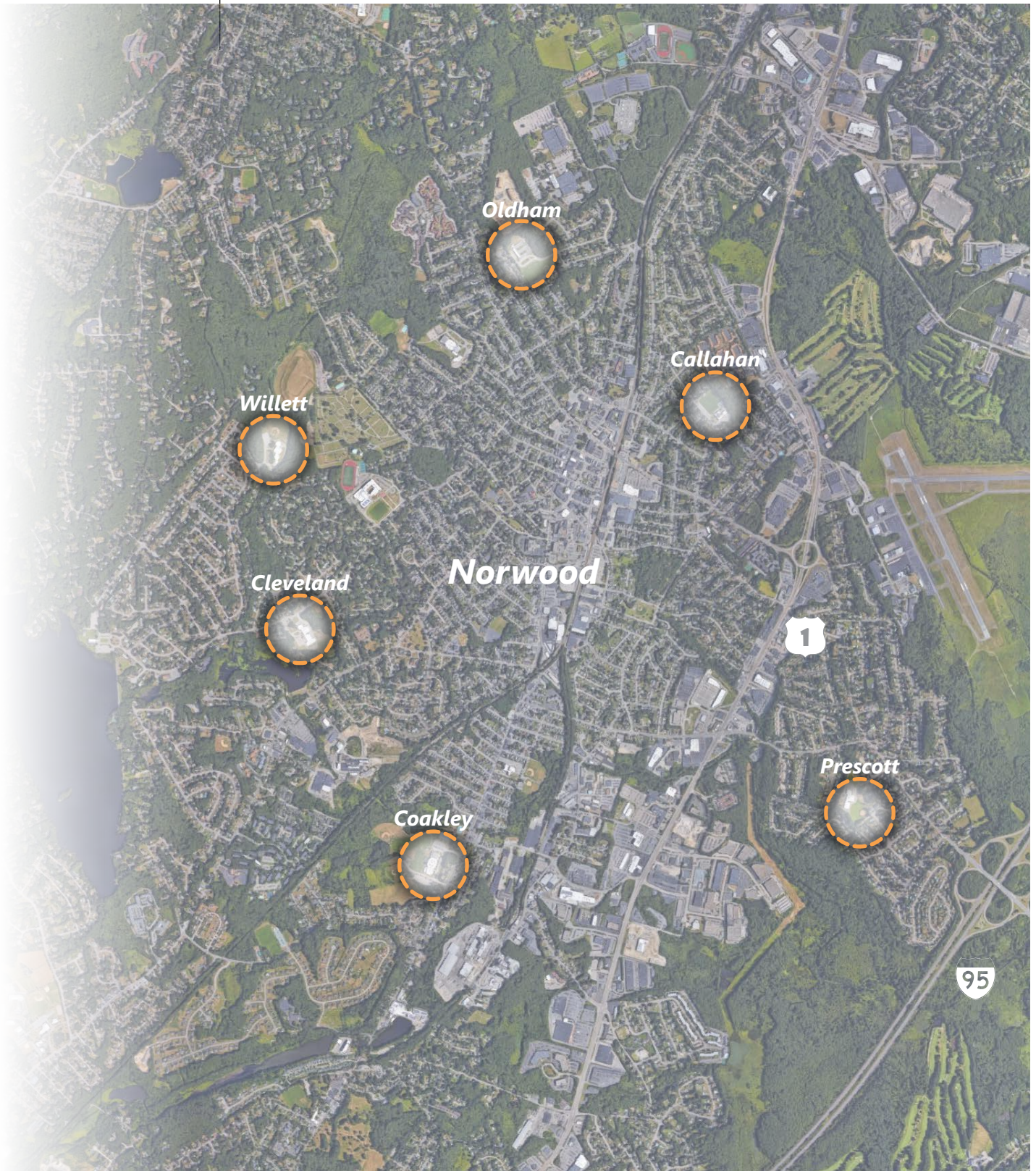
- (+) kindergarten and pre-k to Precott Elementary, which receives an addition and comprehensive renovation
- (-) grades 1 to 4 from Prescott; population re-distributed to other elementary schools

Phase III = complete 2024

- Addition to Oldham Elementary and comprehensive renovation; absorbs Callahan population and use Callahan for district offices; close Savage

Phase IV = ongoing

- Balch and Cleveland operate as they are with capital repairs
- Willett refurbished for community program use



Option 3C:
Buildings remaining in
operation within the
Town of Norwood

Option 3C

This option accommodates student population by moving grade five to a newly constructed middle school. Prescott, Cleveland, and Oldham will remain as the elementary schools for grade K-4, which are well distributed throughout the town. Willett will be exclusively available for pre-k, and the Callahan building can be used for district offices.

Proposed Grade Levels & Square Footages per School

	<i>Balch</i>	<i>Callahan</i>	<i>Cleveland</i>	<i>Oldham</i>	<i>Prescott</i>	<i>Willett</i>	<i>Coakley</i>	<i>Savage</i>
<i>Proposed Grades</i>		N/A	K - 4	K - 4	K - 4	PK	5 - 8	
<i>2027 Students (#)</i>		0	604	604	260	106	1,044	
<i>Existing (sf)</i>		33,500	49,000	39,500	36,000	38,500		
<i>Proposed Add (sf)</i>			59,720	69,220				
<i>Existing + Add (sf)</i>			108,720	108,720				
<i>New (sf)</i>							180,040	
<i>Cap. Repairs (\$)</i>		3,927,875			4,221,000	4,514,125		
<i>Renovations (\$)</i>			16,086,700	12,967,850				
<i>Additions (\$)</i>			28,008,680	32,464,180				
<i>New Project (\$)</i>							86,783,760	
<i>Priority Rating</i>		VI	II	II	VI	VI	I/III	

Summary of Costs

<i>Total Cost Capital Repairs (\$)</i>	12,663,000
<i>Total Project Cost (\$)</i>	173,966,170
<i>Total Sum (\$)</i>	\$186,629,170



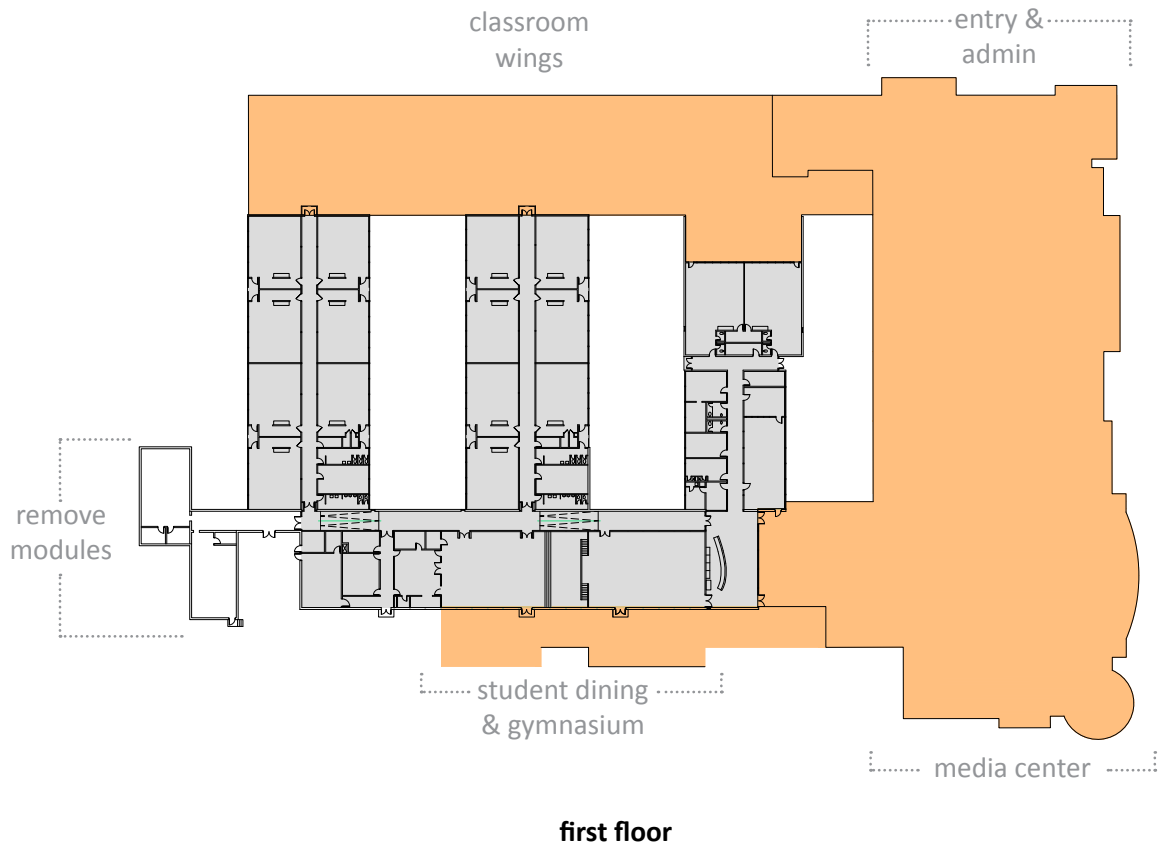


Proposed addition at Oldham in order to account for the added number of students

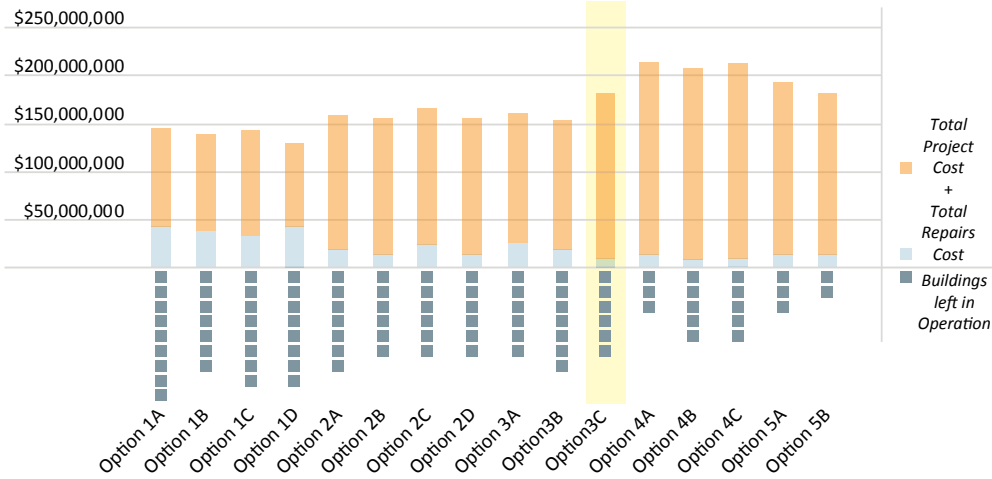
— property line

Oldham Elementary School

- new construction
- renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to six
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- By eliminating over-crowding, the town is better able to meet the goals of its educational visioning and program
- Elementary schools are equally distributed throughout the town and still easily accessible from any neighborhood
- The elementary school additions could be completed under the control of a single owner’s project manager, designer, and contractor
- A single building committee could be established for both elementary school projects
- The completion of both elementary school projects could synchronize with the middle school so that they are complete before the middle school starts construction

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining six buildings, plus the high school

Operatives & Phasing

Phase I = submit a statement of interest to the MSBA for a new middle school; 2019

- (+) grade 5 to new middle school on Coakley site for grades 5 to 8

Phase II = complete 2020

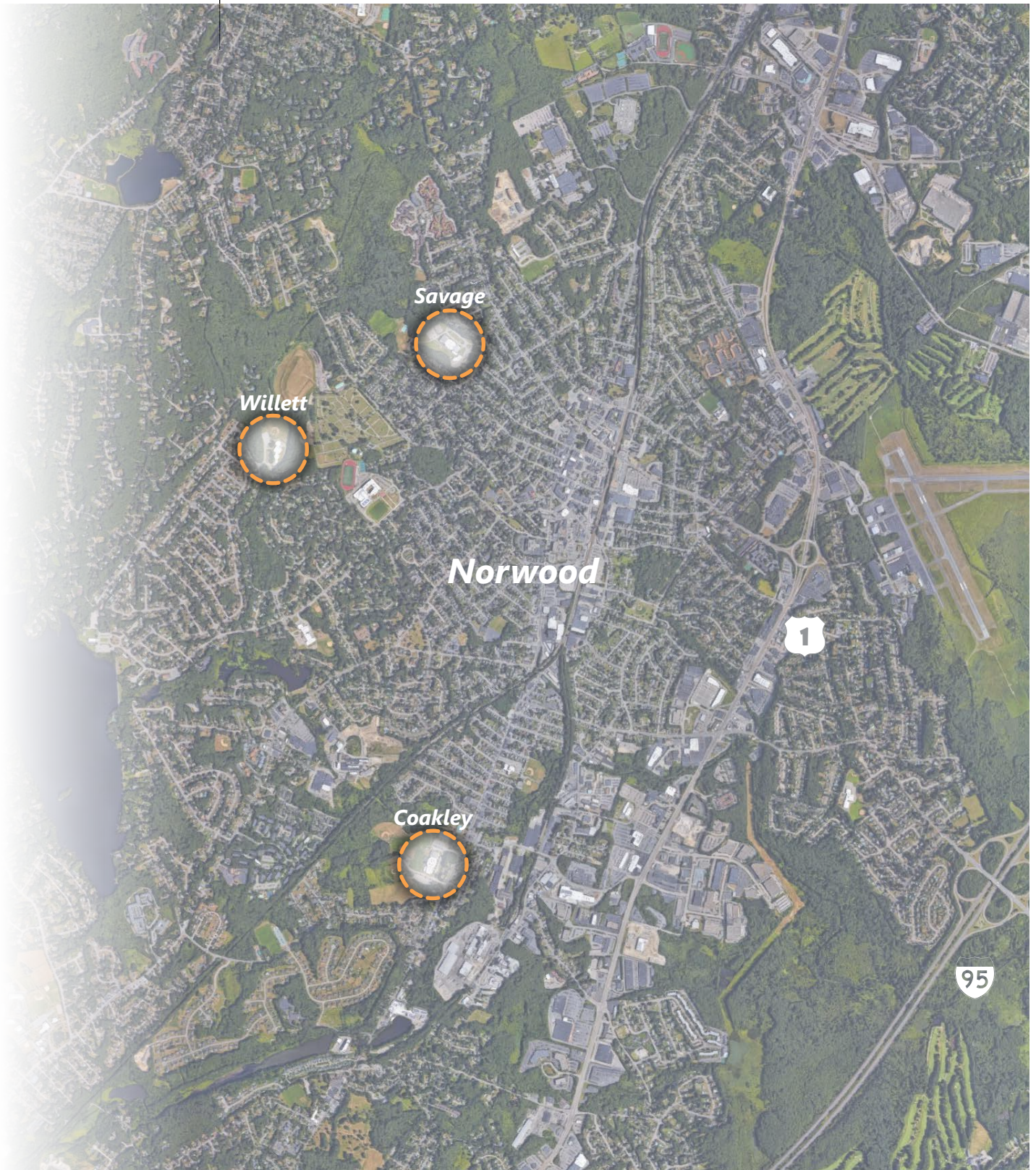
- (+) kindergarten to Oldham, Cleveland, and Prescott
- Phased/occupied additions to Oldham and Cleveland with comprehensive renovations; occurs while middle school is being reviewed by the MSBA

Phase III = complete 2021

- New middle school construction on Coakley site is completed

Phase IV = ongoing

- Prescott, Willett and Callahan receive capital repairs



Option 4A:
Buildings remaining in
operation within the
Town of Norwood

Option 4A

This option reduces the number of buildings in operation as schools. Grade 5 is moved to a newly constructed middle school, reducing the stress at the elementary schools until a newly constructed early childhood education/elementary school is constructed. The community programs and district offices at the Savage Center can remain as is, without disturbance.

Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades						PK - 4	5 - 8	N/A
2027 Students (#)						1,574	1,044	0
Existing (sf)						38,500		122,000
Proposed Add (sf)						218,283		
Existing + Add (sf)						256,783		
New (sf)							180,040	
Cap. Repairs (\$)								14,304,500
Renovations (\$)						12,639,550		
Additions (\$)						102,374,727		
New Project (\$)							84,438,760	
Priority Rating						II	I	III



Summary of Costs

Total Cost Capital Repairs (\$)	14,304,500
Total Project Cost (\$)	199,453,037
Total Sum (\$)	\$213,757,537



Proposed new elementary school, with early education included, at the Savage site

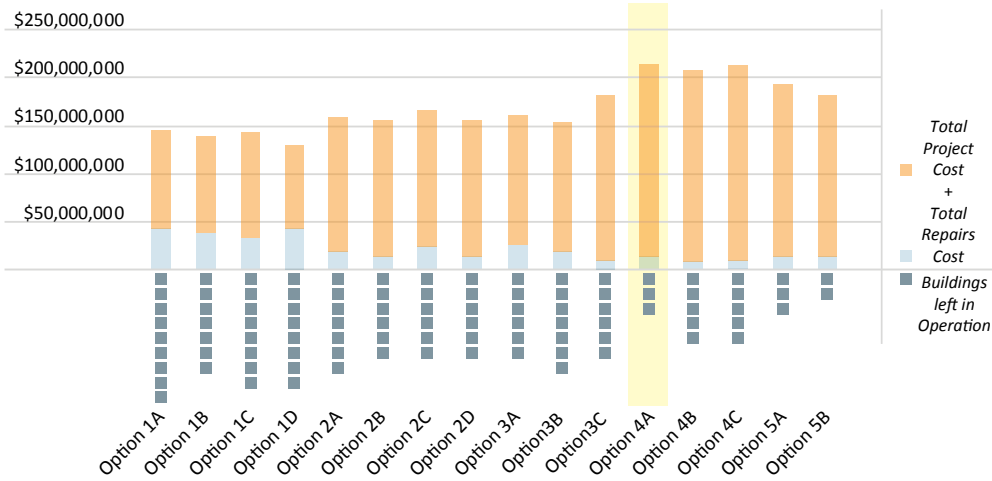
— property line

Willett with Coakley Middle School

- new construction
- renovations



Compared to Other Options



Advantages

- Substantially reduces the number of buildings in operation
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- By constructing a new combined early education and elementary school building, the town is better able to meet the goals of its educational visioning and program
- Simple phasing

Disadvantages

- The sole elementary school would be located in west Norwood, perhaps inconveniencing those with homes in other communities
- Traffic congestion in an effort to deliver 1,000+ students at each of the two designated school lots

Operatives & Phasing

Phase I = complete 2020

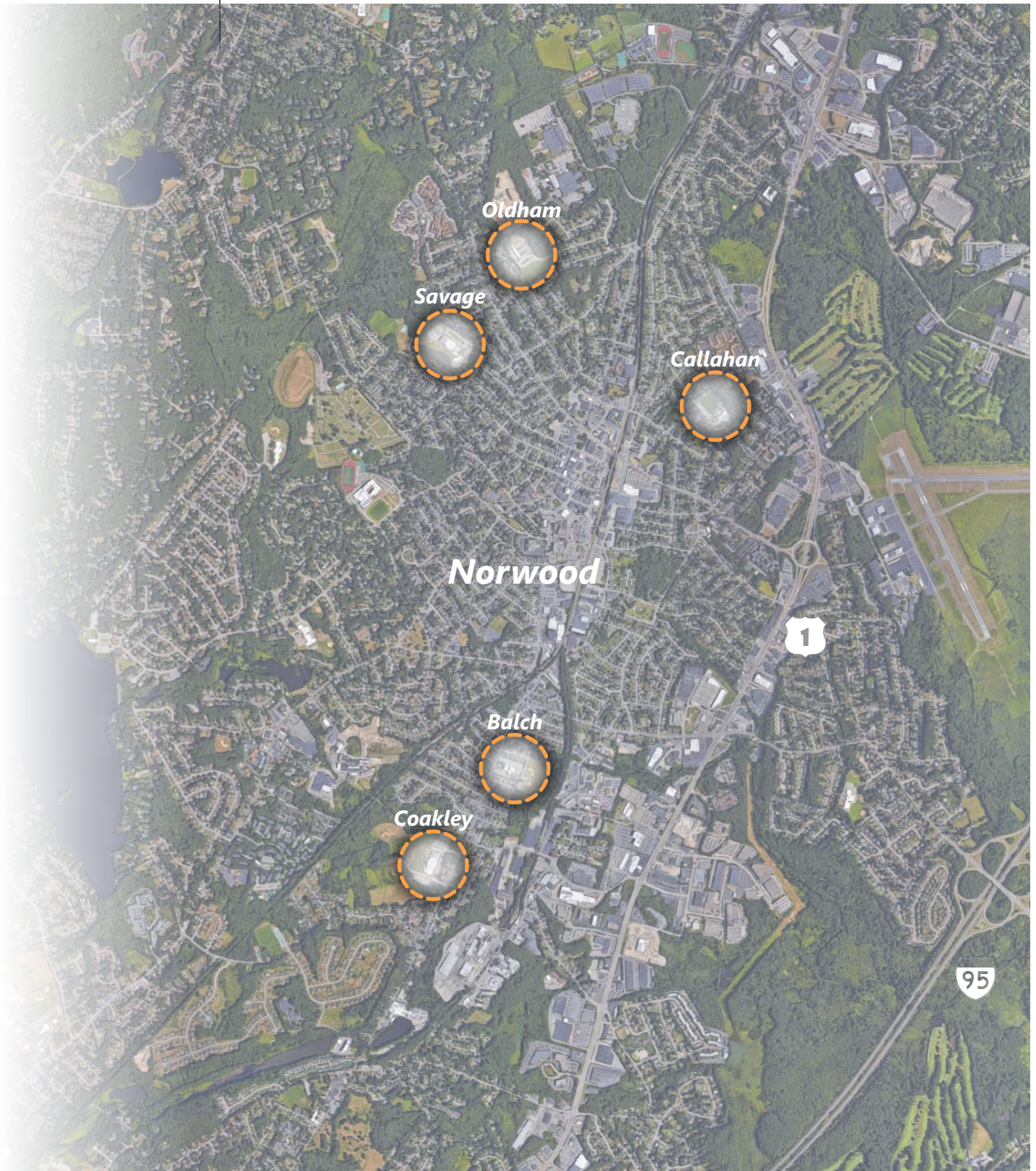
- (+) grade 5 to new middle school on Coakley site for grades 5 to 8
- Balch, Callahan, Cleveland, Oldham, and Prescott close

Phase II = complete 2022

- Addition and comprehensive renovation to Willett

Phase III = ongoing

- Savage operates as is with capital repairs



Option 4B:
Buildings remaining in
operation within the
Town of Norwood

Option 4B

This option reduces the number of buildings in operation as schools. Grade 5 is moved to a newly constructed middle school, reducing the stress at the elementary schools until two newly constructed early childhood education/elementary schools are constructed. The remaining school buildings, Balch and Callahan, can be used instead for the programs leaving the Savage Center, if so desired.

Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades	N/A	N/A		PK - 4			PK - 4	5 - 8
2027 Students (#)	0	0		787			787	1,044
Existing (sf)	51,800	33,500						
Proposed Add (sf)								
Existing + Add (sf)								
New (sf)				121,370			121,370	180,040
Cap. Repairs (\$)	6,073,550	3,927,875						
Renovations (\$)								
Additions (\$)								
New Project (\$)				56,922,530			56,922,530	84,438,760
Priority Rating	IV	IV		II			III	I



Summary of Costs



Total Cost Capital Repairs (\$)	10,001,425
Total Project Cost (\$)	198,283,820
Total Sum (\$)	\$208,285,245

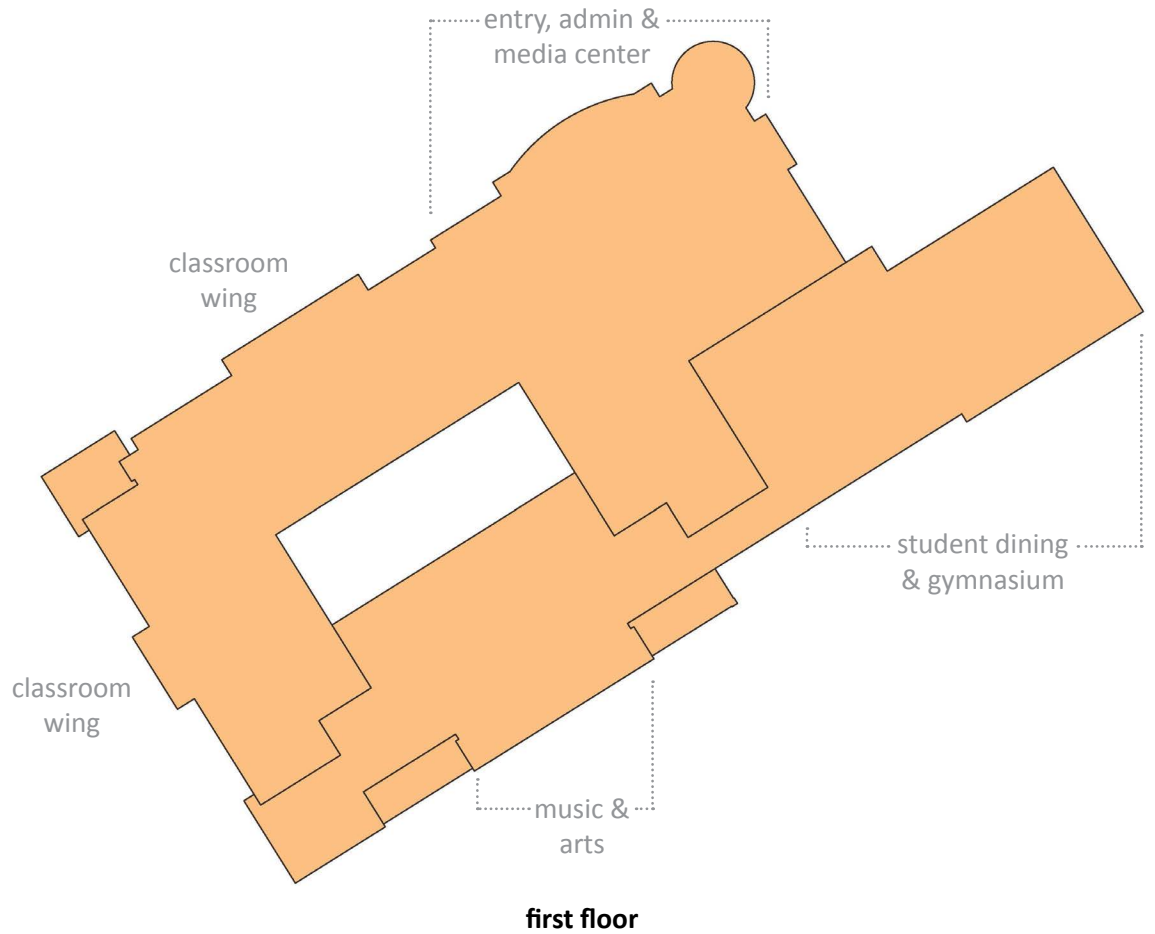


Proposed new elementary school, with early education included, at the Oldham site

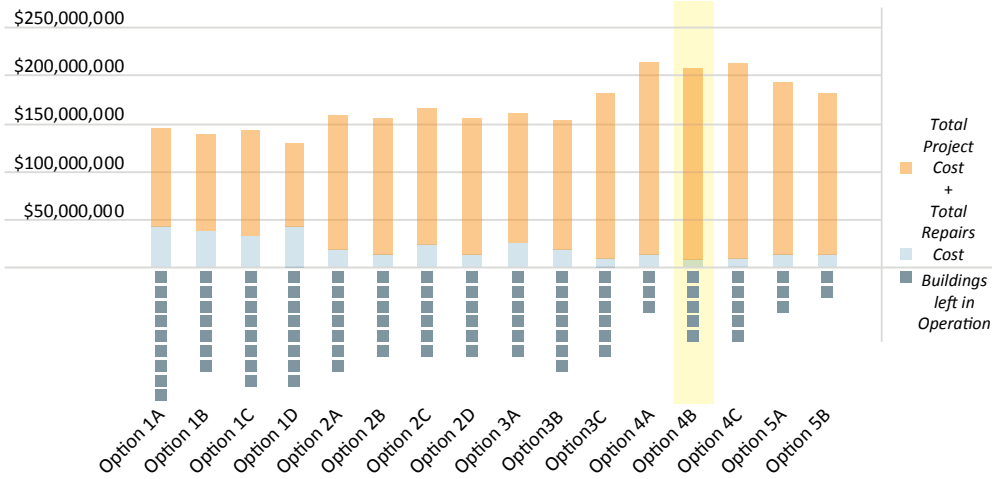
— property line

Oldham Elementary School

-  new construction
-  renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to five
- By constructing a new middle school, congestion in the lower grades will be relieved, and the design can be tailored to fit the needs of the community
- By constructing two new combined early education and elementary school buildings, the town is better able to meet the goals of its educational visioning and program
- There would be a pre-k to grade 4 school at both the northern and southern ends of town
- Community programs at Balch will still engage southern Norwood
- Moving district administration to Callahan will allow the vintage building to continue service while also providing more space than Savage for offices

Disadvantages

- The department of Buildings and Grounds will still be responsible for maintaining five buildings, plus the high school
- High initial cost for demolition and to construct three new schools, all 100,000+ square feet
- Complex phasing required to avoid disruption to students as much as possible

Operatives & Phasing

Phase I = complete 2020

- (+) grade 5 at new middle school on Savage site for grades 5 to 8

Phase II = complete 2023

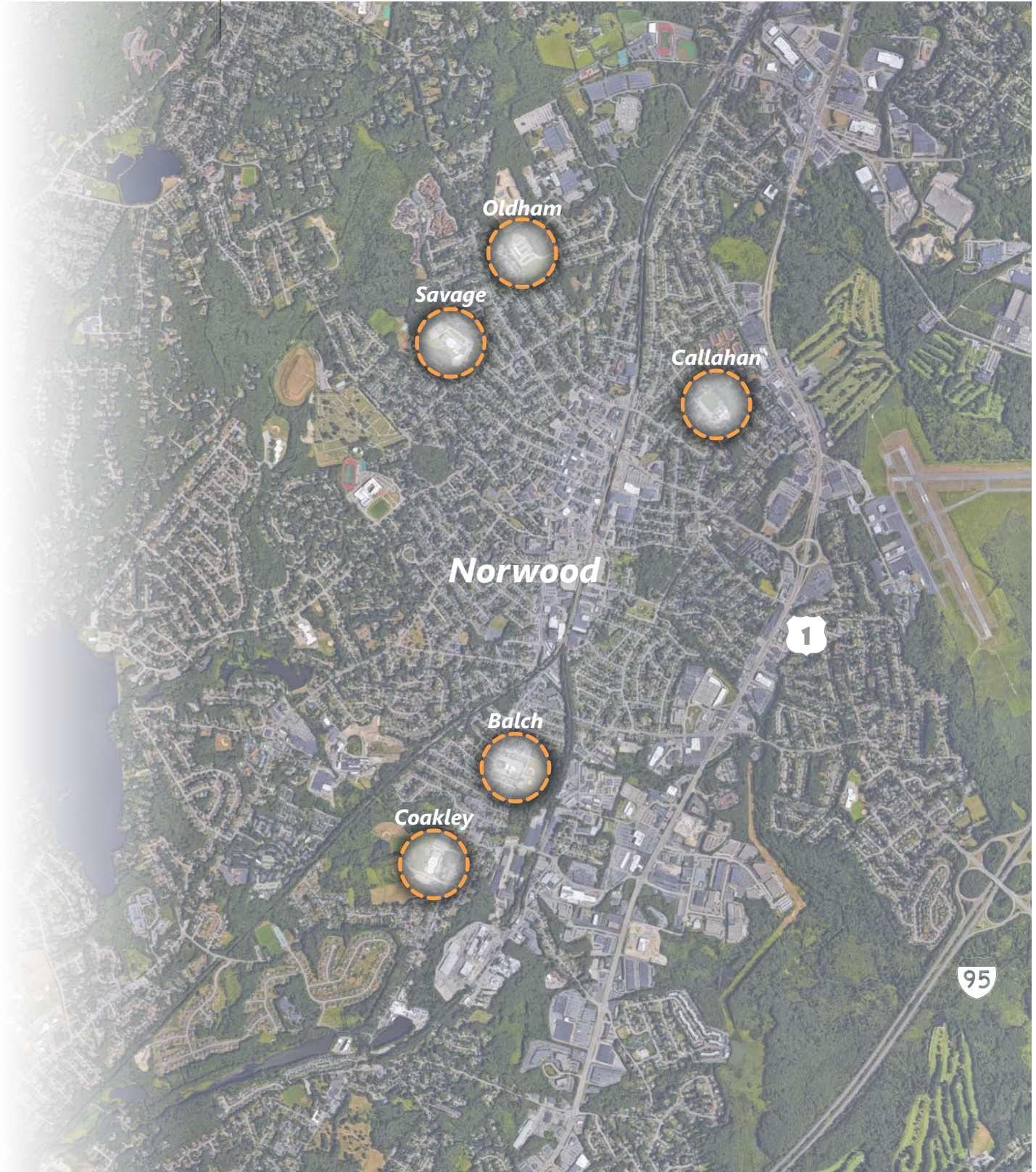
- New early education/elementary school on Oldham site for grades pre-k to 4
- (+) grades 1 to 4 from Oldham, Callahan, and half of Cleveland

Phase III = complete 2026

- New early education/elementary school on Coakley site for grades pre-k to 4
- (+) grades 1 to 4 from Balch, Prescott, and half of Cleveland
- Close Prescott, Cleveland, and Willett

Phase IV = ongoing capital repairs

- Balch and Callahan refurbished for community program use



Option 4C:
Buildings remaining in
operation within the
Town of Norwood

Option 4C

This option reduces the number of buildings in operation as schools. A newly constructed middle school for grades 6-8 is top priority, and two newly constructed early childhood education/elementary schools are planned for as well. The remaining school buildings, Balch and Callahan, can be used instead for the programs leaving the Savage Center, if so desired.

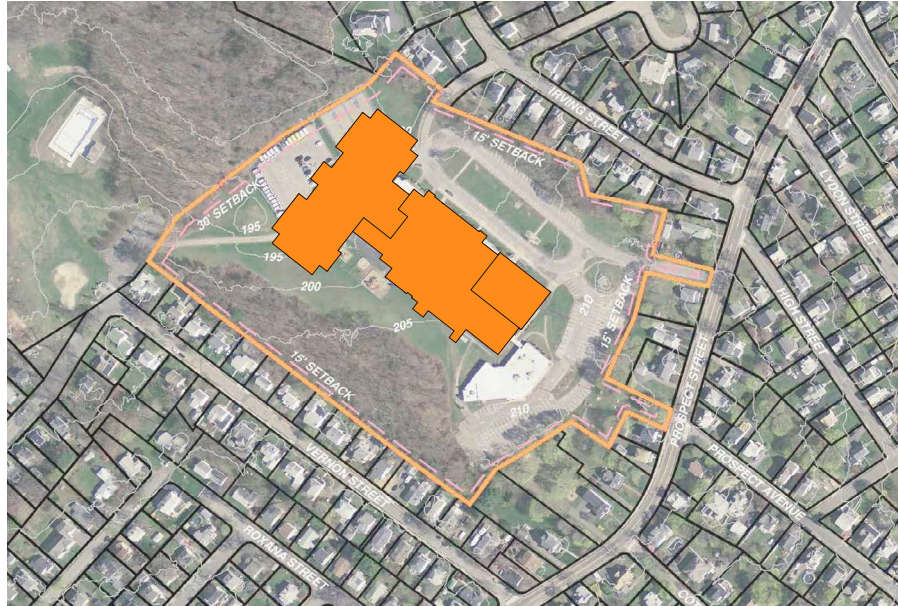
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades	N/A	N/A		PK-5			PK - 5	6 - 8
2027 Students (#)	0	0		919			920	779
Existing (sf)	51,800	33,500						
Proposed Add (sf)								
Existing + Add (sf)								
New (sf)				138,855			138,855	151,080
Cap. Repairs (\$)	6,073,550	3,927,875						
Renovations (\$)								
Additions (\$)								
New Project (\$)				65,122,995			65,122,995	70,856,520
Priority Rating	IV	IV		III			II	I

Summary of Costs

Total Cost Capital Repairs (\$)	10,001,425
Total Project Cost (\$)	201,102,510
Total Sum (\$)	\$211,103,935





Proposed new middle school at the Savage site, without disturbance to the Senior Center

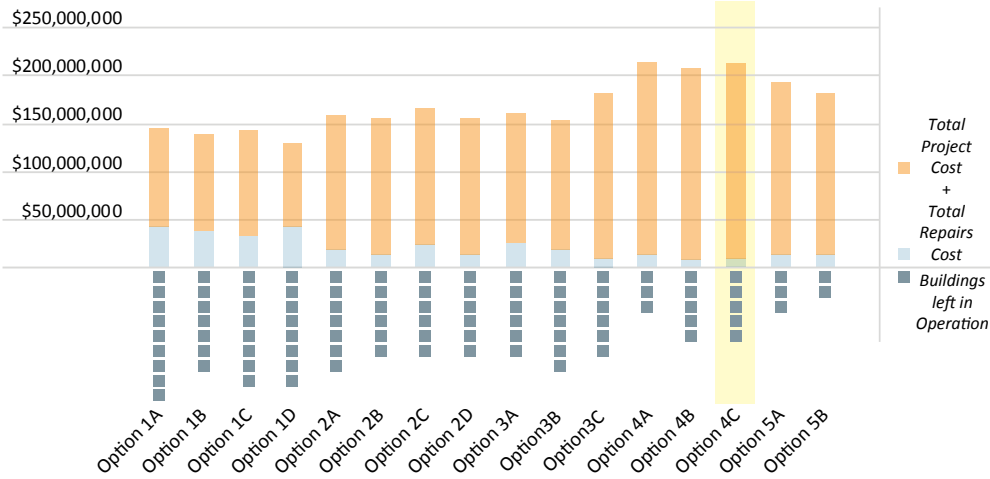
— property line

Middle School on Savage Site

- new construction
- renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to five
- Completely new middle school resolves inadequacy of existing Coakley school
- By constructing two new combined early education and elementary school buildings, the town is better able to meet the goals of its educational visioning and program
- There would be a pre-k to grade 5 school at both ends of the town
- Community programs at Balch will still engage southern Norwood
- Moving district administration to Callahan will allow the vintage building to continue service while also providing more space than Savage for offices

Disadvantages

- Does not immediately resolve over-crowding issues at the elementary and early education level
- The department of Buildings and Grounds will still be responsible for maintaining five buildings, plus the high school
- High initial cost for demolition and to construct three new schools, all 100,000+ square feet
- Complex phasing required to avoid disruption to students as much as possible
- A new middle school on the Savage site will have to consider the Senior Center

Operatives & Phasing

Phase I = complete 2020

- New middle school on Savage site for grades 6 to 8

Phase II = complete 2023

- New early education/elementary school on Coakley site for grades pre-k to 5
- (+) grades 1 to 5 from Balch, Prescott, and half of Cleveland; close Prescott

Phase III = complete 2026

- New early education/elementary school on Oldham site for grades pre-k to 5
- (+) grades 1 to 5 from Oldham, Callahan, and half of Cleveland
- Close Cleveland, and Willett

Phase IV = ongoing

- Balch and Callahan refurbished for community program use



Option 5A:
Buildings remaining in
operation within the
Town of Norwood

Option 5A

This option reduces the number of buildings in operation altogether. Grades 1-5 are moved to a newly constructed co-located elementary/middle school, reducing the stress at all schools. The Prescott is re-used as the new early childhood education center, made possible with an addition. The Savage Center continues operation as is.

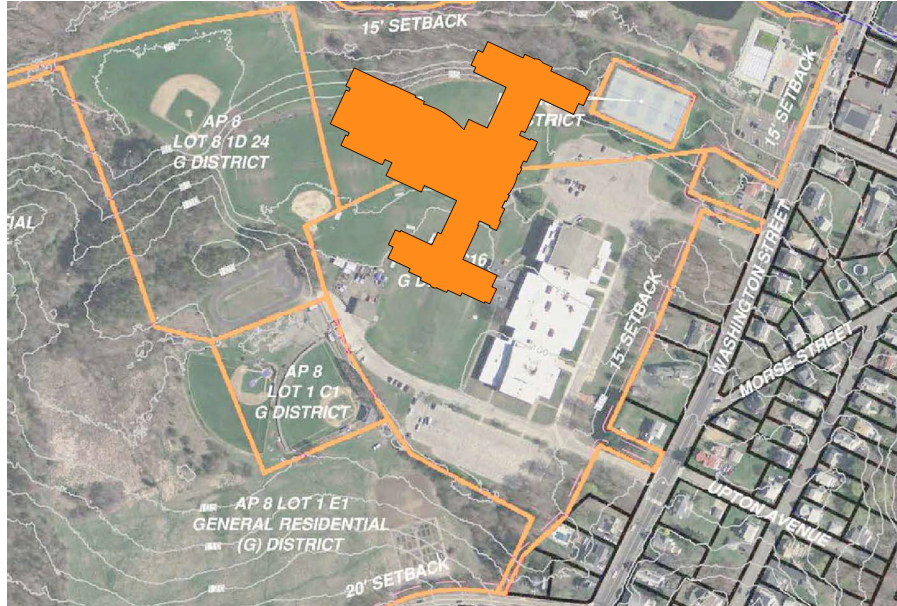
Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades					PK - K		1 - 8	N/A
2027 Students (#)					454		2,164	0
Existing (sf)					36,000			122,000
Proposed Add (sf)					37,500			
Existing + Add (sf)					73,500			
New (sf)							319,231	
Cap. Repairs (\$)								14,304,500
Renovations (\$)					11,818,800			
Additions (\$)					17,587,500			
New Project (\$)							149,719,339	
Priority Rating					II		I	III

Summary of Costs

Total Cost Capital Repairs (\$)	14,304,500
Total Project Cost (\$)	179,125,639
Total Sum (\$)	\$193,430,139





Proposed new co-located elementary/middle school at the Coakley site

— property line

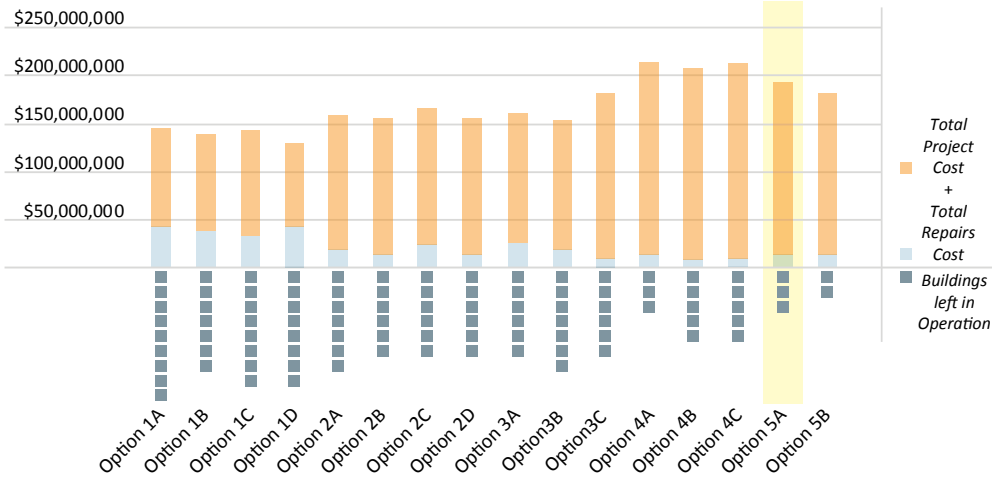
Coakley Elementary/Middle School

- new construction
- renovations



first floor

Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to three
- By constructing a new co-located elementary/middle school, congestion in all grades will be relieved, and the design can be tailored to fit the needs of the community. The advantages of a co-located school are many, such as:
 - has the most efficient building footprint and envelope
 - less costly in the long term with more efficient operational systems
 - logical adjacencies and organization
 - shorter, single-phase construction time frame
 - less disruption to students and staff
 - better distribution of resources
 - less unknowns or unanticipated conditions during construction
- The existing design of Prescott is suitable for re-use as an early childhood education center, with an addition
- New construction does not affect all existing programs at the Savage Center

Disadvantages

- High immediate cost
- Would require an immense series of land plots in order to accommodate the building footprint, parking, and athletic fields
- No other district in the Commonwealth has consolidated as many as six schools, housing a population of 2,000+ students

Operatives & Phasing

Phase I = complete 2020

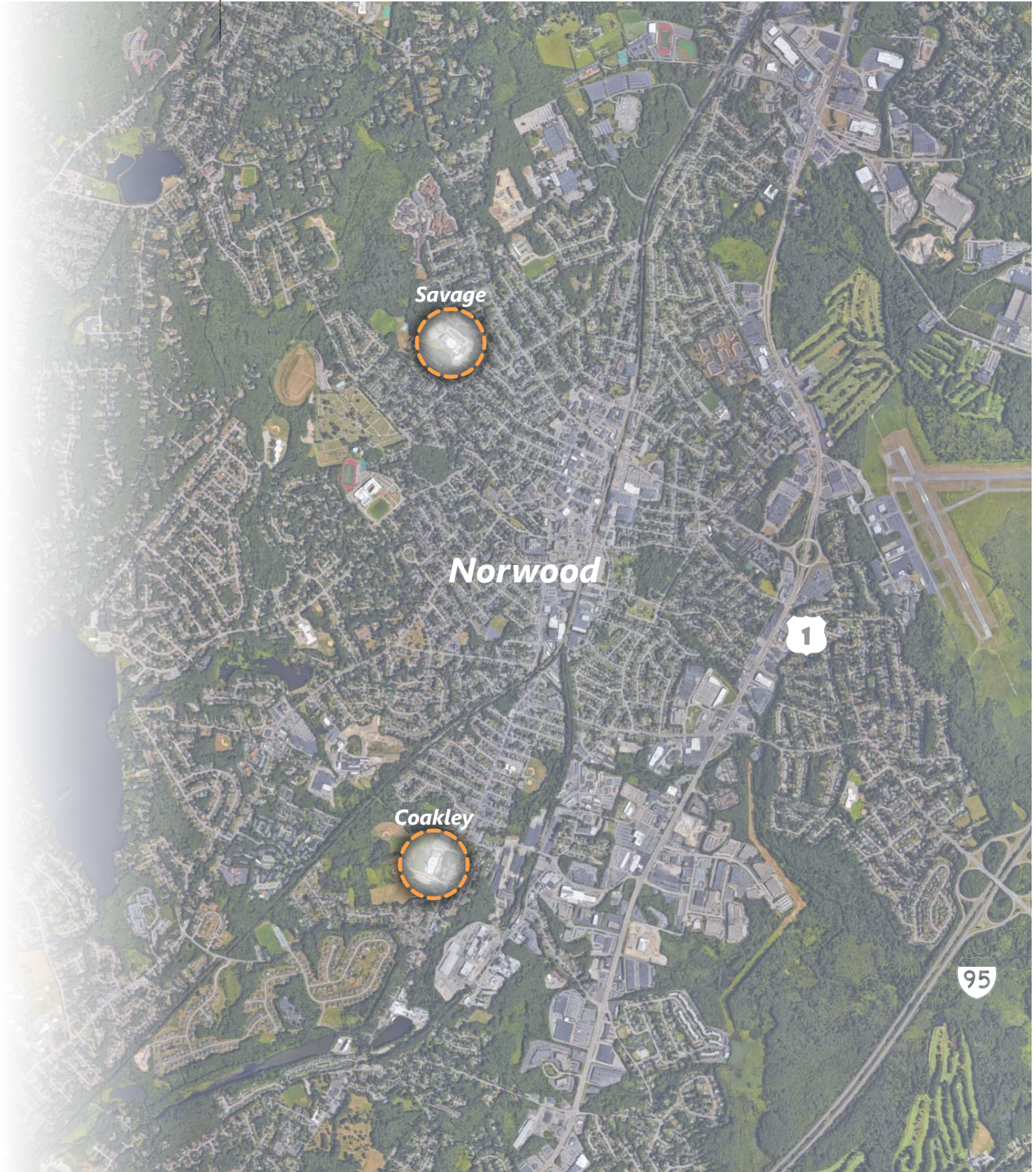
- (+) grade 1 to 5 at new co-located elementary/middle school on Coakley site for grades 1 to 8
- Balch, Callahan, Cleveland, and Oldham close

Phase II = complete 2022

- (+) kindergarten and pre-k to Precott Elementary, which receives an addition and comprehensive renovation; Willett closes

Phase III = ongoing

- Savage operates as-is with capital repairs



Option 5B:
Buildings remaining in
operation within the
Town of Norwood

Option 5B

This option offers complete consolidation. All students below high school are moved to a newly constructed co-located elementary/middle school, reducing stress from over-crowding town-wide. The Savage Center continues operation as is.

Proposed Grade Levels & Square Footages per School

	Balch	Callahan	Cleveland	Oldham	Prescott	Willett	Coakley	Savage
Proposed Grades							PK - 8	N/A
2027 Students (#)							2,618	0
Existing (sf)							122,000	122,000
Proposed Add (sf)							355,050	355,050
Existing + Add (sf)							355,050	355,050
New (sf)							355,050	355,050
Cap. Repairs (\$)							14,304,500	14,304,500
Renovations (\$)							14,304,500	14,304,500
Additions (\$)							14,304,500	14,304,500
New Project (\$)							166,518,450	166,518,450
Priority Rating							I	II



Summary of Costs

Total Cost Capital Repairs (\$)	14,304,500
Total Project Cost (\$)	166,518,450
Total Sum (\$)	\$180,822,950



Proposed new co-located elementary/middle school at the Coakley site

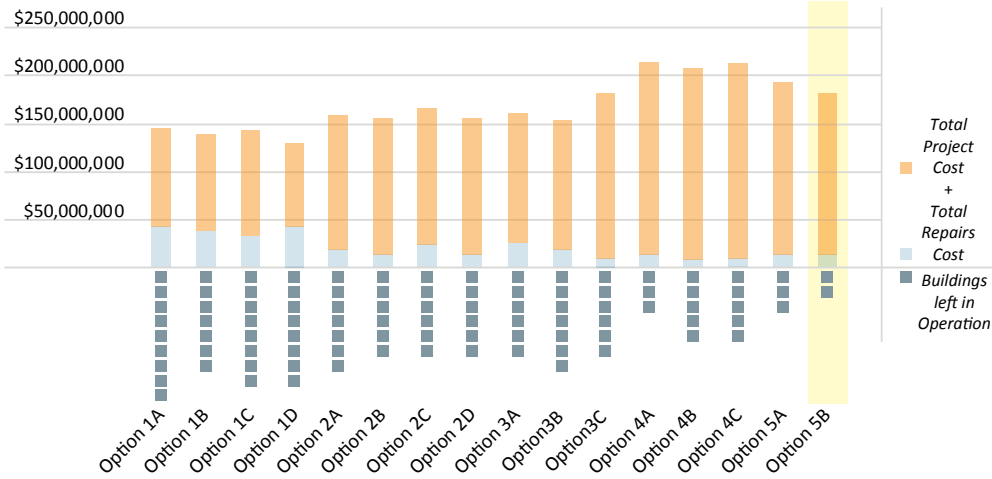
— property line

Coakley Elementary/Middle School

- new construction
- renovations



Compared to Other Options



Advantages

- Reduces number of buildings in operation from eight to two
- By constructing a new co-located elementary/middle school, congestion in all grades will be relieved, and the design can be tailored to fit the needs of the community. The advantages of a co-located school are many, such as:
 - has the most efficient building footprint and envelope
 - less costly in the long term with more efficient operational systems
 - logical adjacencies and organization
 - shorter, single-phase construction time frame
 - less disruption to students and staff
 - better distribution of resources
 - less unknowns or unanticipated conditions during construction
- New construction does not affect all of the existing programs at the Savage Center

Disadvantages

- High immediate cost
- Would require an immense series of land plots in order to accommodate the building footprint, parking, and athletic fields
- No other district in the Commonwealth has consolidated as many as six schools, housing a population of 2,500+ students

Operatives & Phasing

Phase I = complete 2020

- (+) all grades at new co-located elementary/middle school on Coakley site for grades pre-k to 8
- Balch, Callahan, Cleveland, Oldham, Prescott, and Willett close

Phase II = ongoing

- Savage operates as-is with capital repairs

Capital Repairs Approach

Also known as the “Do Nothing Approach”, this option simply lists the costs associated with continuing to operate every school building as is. There is no proposed new construction. Types of capital repairs/improvements are:

- Scheduled replacement of building systems and components
- Technology and security improvements
- Review and redistribution of space needs
- Site and landscape improvements
- Phased renovations of portions of a school
- Roof and window replacement to increase energy efficiency

Existing Grade Levels & Square Footages per School

	<i>Balch</i>	<i>Callahan</i>	<i>Cleveland</i>	<i>Oldham</i>	<i>Prescott</i>	<i>Willett</i>	<i>Cookley</i>	<i>Savage</i>
<i>Proposed Grades</i>	1 - 5	1 - 5	1 - 5	1 - 5	1 - 5	PK - K	6 - 8	N/A
<i>2027 Students (#)</i>	318	242	361	230	274	406	787	0
<i>Existing (sf)</i>	51,800	33,500	49,000	39,500	36,000	38,500	128,000	122,000
<i>Proposed Add (sf)</i>								
<i>Existing + Add (sf)</i>								
<i>New (sf)</i>								
<i>Cap. Repairs (\$)</i>	6,073,550	3,927,875	5,745,250	4,631,375	4,221,000	4,514,125	15,008,000	14,304,500
<i>Renovations (\$)</i>								
<i>Additions (\$)</i>								
<i>New Project (\$)</i>								

Summary of Costs

<i>Total Cost Capital Repairs (\$)</i>	58,425,675
<i>Total Project Cost (\$)</i>	0
<i>Total Sum (\$)</i>	\$58,425,675

Disadvantages

- Does not address issues of over-crowding or plan for population growth
- The department of Buildings and Grounds will still be responsible for maintaining eight buildings, plus the high school
- The older the buildings get, the more they will require updates and repairs
- High long-term costs associated with maintaining all buildings as they are, and little to no funding is provided by the MSBA for such repairs

V. *Executive Summary*

Recommendations

After reviewing the enrollment projections, existing school environments, existing building conditions, current educational philosophies, and the concerns of the Building Committee and community at large, the following conclusions were established regarding the highest priorities facing the Norwood Public Schools:

Priority 1: The most significant educational facility challenge facing the Norwood Public School system is the lack of an appropriate 21st Century middle school environment. The lack of appropriately sized classrooms and educational support spaces, combined with aged building systems and components, creates a very challenging environment that is grossly insufficient when compared to surrounding Districts. Many proposed options for addressing the long-term needs of all Norwood school facilities are contained within this long-range study and report, and each of them is intended to initiate a thoughtful dialogue regarding the future of Norwood's school facilities. However, every option included herein identifies the middle school as the highest priority for the Town and the first project which should be addressed.

The middle school educational environment has changed dramatically over the past four decades (since Coakley was designed and constructed), as educators and parents began to realize that young adolescents are not simply older elementary school students nor younger high school students, but that there are dramatic changes that occur during this time of life requiring a radically different and unique approach to education. Middle school educators found that the biological event of puberty fundamentally disrupts the relatively smooth development of the elementary school years and has a profound impact upon the cognitive, social, and emotional lives of young teens. In line with this important insight, they saw the need for the provision of special instructional, curricular, and administrative changes in the way that education takes place for kids in early adolescence. Among those changes were the establishment of a mentor relationship between teacher and student, the creation of small communities of learners, and the implementation of a flexible interdisciplinary curriculum that encourages active and personalized learning. Newly created middle schools designed to support these changes quickly proved beneficial to the support of teaching, learning, socialization, and student confidence. These supportive middle school environments include small and large group study and instruction spaces, larger flexible classrooms, smaller academic neighborhoods, project-based learning laboratories, student socialization areas, and many other critical components and spaces. These new middle schools, often referred to as 21st century Middle Schools, differ dramatically from those of several decades ago. People often imagine middle school students sitting in straight rows, listening intently to the teacher and reading from the same book, this is no longer the case. Students work in small groups, perform different learning tasks and learn from different books. They integrate real-world problems and projects into their daily academic learning, and are often collaborating



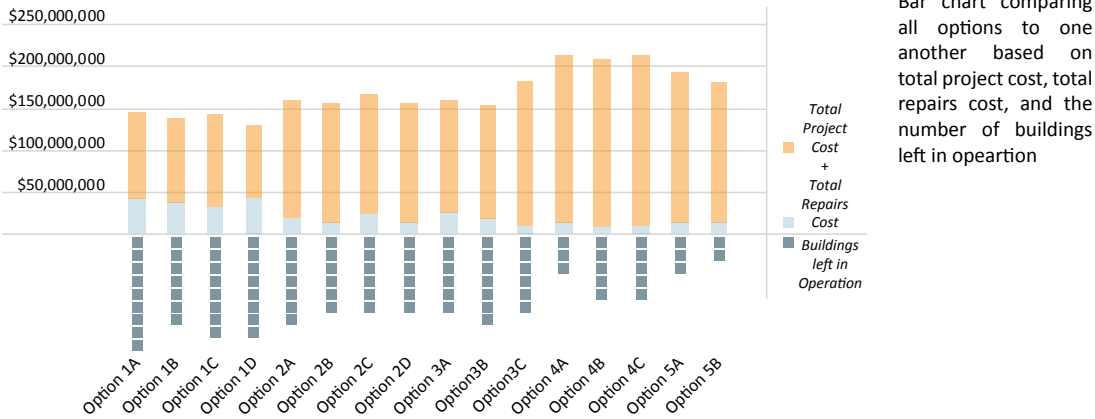
with other students and presenting their ideas and concepts to their peers. These activities are greatly restricted in older facilities with undersized, inflexible classrooms with no small or large group support spaces and no project labs.

Despite the best efforts by faculty and staff to offer a modern middle school education within the confines of the existing facility, the Coakley Middle School facility does not represent a 21st Century middle school learning environment. It was designed almost 50 years ago and is based on long-outdated principles and concepts. Its educational deficiencies are fully detailed herein, as well as the numerous physical challenges created by its dated building systems and components, which have been maintained well beyond their intended life expectancy. The undersized and overcrowded school relies on six 20-year-old modular classrooms which are somewhat isolated from the remainder of the school and were never intended to be a permanent solution for an appropriate middle school instructional environment. The building is an extremely inefficient all-electric facility that is very expensive to operate and has a poorly insulated building envelope. It relies almost 100% on mechanical ventilation, resulting in poor fresh air ventilation in many areas of the building.

Subsequent to reviewing and discussing all of the options contained within this report, the Norwood Schools Long-Range Planning Committee was unanimous in their desire to recommend that the Town act immediately to address the middle school. The critical role that the middle school environment plays in addressing the specific cognitive, social, and emotional needs of Norwood's students and supporting their teachers is much too important to be ignored, and the inadequacies of the current facility requires immediate action. The Committee also recognized that although all options recommended that the town immediately address the middle school, those options that proposed a 5th through 8th middle school had the added benefit of resolving overcrowding across all of the elementary schools by removing the 5th grade population from the elementary schools. The Committee also reviewed other Districts and found this (5th through 8th grade middle school model) to be a common practice for enhancing 5th grade educational opportunities. Ultimately, the Committee voted to recommend that the Town consider moving forward immediately with the necessary steps to have the middle school project submitted to the Massachusetts School Building Authority (MSBA) for consideration of grant funding. The details of the exact proposed project at the middle school (renovation, expansion, or new school construction) will ultimately be developed through a lengthy and detailed process as prescribed by MSBA guidelines. However, the Committee did express their support for consideration of a 5th through 8th middle school as part of this planning process.

The process of entering the middle school into the MSBA grant program would result in several years of planning and analysis before any construction would occur and would give the Town plenty of time to consider other recommendations contained within this Long-Range Planning Study. This includes future planning options associated with improvements, renovation, or replacement of the elementary schools. There are numerous options contained herein, with all of them fitting within categories 1 through 4, with variations labeled A, B, C, and D in some categories. These options include:

- Option 1A
- Option 1B
- Option 1C
- Option 1D
- Option 2A
- Option 2B
- Option 2C
- Option 2D
- Option 3A
- Option 3B
- Option 3C
- Option 4A
- Option 4B
- Option 4C
- Option 5A
- Option 5B



As stated previously, all options propose proceeding to address the middle school as the highest priority. The variations in the options can be categorized into three major areas.

1. The amount of school consolidation

Category 1 options involve leaving all of the existing elementary school facilities in their current locations and proposes to address all school needs without closing any existing elementary schools. Category 5 options are on the opposite end of the spectrum, proposing an enormous amount of consolidation and the closing of several elementary schools. The Long-Range Planning Committee ultimately determined that subsequent to addressing the middle school as a priority, the Town should consider some level of consolidation in order to improve educational opportunities at the smaller elementary schools and improve operational efficiency for the Town. The Committee voted to reject extreme consolidation such as that identified in Options 5A and 5B but supported consideration for some consolidation such as that proposed in Options 2 through 4. Discussions regarding the appropriate balance of consolidation can occur over the next few years as the middle school is being addressed.

2. The specific schools that might be considered for consolidation in the future

The various options include different consolidation scenarios and therefore the specific schools which are proposed for closing vary within each option.

3. Middle school grade configuration (4th-8th), (5th-8th), or (6th-8th)

Although all options propose proceeding with addressing the middle school as the highest priority, some options propose a 4th-8th grade or a 5th-8th grade middle school over the current 6th-8th grade middle school configuration. After consideration and discussion of all options, the Committee voted unanimously to recommend that the School Department and the Town at least consider the possibility of a 5th-8th grade middle school. They subsequently voted to favor those options which utilize a 5th-8th grade middle school and simultaneously considered some amount of consolidation. A 5th-8th grade middle school project (either renovation, expansion, or all-new construction) would allow the Town to address the middle school needs while simultaneously providing overcrowding relief at the elementary schools. It would also have the net effect of placing two-thirds of the Norwood students (grades 5 through 12) into new facilities and

freeing up additional space in the elementary schools, thereby improving programming and educational delivery in grades PK-4. The single 5-8 middle school project could have an impact across all grade levels, PK-8, thereby improving educational opportunities Town-wide.

**Norwood Middle School
Grades 6-8**

PROPOSED									
Existing to Remain/Renovated			New				Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	area totals
		0			44,410				0
				27	25,650				
				2	1,000				
				7	8,400				
				7	560				
			1,200	4	4,800				
			1,000	4	4,000				
		0			7,060				0
				6	5,700				
				6	360				
				2	1,000				
		0			5,000				0
			1,200	2	2,400				
			150	2	300				
			1,500	1	1,500				
			200	2	400				
			200	2	400				
		0			6,400				0
			1200	2	2,400				
			2000	2	4,000				
		0			8,800				0
			6,000	1	6,000				
			150	2	300				
			250	2	500				
			1,000	2	2,000				
		0			4,859				0
			4,859	1	4,859				

1,200	4	4,800
1,000	4	4,000

← indicates proposed program space not present in existing school

Middle School	ROOM TYPE
	CORE ACADEMIC SPACES <i>(List classrooms of different sizes separately)</i>
	Classroom - General
	Small Group Seminar (20-30 seats) / Resource
	Science Classroom / Lab
	Prep Room
	Academic Team Room
	Teacher Collaboration Room
	SPECIAL EDUCATION <i>(List classrooms of different sizes separately)</i>
	Self-Contained SPED
	Self-Contained SPED Toilet
	Small Group Room / Reading
	ART & MUSIC
	Art Classroom
	Art Workroom w/ Storage & kiln
	Band / Chorus - 100 seats
	Band Storage
	Music Practice / Ensemble
	VOCATIONS & TECHNOLOGY
	Tech Cirm. - (E.G. Drafting, Business)
	Tech Shop - (E.G. Consumer, Wood)
	HEALTH & PHYSICAL EDUCATION
	Gymnasium
	Gym Storeroom
	Health Instructor's Office w/ Shower & Toilet
	Locker Rooms - Boys / Girls w/ Toilets
	MEDIA CENTER
	Media Center / Reading Room

Proposed Space Summary

Norwood Middle School (6-8)

Option 1C

DINING & FOOD SERVICE	0	10,277	0
Cafeteria / Dining	5,843	1	5,843
Stage	1,600	1	1,600
Chair / Table / Equipment Storage	460	1	460
Kitchen	2,079	1	2,079
Staff Lunch Room	295	1	295
MEDICAL	0	830	0
Medical Suite / Toilet	60	1	60
Nurses' Office / Waiting Room	250	1	250
Examination Room	100	2	200
Resting	160	2	320
ADMINISTRATION & GUIDANCE	0	3,560	0
General Office / Waiting Room / Toilet	490	1	490
Teachers' Mail and Time Room	100	1	100
Duplicating Room	200	1	200
Records Room	200	1	200
Principal's Office w/ Conference Area	375	1	375
Principal's Secretary / Waiting	125	1	125
Assistant Principal's Office - AP1	150	1	150
Assistant Principal's Office - AP2	150	1	150
Supervisory / Spare Office	350	1	350
Conference Room	150	4	600
Guidance Office	100	1	100
Guidance Waiting Room	50	1	50
Guidance Storeroom	540	1	540
Teachers' Work Room			
CUSTODIAL & MAINTENANCE	0	2,254	0
Custodian's Office	150	1	150
Custodian's Workshop	250	1	250
Custodian's Storage	375	1	375
Recycling Room / Trash	400	1	400
Receiving and General Supply	360	1	360
Storeroom	519	1	519
Network / Telecom Room	200	1	200
OTHER	0	7,250	0
Other (specify)			
Auditorium	6,000	1	6,000
Set Design & Construction Lab	1,250	1	1,250

Total Building Net Floor Area (NFA)	100,720
Proposed Student Capacity / Enrollment	779
Total Building Gross Floor Area (GFA) ²	151,080
Grossing factor (GFA/NFA)	1.50

DINING & FOOD SERVICE	0
Cafeteria / Dining	5,843
Stage	1,600
Chair / Table / Equipment Storage	460
Kitchen	2,079
Staff Lunch Room	295
MEDICAL	0
Medical Suite / Toilet	60
Nurses' Office / Waiting Room	250
Examination Room	100
Resting	160
ADMINISTRATION & GUIDANCE	0
General Office / Waiting Room / Toilet	490
Teachers' Mail and Time Room	100
Duplicating Room	200
Records Room	200
Principal's Office w/ Conference Area	375
Principal's Secretary / Waiting	125
Assistant Principal's Office - AP1	150
Assistant Principal's Office - AP2	150
Supervisory / Spare Office	350
Conference Room	150
Guidance Office	100
Guidance Waiting Room	50
Guidance Storeroom	540
Teachers' Work Room	
CUSTODIAL & MAINTENANCE	0
Custodian's Office	150
Custodian's Workshop	250
Custodian's Storage	375
Recycling Room / Trash	400
Receiving and General Supply	360
Storeroom	519
Network / Telecom Room	200
OTHER	0
Other (specify)	
Auditorium	6,000
Set Design & Construction Lab	1,250

Total Building Net Floor Area (NFA)	100,720
Proposed Student Capacity / Enrollment	779
Total Building Gross Floor Area (GFA) ²	151,080
Grossing factor (GFA/NFA)	1.50

Willett Early Education Center

Over MSBA Guidelines

Under MSBA Guidelines

Early Childhood

ROOM TYPE	Existing Conditions			PROPOSED			Total				
	ROOM NFA ¹	# OF RMS	area totals	Existing to Remain/Renovated			New				
				ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals		
CORE ACADEMIC SPACES			16,364			4,800					21,164
<i>(List classrooms of different sizes separately)</i>											
Pre-Kindergarten w/ toilet							4	4,800		4	4,800
Kindergarten w/ toilet	1,055	3	3,165						1,200	3	3,165
General Classrooms - Grade PK-K	888	10	8,880						888	10	8,880
Integrated Pre-School	905	4	3,620						905	4	3,620
Integrated Pre-School	699	1	699						699	1	699
SPECIAL EDUCATION			3,145			500					3,645
<i>(List rooms of different sizes separately)</i>											
Self-Contained SPED											
Self-Contained SPED - toilet											
Resource Room									500	1	500
Small Group Room / Reading											
Self-Contained Pre-school	595	1	595						595	1	595
Quiet Room	184	1	184						184	1	184
Sped & ELL	662	1	662						662	1	662
Sped Motor Room	512	1	512						512	1	512
Motor Skills	931	1	931						931	1	931
Sped	261	1	261						261	1	261
ART & MUSIC			0			1,000		1,000			1,000
Art Classroom - 25 seats									1,000	1	1,000
Art Workroom w/ Storage & Mill											
Music Classroom / Large Group - 25-50 seats											
Music Practice / Ensemble											
HEALTH & PHYSICAL EDUCATION			3,097			0		0			3,097
Gymnasium	2,763	1	2,763						2,763	1	2,763
Gym Storeroom	167	2	334						167	2	334
Health Instructor's Office w/ Shower & Toilet											
MEDIA CENTER			988			0		0			988
Media Center / Reading Room	988	1	988						988	1	988
DINING & FOOD SERVICE			3,962			0		0			3,962
Cafeteria / Dining	2,547	1	2,547						2,547	1	2,547
Stage											
Chair / Table / Equipment Storage	253	1	253						253	1	253
Kitchen	825	1	825						825	1	825
Staff Lunch Room	337	1	337						337	1	337
MEDICAL			310			0		0			310
Medical Suite Toilet											
Nurses' Office / Waiting Room	310	1	310						310	1	310
Examination Room / Resting											
ADMINISTRATION & GUIDANCE			818			1,123		1,123			1,941

1,200	4	4,800
1,000	4	4,000

← indicates proposed program space not present in existing school

**Norwood Middle School
Grades 5-8**

PROPOSED									
Existing to Remain/Renovated			New				Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	area totals
		0			58,270			0	
			950	39	37,050				
			500	3	1,500				
			1,200	9	10,800				
			80	9	720				
			1,150	4	4,600				
			900	4	3,600				
		0			11,070			0	
			950	7	6,650				
			60	7	420				
			500	5	2,500				
			500	3	1,500				
		0			5,000			0	
			1,200	2	2,400				
			150	2	300				
			1,500	1	1,500				
			200	4	800				
		0			6,400			0	
			1200	2	2,400				
			2000	2	4,000				
		0			8,800			0	
			6,000	1	6,000				
			150	2	300				
			250	2	500				
			1,000	2	2,000				
		0			6,383			0	

Middle School	ROOM TYPE
	CORE ACADEMIC SPACES <i>(List classrooms of different sizes separately)</i>
	Classroom - General
	Small Group Seminar (20-30 seats) / Resource
	Science Classroom / Lab
	Prep Room
	Academic Team Room
	Teacher Collaboration Room
	SPECIAL EDUCATION <i>(List classrooms of different sizes separately)</i>
	Self-Contained SPED
	Self-Contained SPED Toilet
	Resource Room
	Small Group Room / Reading
	ART & MUSIC
	Art Classroom
	Art Workroom w/ Storage & kiln
	Band / Chorus - 100 seats
	Band Storage
	Music Practice / Ensemble
	VOCATIONS & TECHNOLOGY
	Tech Cim. - (E.G. Drafting, Business)
	Tech Shop - (E.G. Consumer, Wood)
	HEALTH & PHYSICAL EDUCATION
	Gymnasium
	Gyn. Storeroom
	Health Instructor's Office w/ Shower & Toilet
	Locker Rooms - Boys / Girls w/ Toilets
	MEDIA CENTER

Proposed Space Summary

Norwood Middle School (5-8)

Option 1D

Media Center / Reading Room	6,383	1	6,383				
DINING & FOOD SERVICE			12,683				0
Cafeteria / Dining	7,830	1	7,830				
Stage	1,600	1	1,600				
Chair / Table / Equipment Storage	548	1	548				
Kitchen	2,344	1	2,344				
Staff Lunch Room	361	1	361				
MEDICAL			910				0
Medical Suite Toilet	60	1	60				
Nurses' Office / Waiting Room	250	1	250				
Examination Room	100	3	300				
Resting	150	2	300				
ADMINISTRATION & GUIDANCE			4,294				0
General Office / Waiting Room / Toilet	622	1	622				
Teachers' Mail and Time Room	100	1	100				
Duplicating Room	200	1	200				
Records Room	200	1	200				
Principal's Office w/ Conference Area	375	1	375				
Principal's Secretary / Waiting	125	1	125				
Assistant Principal's Office - AP1	150	1	150				
Assistant Principal's Office - AP2	150	2	300				
Supervisory / Spare Office	150	1	150				
Conference Room	350	1	350				
Guidance Office	150	6	900				
Guidance Waiting Room	100	1	100				
Guidance Storeroom	50	1	50				
Teachers' Work Room	672	1	672				
CUSTODIAL & MAINTENANCE			2,519				0
Custodian's Office	150	1	150				
Custodian's Workshop	250	1	250				
Custodian's Storage	375	1	375				
Recycling Room / Trash	400	1	400				
Receiving and General Supply	448	1	448				
Storeroom	696	1	696				
Network / Telecom Room	200	1	200				
OTHER			7,031				0
Other (specify)							
Auditorium	6,000	1	6,000				
Set Design & Construction Lab	1,000	1	1,031				

Total Building Net Floor Area (NFA)	123,360
Proposed Student Capacity / Enrollment	1,044
Total Building Gross Floor Area (GFA) ²	185,040
Grossing factor (GFA/NFA)	1.50

Media Center / Reading Room	
DINING & FOOD SERVICE	
Cafeteria / Dining	
Stage	
Chair / Table / Equipment Storage	
Kitchen	
Staff Lunch Room	
MEDICAL	
Medical Suite Toilet	
Nurses' Office / Waiting Room	
Examination Room	
Resting	
ADMINISTRATION & GUIDANCE	
General Office / Waiting Room / Toilet	
Teachers' Mail and Time Room	
Duplicating Room	
Records Room	
Principal's Office w/ Conference Area	
Principal's Secretary / Waiting	
Assistant Principal's Office - AP1	
Assistant Principal's Office - AP2	
Supervisory / Spare Office	
Conference Room	
Guidance Office	
Guidance Waiting Room	
Guidance Storeroom	
Teachers' Work Room	
CUSTODIAL & MAINTENANCE	
Custodian's Office	
Custodian's Workshop	
Custodian's Storage	
Recycling Room / Trash	
Receiving and General Supply	
Storeroom	
Network / Telecom Room	
OTHER	
Other (specify)	
Auditorium	
Set Design & Construction Lab	

Total Building Net Floor Area (NFA)	
Proposed Student Capacity / Enrollment	
Total Building Gross Floor Area (GFA) ²	
Grossing factor (GFA/NFA)	

**Norwood Middle School
Grades 5-8**

PROPOSED									
Existing to Remain/Renovated			New				Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	area totals
		0			58,270			0	
			950	39	37,050				
			500	3	1,500				
			1,200	9	10,800				
			80	9	720				
			1,150	4	4,600				
			900	4	3,600				
		0			11,070			0	
			950	7	6,650				
			60	7	420				
			500	5	2,500				
			500	3	1,500				
		0			5,000			0	
			1,200	2	2,400				
			150	2	300				
			1,500	1	1,500				
			200	4	800				
		0			6,400			0	
			1200	2	2,400				
			2000	2	4,000				
		0			8,800			0	
			6,000	1	6,000				
			150	2	300				
			250	2	500				
			1,000	2	2,000				
		0			6,383			0	

1,200	4	4,800
1,000	4	4,000

← indicates proposed program space not present in existing school

Middle School	ROOM TYPE
	CORE ACADEMIC SPACES <i>(List classrooms of different sizes separately)</i>
	Classroom - General
	Small Group Seminar (20-30 seats) / Resource
	Science Classroom / Lab
	Prep Room
	Academic Team Room
	Teacher Collaboration Room
	SPECIAL EDUCATION <i>(List classrooms of different sizes separately)</i>
	Self-Contained SPED
	Self-Contained SPED Toilet
	Resource Room
	Small Group Room / Reading
	ART & MUSIC
	Art Classroom
	Art Workroom w/ Storage & kiln
	Band / Chorus - 100 seats
	Band Storage
	Music Practice / Ensemble
	VOCATIONS & TECHNOLOGY
	Tech Cim. - (E.G. Drafting, Business)
	Tech Shop - (E.G. Consumer, Wood)
	HEALTH & PHYSICAL EDUCATION
	Gymnasium
	Gyn. Storeroom
	Health Instructor's Office w/ Shower & Toilet
	Locker Rooms - Boys / Girls w/ Toilets
	MEDIA CENTER

Proposed Space Summary

Norwood Middle School (5-8)

Option 4B

Media Center / Reading Room	6,383	1	6,383				
DINING & FOOD SERVICE			12,683				0
Cafeteria / Dining	7,830	1	7,830				
Stage	1,600	1	1,600				
Chair / Table / Equipment Storage	548	1	548				
Kitchen	2,344	1	2,344				
Staff Lunch Room	361	1	361				
MEDICAL			910				0
Medical Suite Toilet	60	1	60				
Nurses' Office / Waiting Room	250	1	250				
Examination Room	100	3	300				
Resting	150	2	300				
ADMINISTRATION & GUIDANCE			4,294				0
General Office / Waiting Room / Toilet	622	1	622				
Teachers' Mail and Time Room	100	1	100				
Duplicating Room	200	1	200				
Records Room	200	1	200				
Principal's Office w/ Conference Area	375	1	375				
Principal's Secretary / Waiting	125	1	125				
Assistant Principal's Office - AP1	150	1	150				
Assistant Principal's Office - AP2	150	2	300				
Supervisory / Spare Office	150	1	150				
Conference Room	350	1	350				
Guidance Office	150	6	900				
Guidance Waiting Room	100	1	100				
Guidance Storeroom	50	1	50				
Teachers' Work Room	672	1	672				
CUSTODIAL & MAINTENANCE			2,519				0
Custodian's Office	150	1	150				
Custodian's Workshop	250	1	250				
Custodian's Storage	375	1	375				
Recycling Room / Trash	400	1	400				
Receiving and General Supply	448	1	448				
Storeroom	696	1	696				
Network / Telecom Room	200	1	200				
OTHER			7,031				0
Other (specify)							
Auditorium	6,000	1	6,000				
Set Design & Construction Lab	1,000	1	1,031				

Total Building Net Floor Area (NFA)	123,360
Proposed Student Capacity / Enrollment	1,044
Total Building Gross Floor Area (GFA) ²	185,040
Grossing factor (GFA/NFA)	1.50

Media Center / Reading Room	6,383	1	6,383
DINING & FOOD SERVICE			12,683
Cafeteria / Dining	7,830	1	7,830
Stage	1,600	1	1,600
Chair / Table / Equipment Storage	548	1	548
Kitchen	2,344	1	2,344
Staff Lunch Room	361	1	361
MEDICAL			910
Medical Suite Toilet	60	1	60
Nurses' Office / Waiting Room	250	1	250
Examination Room	100	3	300
Resting	150	2	300
ADMINISTRATION & GUIDANCE			4,294
General Office / Waiting Room / Toilet	622	1	622
Teachers' Mail and Time Room	100	1	100
Duplicating Room	200	1	200
Records Room	200	1	200
Principal's Office w/ Conference Area	375	1	375
Principal's Secretary / Waiting	125	1	125
Assistant Principal's Office - AP1	150	1	150
Assistant Principal's Office - AP2	150	2	300
Supervisory / Spare Office	150	1	150
Conference Room	350	1	350
Guidance Office	150	6	900
Guidance Waiting Room	100	1	100
Guidance Storeroom	50	1	50
Teachers' Work Room	672	1	672
CUSTODIAL & MAINTENANCE			2,519
Custodian's Office	150	1	150
Custodian's Workshop	250	1	250
Custodian's Storage	375	1	375
Recycling Room / Trash	400	1	400
Receiving and General Supply	448	1	448
Storeroom	696	1	696
Network / Telecom Room	200	1	200
OTHER			7,031
Other (specify)			
Auditorium	6,000	1	6,000
Set Design & Construction Lab	1,000	1	1,031

Total Building Net Floor Area (NFA)	123,360
Proposed Student Capacity / Enrollment	1,044
Total Building Gross Floor Area (GFA) ²	185,040
Grossing factor (GFA/NFA)	1.50

PK - Grade 4 Elementary School

787 Students

PROPOSED									
Existing to Remain/Renovated			New				Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	
		0			36,950				0
			1,200	5	6,000				
			1,200	6	7,200				
			950	25	23,750				
		0			8,050				0
			950	5	4,750				
			60	5	300				
			500	4	2,000				
			500	2	1,000				
		0			5,075				0
			1,000	2	2,000				
			150	2	300				
			1,200	2	2,400				
			75	5	375				
		0			6,300				0
			6,000	1	6,000				
			150	1	150				
			150	1	150				
		0			3,847				0
			3,847	1	3,847				
		0			9,084				0
			5,366	1	5,366				
			1,000	1	1,000				
			435	1	435				
			2,006	1	2,006				
			277	1	277				
		0			610				0
			60	1	60				
			250	1	250				
			100	3	300				
		0			2,691				0

ROOM TYPE
Elementary/Early Ed.
CORE ACADEMIC SPACES <i>(List classrooms of different sizes separately)</i>
Pre-Kindergarten w/ toilet
Kindergarten w/ toilet
General Classrooms - Grade 1-6
SPECIAL EDUCATION <i>(List rooms of different sizes separately)</i>
Self-Contained SPED
Self-Contained SPED - toilet
Resource Room
Small Group Room / Reading
ART & MUSIC
Art Classroom - 25 seats
Art Workroom w/ Storage & kiln
Music Classroom / Large Group - 25-50 seats
Music Practice / Ensemble
HEALTH & PHYSICAL EDUCATION
Gymnasium
Gym Storeroom
Health Instructor's Office w/ Shower & Toilet
MEDIA CENTER
Media Center / Reading Room
DINING & FOOD SERVICE
Cafeteria / Dining
Stage
Chair / Table / Equipment Storage
Kitchen
Staff Lunch Room
MEDICAL
Medical Suite Toilet
Nurses' Office / Waiting Room
Examination Room / Resting
ADMINISTRATION & GUIDANCE

**Norwood Middle School
Grades 6-8**

PROPOSED									
Existing to Remain/Renovated			New				Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	
		0			44,410				0
				27	25,650				
				2	1,000				
				7	8,400				
				7	560				
			1,200	4	4,800				
			1,000	4	4,000				
		0			7,060				0
				6	5,700				
				6	360				
				2	1,000				
		0			5,000				0
			1,200	2	2,400				
			150	2	300				
			1,500	1	1,500				
			200	2	400				
			200	2	400				
		0			6,400				0
			1200	2	2,400				
			2000	2	4,000				
		0			8,800				0
			6,000	1	6,000				
			150	2	300				
			250	2	500				
			1,000	2	2,000				
		0			4,859				0
			4,859	1	4,859				

1,200	4	4,800
1,000	4	4,000

← indicates proposed program space not present in existing school

Middle School	ROOM TYPE
	CORE ACADEMIC SPACES <i>(List classrooms of different sizes separately)</i>
	Classroom - General
	Small Group Seminar (20-30 seats) / Resource
	Science Classroom / Lab
	Prep Room
	Academic Team Room
	Teacher Collaboration Room
	SPECIAL EDUCATION <i>(List classrooms of different sizes separately)</i>
	Self-Contained SPED
	Self-Contained SPED Toilet
	Small Group Room / Reading
	ART & MUSIC
	Art Classroom
	Art Workroom w/ Storage & kiln
	Band / Chorus - 100 seats
	Band Storage
	Music Practice / Ensemble
	VOCATIONS & TECHNOLOGY
	Tech Cirm. - (E.G. Drafting, Business)
	Tech Shop - (E.G. Consumer, Wood)
	HEALTH & PHYSICAL EDUCATION
	Gymnasium
	Gym Storeroom
	Health Instructor's Office w/ Shower & Toilet
	Locker Rooms - Boys / Girls w/ Toilets
	MEDIA CENTER
	Media Center / Reading Room

PK - Grade 5 Elementary School

920 Students

PROPOSED									
Existing to Remain/Renovated			New				Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	
		0			41,950				0
			1,200	5	6,000				
			1,200	7	8,400				
			950	29	27,550				
		0			9,060				0
			950	6	5,700				
			60	6	360				
			500	4	2,000				
			500	2	1,000				
		0			5,150				0
			1,000	2	2,000				
			150	2	300				
			1,200	2	2,400				
			75	6	450				
		0			8,800				0
			8,500	1	8,500				
			150	1	150				
			150	1	150				
		0			4,441				0
			4,441	1	4,441				
		0			11,048				0
			6,521	1	6,521				
			1,600	1	1,600				
			479	1	479				
			2,138	1	2,138				
			310	1	310				
		0			710				0
			60	1	60				
			250	1	250				
			100	4	400				
		0			2,973				0

ROOM TYPE
Elementary/Early Ed.
CORE ACADEMIC SPACES <i>(List classrooms of different sizes separately)</i>
Pre-Kindergarten w/ toilet
Kindergarten w/ toilet
General Classrooms - Grade 1-5
SPECIAL EDUCATION <i>(List rooms of different sizes separately)</i>
Self-Contained SPED
Self-Contained SPED - toilet
Resource Room
Small Group Room / Reading
ART & MUSIC
Art Classroom - 25 seats
Art Workroom w/ Storage & kiln
Music Classroom / Large Group - 25-50 seats
Music Practice / Ensemble
HEALTH & PHYSICAL EDUCATION
Gymnasium
Gym Storeroom
Health Instructor's Office w/ Shower & Toilet
MEDIA CENTER
Media Center / Reading Room
DINING & FOOD SERVICE
Cafeteria / Dining
Stage
Chair / Table / Equipment Storage
Kitchen
Staff Lunch Room
MEDICAL
Medical Suite Toilet
Nurses' Office / Waiting Room
Examination Room / Resting
ADMINISTRATION & GUIDANCE

Appendix

Contents

Building Committee Submittals

- The MSBA Process

NESDEC Enrollment Data

- Historical Enrollment by Grade
- Historical Enrollment by Grade: PK - 12 from 2006 - 2016
- Enrollment Projections by Grade
- Enrollment Projections by Grade: PK - 12 from 2016 - 2026
- Birth-to-Kindergarten Relationship
- Additional Demographic Data

Supplemental Site Analysis

- Historical Maps of Norwood
- Supplemental Site Analysis - Balch
- Supplemental Site Analysis - Callahan
- Supplemental Site Analysis - Cleveland
- Supplemental Site Analysis - Oldham
- Supplemental Site Analysis - Prescott
- Supplemental Site Analysis - Willett
- Supplemental Site Analysis - Coakley
- Supplemental Site Analysis - Savage

School Committee Presentation from August 16, 2017



The MSBA Process

Step 1: Communication & Presentation of the Study

The Feasibility Study and Long Range Plan for Norwood Public Schools

Step 2: Consider Submittal of MSBA Statement of Interest (SOI)

The Town of Norwood should begin to consider the submittal of an SOI to the MSBA that names the Middle School as a district priority.

Step 3: Submit MSBA Statement of Interest (SOI)

Purpose

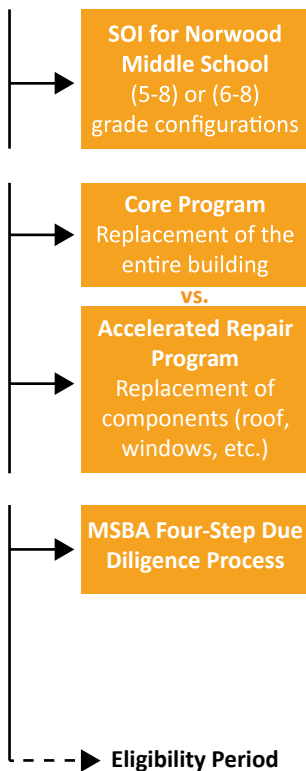
- An SOI allows the MSBA to determine “those schools that are most urgent and needy” by identifying a school building’s deficiencies
- An SOI allows a district to partner with the MSBA in an effort to understand a school building’s true deficiencies; Norwood can explore the benefits of a new middle school with either a 5-8 grade configuration or a 6-8 grade configuration.

Filing Period & Process

- The SOI period opens in early January, but a district should only file if it has the ability to fund a project in the next two years
- The SOI period closes each April, and decisions of the SOI are generally made by the MSBA in late fall of each year

• Following is a four-step Due Diligence Process by the MSBA for all SOIs:

1. Review SOI submissions for completeness
 - A hard copy of the SOI with the required signatures
 - A hard copy of the Closed Schools Certification
 - Hard copies of the required local vote documentation
 - Any supporting materials required to be submitted with the SOI
2. Review SOI submissions & accompanying documents for content
 - The MSBA uses 50+ data points in their analysis of SOI applications
 - Utilizes a “Needs Survey” that assesses building systems, space utilization, classrooms/core spaces, and technology of the facility
3. Conduct Senior Study visits, if required
 - This is a site visit by an MSBA team to review the physical conditions and programmatic experience of the submitted school
4. Recommend SOIs for invitation into the Eligibility Period
 - The MSBA compares district SOIs selected for review to each other
 - Once recommendations from the MSBA CEO, Board of Directors, and Facilities Assessment Subcommittee have been accepted, the district will receive an invitation into the Eligibility Period from the Board of Directors



Step 4: MSBA Eligibility Period (Module 1)

The Eligibility Period assists the MSBA with managing its financial resources. Early in the process, it identifies whether a district is ready to manage and fund a capital project.

1. Execute an Initial Compliance Certification (ICC)
 - Proof that the district understands the grant programs rules
2. Form a School Building Committee (SBC)
3. Complete an Educational Profile Questionnaire
 - Helps the MSBA understand the true needs of the district and its goals
4. Summary of District’s Existing Maintenance Practices
5. Establish a Design Enrollment
 - Establishes size of proposed new project based on projected needs
6. Confirmation of Community Authorization & Funding to Proceed
7. MSBA Feasibility Study Agreement
 - Establishes a process for the district to be reimbursed for eligible expenses

Eligibility Period Up to 270 Days



Upon Invite to Eligibility Period, Districts complete defined requirements within the timeframes listed above

Step 5: Community Outreach

Community outreach presentations should occur periodically throughout the Eligibility Period to ensure that the Building and School Committees are acting in the best interest of its community members. The district will be unable to continue participation in an MSBA Core Program without community authorization.



Norwood, MA Historical Enrollment

School District: Norwood, MA

10/25/2016

Historical Enrollment By Grade																			
Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2001	392	2006-07	104	242	249	242	242	261	287	276	239	261	281	266	276	259	5	3386	3490
2002	387	2007-08	94	272	222	250	235	249	273	289	278	237	268	277	265	275	7	3397	3491
2003	413	2008-09	95	270	262	214	261	232	249	262	291	286	224	263	275	248	7	3344	3439
2004	371	2009-10	99	275	266	259	214	253	226	254	263	285	281	219	258	281	4	3338	3437
2005	364	2010-11	91	299	276	272	254	222	246	225	266	272	256	285	226	257	7	3363	3454
2006	364	2011-12	93	279	297	264	253	263	220	252	238	259	285	256	294	226	0	3386	3479
2007	362	2012-13	106	274	292	283	256	257	255	229	243	240	268	290	263	291	0	3441	3547
2008	407	2013-14	109	280	276	287	266	248	261	249	235	232	245	264	276	249	0	3368	3477
2009	365	2014-15	100	274	275	270	275	282	253	249	249	228	243	249	264	267	0	3378	3478
2010	382	2015-16	121	277	268	267	262	271	272	258	250	250	220	237	249	267	0	3348	3469
2011	402	2016-17	106	294	287	258	254	259	253	265	241	251	253	226	235	251	0	3327	3433

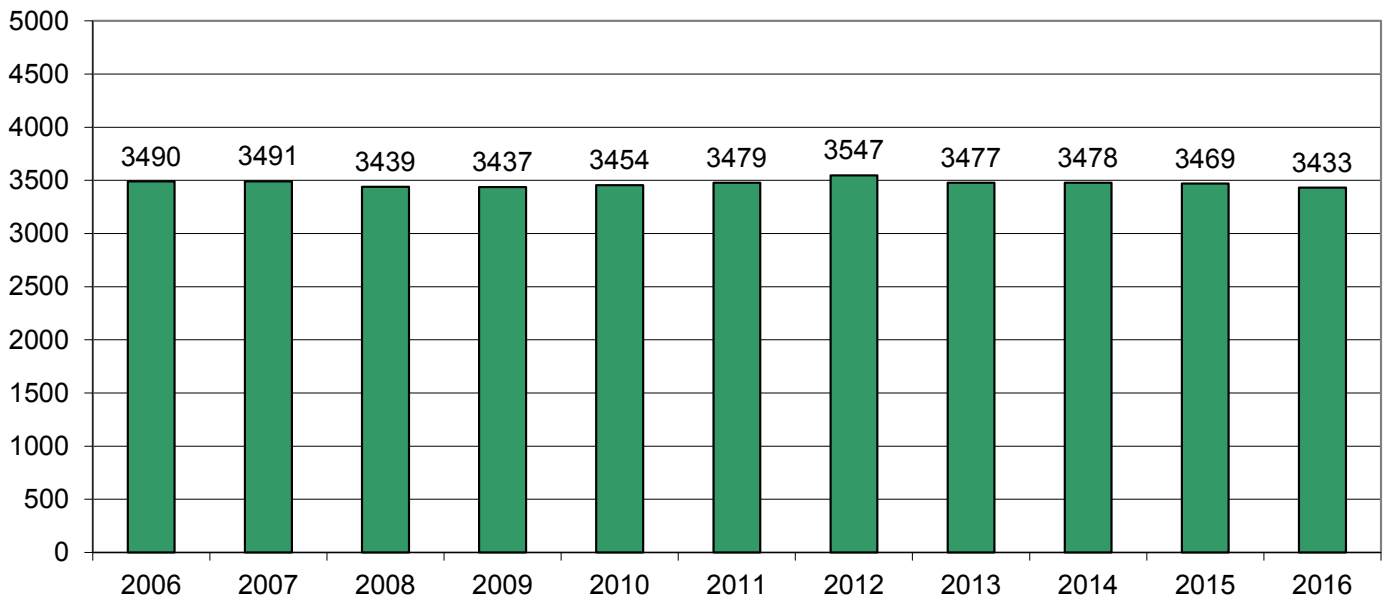
Historical Enrollment in Grade Combinations									
Year	PK-K	K-5	1-5	K-8	5-8	6-8	7-8	7-12	9-12
2006-07	346	1523	1281	2299	1063	776	500	1582	1082
2007-08	366	1501	1229	2305	1077	804	515	1600	1085
2008-09	365	1488	1218	2327	1088	839	577	1587	1010
2009-10	374	1493	1218	2295	1028	802	548	1587	1039
2010-11	390	1569	1270	2332	1009	763	538	1562	1024
2011-12	372	1576	1297	2325	969	749	497	1558	1061
2012-13	380	1617	1343	2329	967	712	483	1595	1112
2013-14	389	1618	1338	2334	977	716	467	1501	1034
2014-15	374	1629	1355	2355	979	726	477	1500	1023
2015-16	398	1617	1340	2375	1030	758	500	1473	973
2016-17	400	1605	1311	2362	1010	757	492	1457	965

Historical Percentage Changes			
Year	K-12	Diff.	%
2006-07	3386	0	0.0%
2007-08	3397	11	0.3%
2008-09	3344	-53	-1.6%
2009-10	3338	-6	-0.2%
2010-11	3363	25	0.7%
2011-12	3386	23	0.7%
2012-13	3441	55	1.6%
2013-14	3368	-73	-2.1%
2014-15	3378	10	0.3%
2015-16	3348	-30	-0.9%
2016-17	3327	-21	-0.6%
Change		-59	-1.7%



Norwood, MA Historical Enrollment

PK-12, 2006-2016



© New England School Development Council • 508.481-9444 • www.nesdec.org




Norwood, MA Projected Enrollment


School District: **Norwood, MA**


10/25/2016

Enrollment Projections By Grade*																			
Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2011	402	2016-17	106	294	287	258	254	259	253	265	241	251	253	226	235	251	0	3327	3433
2012	375	2017-18	106	276	294	279	248	255	253	249	261	239	253	255	225	234	0	3321	3427
2013	379	2018-19	106	279	276	285	268	249	249	249	245	259	241	255	254	224	0	3333	3439
2014	403	2019-20	106	296	279	268	274	269	243	245	245	243	261	243	254	253	0	3373	3479
2015	412	(prov.) 2020-21	106	303	296	271	257	275	263	239	241	243	245	263	242	253	0	3391	3497
2016	394	(est.) 2021-22	106	290	303	287	260	258	269	258	235	239	245	247	262	241	0	3394	3500
2017	393	(est.) 2022-23	106	289	290	294	276	261	252	264	254	233	241	247	246	261	0	3408	3514
2018	396	(est.) 2023-24	106	291	289	281	282	277	255	248	260	252	235	243	246	245	0	3404	3510
2019	400	(est.) 2024-25	106	294	291	281	270	283	271	251	244	258	254	236	242	245	0	3420	3526
2020	399	(est.) 2025-26	106	293	294	282	270	271	277	266	247	242	260	256	235	241	0	3434	3540
2021	396	(est.) 2026-27	106	292	293	285	271	271	265	272	262	245	244	262	255	234	0	3451	3557

*Projections should be updated on an annual basis in order to reflect changes in births, real estate sales, in-/out-migration of families, and housing construction.

 Based on an estimate of births

 Based on children already born

 Based on students already enrolled

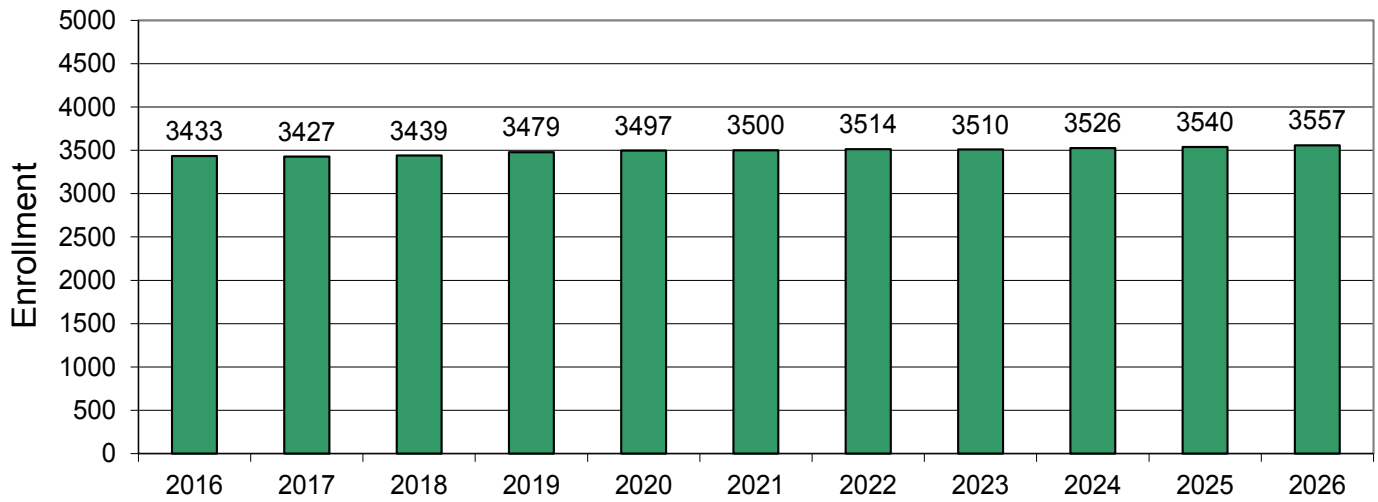
Projected Enrollment in Grade Combinations*									
Year	PK-K	K-5	1-5	K-8	5-8	6-8	7-8	7-12	9-12
2016-17	400	1605	1311	2362	1010	757	492	1457	965
2017-18	382	1605	1329	2354	1002	749	500	1467	967
2018-19	385	1606	1327	2359	1002	753	504	1478	974
2019-20	402	1629	1333	2362	976	733	488	1499	1011
2020-21	409	1665	1362	2388	986	723	484	1487	1003
2021-22	396	1667	1377	2399	1001	732	474	1469	995
2022-23	395	1662	1373	2413	1003	751	487	1482	995
2023-24	397	1675	1384	2435	1015	760	512	1481	969
2024-25	400	1690	1396	2443	1024	753	502	1479	977
2025-26	399	1687	1394	2442	1032	755	489	1481	992
2026-27	398	1677	1385	2456	1044	779	507	1502	995

Projected Percentage Changes			
Year	K-12	Diff.	%
2016-17	3327	0	0.0%
2017-18	3321	-6	-0.2%
2018-19	3333	12	0.4%
2019-20	3373	40	1.2%
2020-21	3391	18	0.5%
2021-22	3394	3	0.1%
2022-23	3408	14	0.4%
2023-24	3404	-4	-0.1%
2024-25	3420	16	0.5%
2025-26	3434	14	0.4%
2026-27	3451	17	0.5%
Change		124	3.7%



Norwood, MA Projected Enrollment

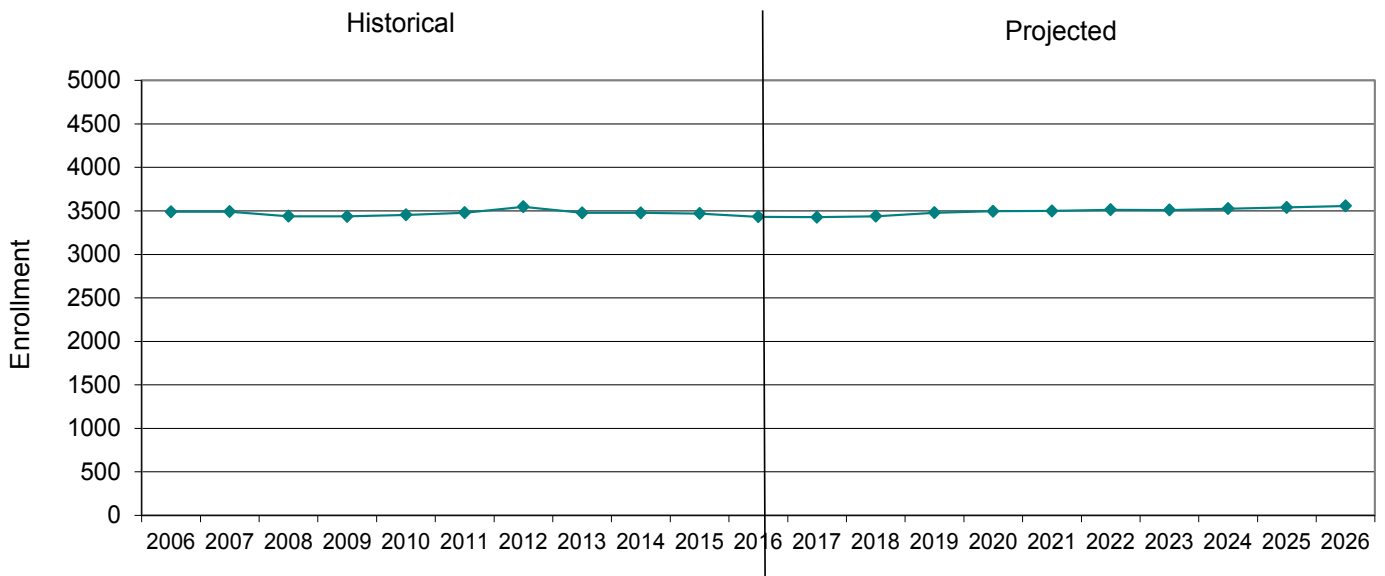
PK-12 TO 2026 Based On Data Through School Year 2016-17





Norwood, MA Historical & Projected Enrollment

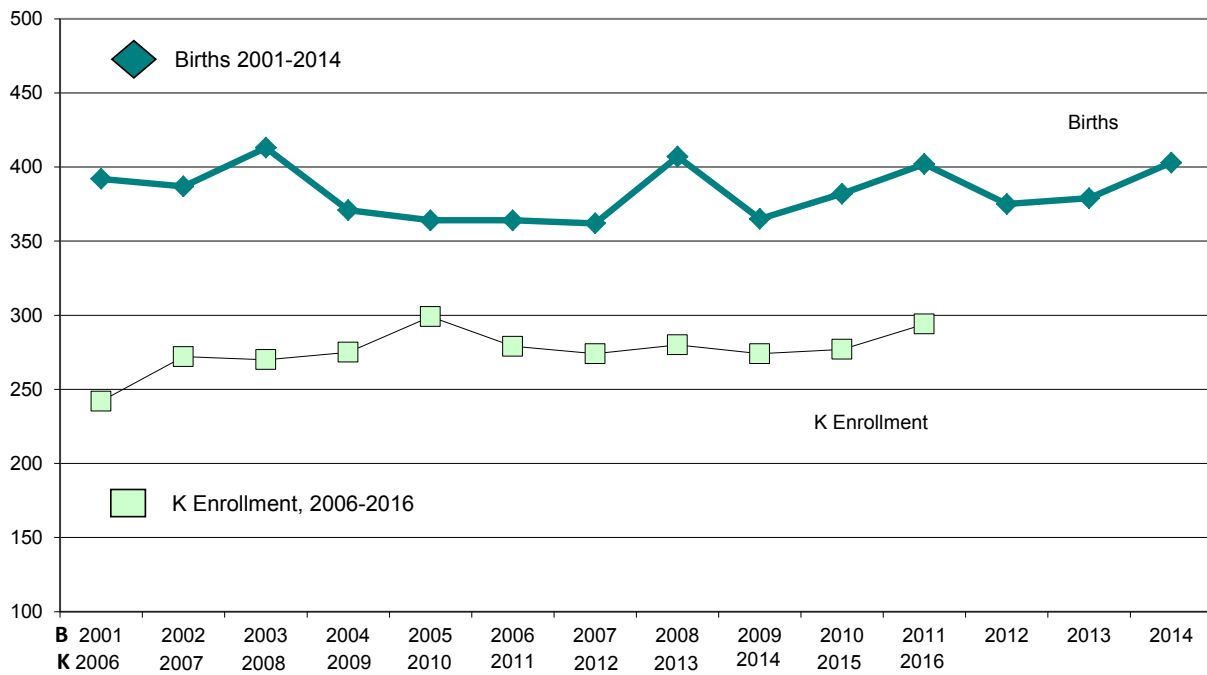
PK-12, 2006-2026



© New England School Development Council • 508.481-9444 • www.nesdec.org



Norwood, MA Birth-to-Kindergarten Relationship





Norwood, MA Additional Data

Building Permits Issued		
Year	Single-Family	Multi-Units
2005	33	6
2012	5	12
2013	13	0
2014	9	0
2015	12	44
2016	11 to Jun 30	6 to Jun 30

Source: HUD and Building Department

Enrollment History		
Year	Voc-Tech 9-12 Total	Non-Public K-12 Total
2005-06	n/a	n/a
2012-13	81	478
2013-14	70	n/a
2014-15	n/a	427
2015-16	60	384
2016-17	64	n/a

Residents in Non-Public Independent and Parochial Schools (General Education)														
Enrollment Jan. 1, 2016	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	35	29	29	24	32	26	33	30	40	21	26	33	26	384

K-12 Home-Schooled Students	
2016	20

K-12 Residents "Choiced-out" or in Charter or Magnet Schools	
2016	46

K-12 Special Education Outplaced Students	
2016	62

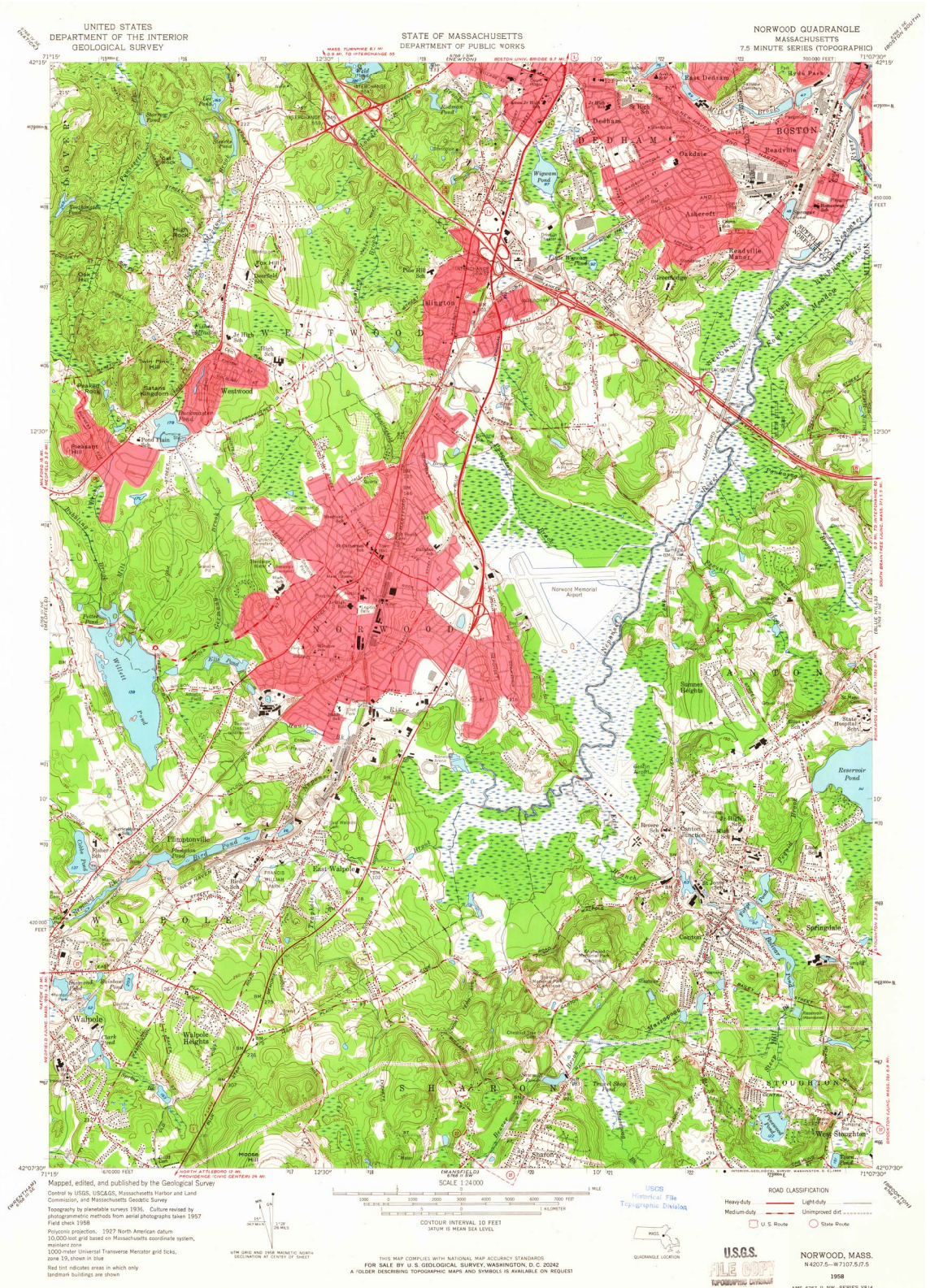
K-12 Choiced-In, Tuitioned-In, & Other Non-Residents	
2016	0

The above data were used to assist in the preparation of the enrollment projections. If additional demographic work is needed, please contact our office.

Supplemental Site Analysis



Feasibility Study & Long Range Plan - Norwood Public Schools

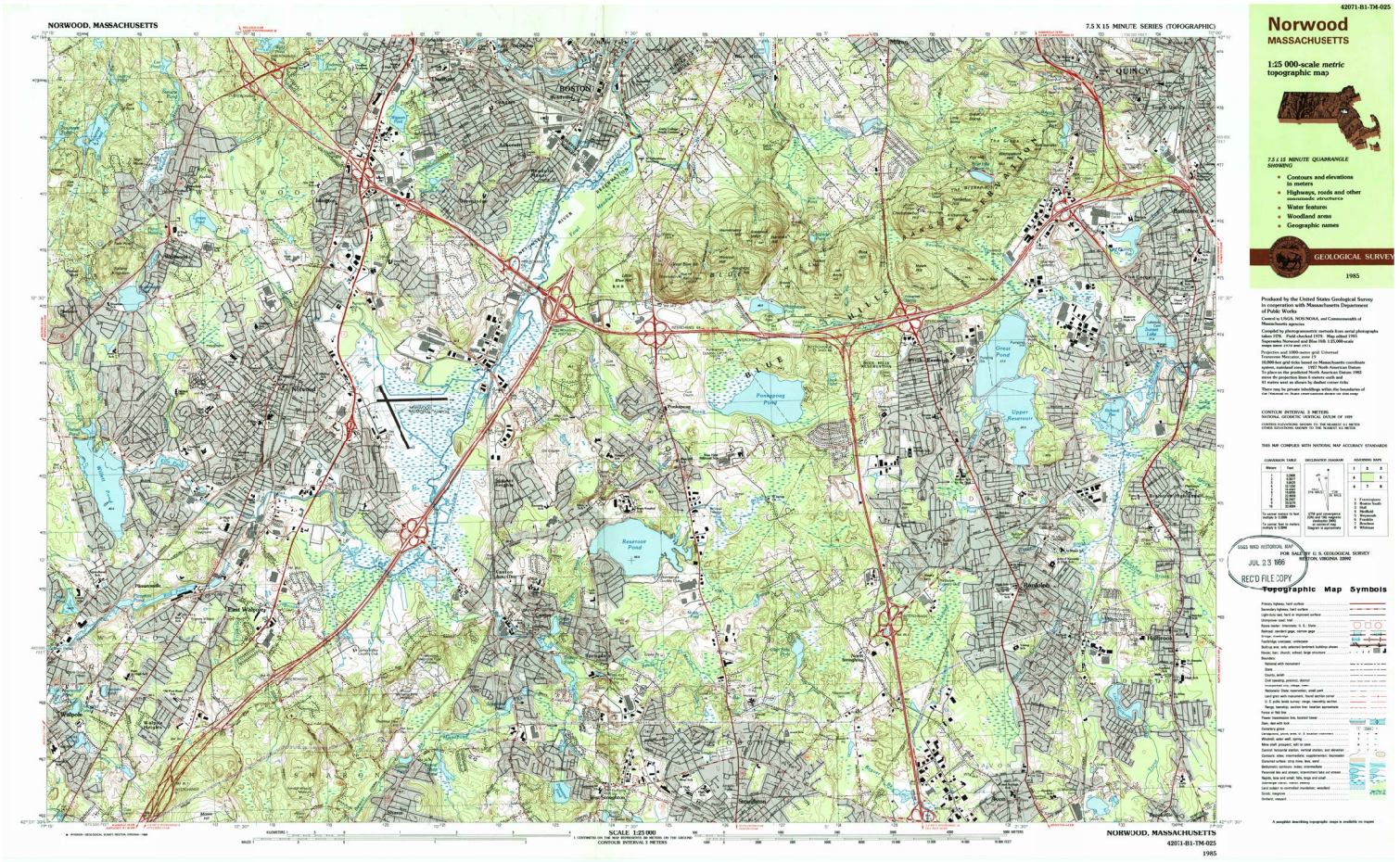


Feasibility Study & Long Range Plan - Norwood Public Schools

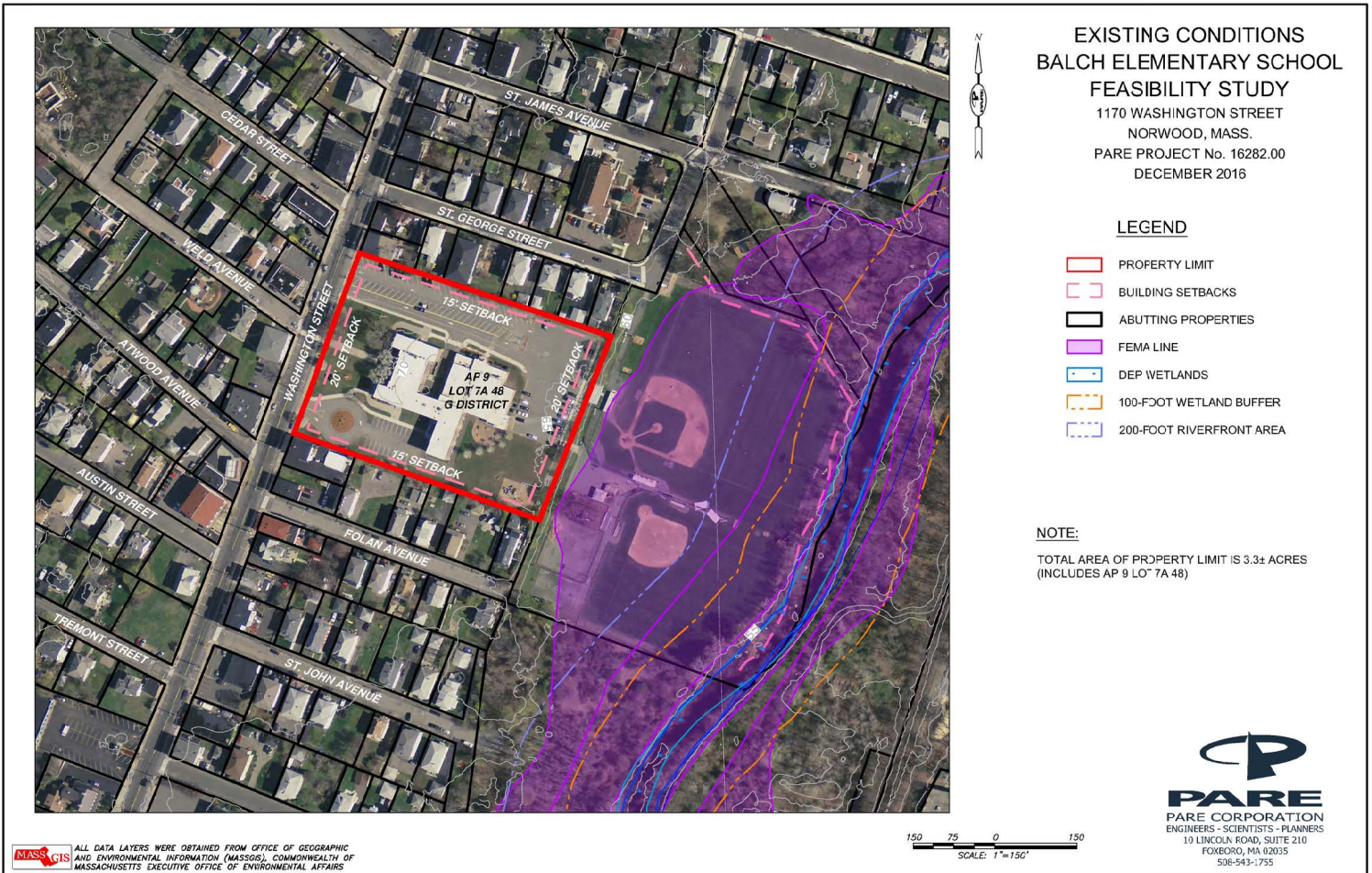


DEC

Feasibility Study & Long Range Plan - Norwood Public Schools



Supplemental Site Analysis: Balch



**EXISTING CONDITIONS
BALCH ELEMENTARY SCHOOL
FEASIBILITY STUDY**
1170 WASHINGTON STREET
NORWOOD, MASS.
PARE PROJECT No. 16282.00
DECEMBER 2016

- LEGEND**
- PROPERTY LIMIT
 - BUILDING SETBACKS
 - ABUTTING PROPERTIES
 - FEMA LINE
 - DEP WETLANDS
 - 100-FOOT WETLAND BUFFER
 - 200-FOOT RIVERFRONT AREA

NOTE:
TOTAL AREA OF PROPERTY LIMIT IS 3.3± ACRES
(INCLUDES AP 9 LOT 7A 48)

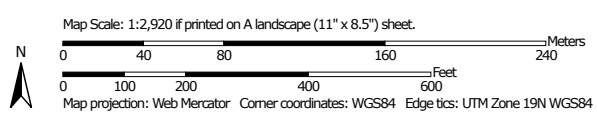
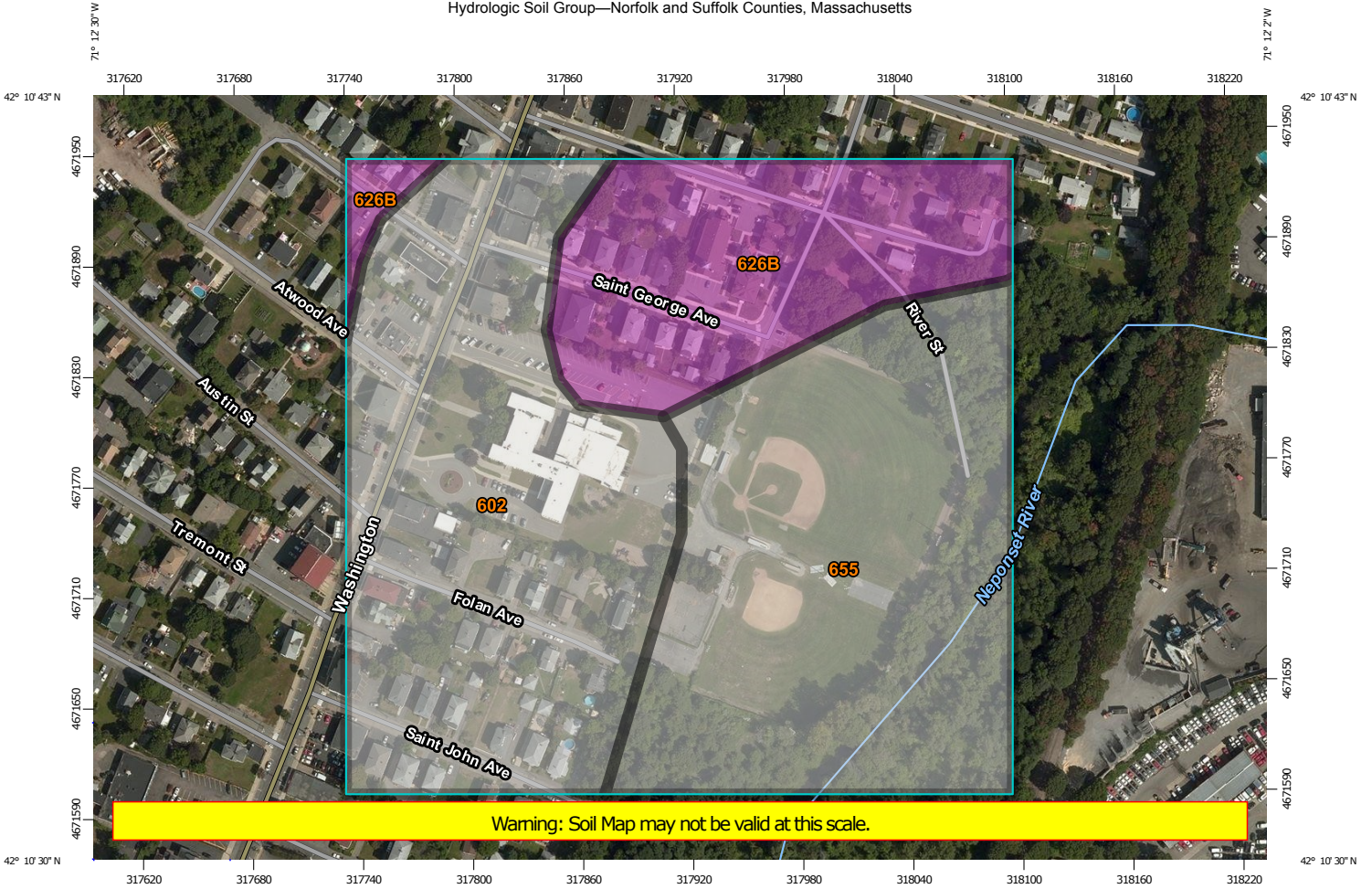
MASS GIS ALL DATA LAYERS WERE OBTAINED FROM OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MASSGIS), COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

150 75 0 150
SCALE: 1"=150'



Feasibility Study & Long Range Plan - Norwood Public Schools

Hydrologic Soil Group—Norfolk and Suffolk Counties, Massachusetts



Natural Resources Conservation Service

































Web Soil Survey
National Cooperative Soil Survey

12/6/2016
Page 1 of 4

Feasibility Study & Long Range Plan - Norwood Public Schools

Hydrologic Soil Group—Norfolk and Suffolk Counties, Massachusetts

MAP LEGEND

- Area of Interest (AOI)**
-  Area of Interest (AOI)
- Soils**
- Soil Rating Polygons**
-  A
 -  A/D
 -  B
 -  B/D
 -  C
 -  C/D
 -  D
 -  Not rated or not available
- Soil Rating Lines**
-  A
 -  A/D
 -  B
 -  B/D
 -  C
 -  C/D
 -  D
 -  Not rated or not available
- Soil Rating Points**
-  A
 -  A/D
 -  B
 -  B/D
- Soils**
-  C
 -  C/D
 -  D
 -  Not rated or not available
- Water Features**
-  Streams and Canals
- Transportation**
-  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Norfolk and Suffolk Counties, Massachusetts
 Survey Area Data: Version 12, Sep 15, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 26, 2014—Sep 4, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group— Summary by Map Unit — Norfolk and Suffolk Counties, Massachusetts (MA616)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
602	Urban land, 0 to 15 percent slopes		12.3	39.6%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	A	6.8	21.8%
655	Udorthents, wet substratum		12.0	38.6%
Totals for Area of Interest			31.1	100.0%

Appendix

Contents

Building Committee Submittals

- The MSBA Process

NESDEC Enrollment Data

- Historical Enrollment by Grade
- Historical Enrollment by Grade: PK - 12 from 2006 - 2016
- Enrollment Projections by Grade
- Enrollment Projections by Grade: PK - 12 from 2016 - 2026
- Birth-to-Kindergarten Relationship
- Additional Demographic Data

Supplemental Site Analysis

- Historical Maps of Norwood
- Supplemental Site Analysis - Balch
- Supplemental Site Analysis - Callahan
- Supplemental Site Analysis - Cleveland
- Supplemental Site Analysis - Oldham
- Supplemental Site Analysis - Prescott
- Supplemental Site Analysis - Willett
- Supplemental Site Analysis - Coakley
- Supplemental Site Analysis - Savage

School Committee Presentation from August 16, 2017



The MSBA Process

Step 1: Communication & Presentation of the Study

The Feasibility Study and Long Range Plan for Norwood Public Schools

Step 2: Consider Submittal of MSBA Statement of Interest (SOI)

The Town of Norwood should begin to consider the submittal of an SOI to the MSBA that names the Middle School as a district priority.

Step 3: Submit MSBA Statement of Interest (SOI)

Purpose

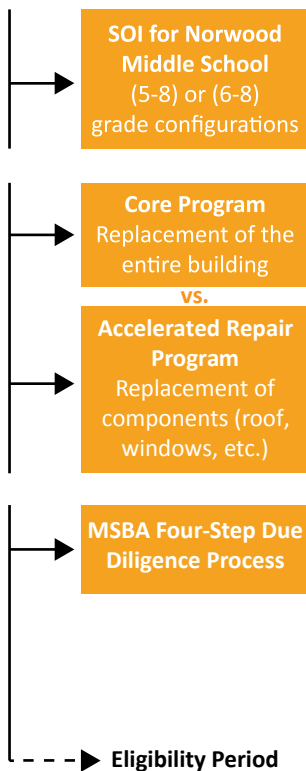
- An SOI allows the MSBA to determine “those schools that are most urgent and needy” by identifying a school building’s deficiencies
- An SOI allows a district to partner with the MSBA in an effort to understand a school building’s true deficiencies; Norwood can explore the benefits of a new middle school with either a 5-8 grade configuration or a 6-8 grade configuration.

Filing Period & Process

- The SOI period opens in early January, but a district should only file if it has the ability to fund a project in the next two years
- The SOI period closes each April, and decisions of the SOI are generally made by the MSBA in late fall of each year

• Following is a four-step Due Diligence Process by the MSBA for all SOIs:

1. Review SOI submissions for completeness
 - A hard copy of the SOI with the required signatures
 - A hard copy of the Closed Schools Certification
 - Hard copies of the required local vote documentation
 - Any supporting materials required to be submitted with the SOI
2. Review SOI submissions & accompanying documents for content
 - The MSBA uses 50+ data points in their analysis of SOI applications
 - Utilizes a “Needs Survey” that assesses building systems, space utilization, classrooms/core spaces, and technology of the facility
3. Conduct Senior Study visits, if required
 - This is a site visit by an MSBA team to review the physical conditions and programmatic experience of the submitted school
4. Recommend SOIs for invitation into the Eligibility Period
 - The MSBA compares district SOIs selected for review to each other
 - Once recommendations from the MSBA CEO, Board of Directors, and Facilities Assessment Subcommittee have been accepted, the district will receive an invitation into the Eligibility Period from the Board of Directors



Step 4: MSBA Eligibility Period (Module 1)

The Eligibility Period assists the MSBA with managing its financial resources. Early in the process, it identifies whether a district is ready to manage and fund a capital project.

1. Execute an Initial Compliance Certification (ICC)
 - Proof that the district understands the grant programs rules
2. Form a School Building Committee (SBC)
3. Complete an Educational Profile Questionnaire
 - Helps the MSBA understand the true needs of the district and its goals
4. Summary of District’s Existing Maintenance Practices
5. Establish a Design Enrollment
 - Establishes size of proposed new project based on projected needs
6. Confirmation of Community Authorization & Funding to Proceed
7. MSBA Feasibility Study Agreement
 - Establishes a process for the district to be reimbursed for eligible expenses

Eligibility Period Up to 270 Days



Upon Invite to Eligibility Period, Districts complete defined requirements within the timeframes listed above

Step 5: Community Outreach

Community outreach presentations should occur periodically throughout the Eligibility Period to ensure that the Building and School Committees are acting in the best interest of its community members. The district will be unable to continue participation in an MSBA Core Program without community authorization.



Norwood, MA Historical Enrollment

School District: Norwood, MA

10/25/2016

Historical Enrollment By Grade																			
Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2001	392	2006-07	104	242	249	242	242	261	287	276	239	261	281	266	276	259	5	3386	3490
2002	387	2007-08	94	272	222	250	235	249	273	289	278	237	268	277	265	275	7	3397	3491
2003	413	2008-09	95	270	262	214	261	232	249	262	291	286	224	263	275	248	7	3344	3439
2004	371	2009-10	99	275	266	259	214	253	226	254	263	285	281	219	258	281	4	3338	3437
2005	364	2010-11	91	299	276	272	254	222	246	225	266	272	256	285	226	257	7	3363	3454
2006	364	2011-12	93	279	297	264	253	263	220	252	238	259	285	256	294	226	0	3386	3479
2007	362	2012-13	106	274	292	283	256	257	255	229	243	240	268	290	263	291	0	3441	3547
2008	407	2013-14	109	280	276	287	266	248	261	249	235	232	245	264	276	249	0	3368	3477
2009	365	2014-15	100	274	275	270	275	282	253	249	249	228	243	249	264	267	0	3378	3478
2010	382	2015-16	121	277	268	267	262	271	272	258	250	250	220	237	249	267	0	3348	3469
2011	402	2016-17	106	294	287	258	254	259	253	265	241	251	253	226	235	251	0	3327	3433

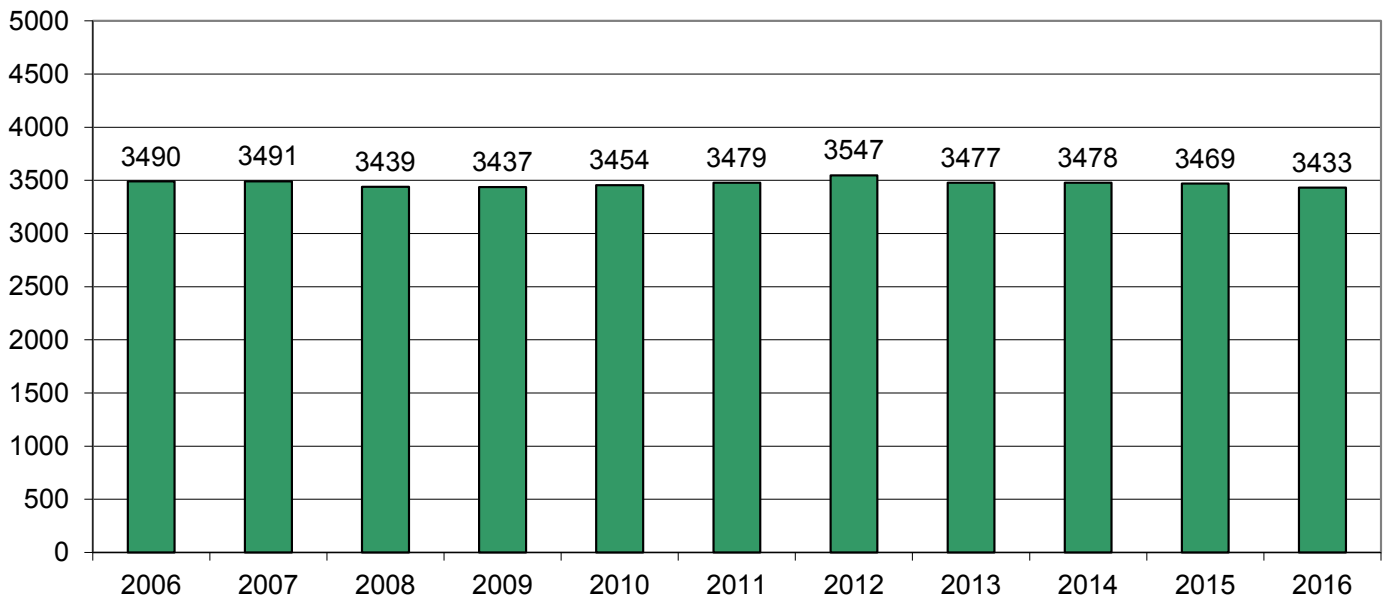
Historical Enrollment in Grade Combinations									
Year	PK-K	K-5	1-5	K-8	5-8	6-8	7-8	7-12	9-12
2006-07	346	1523	1281	2299	1063	776	500	1582	1082
2007-08	366	1501	1229	2305	1077	804	515	1600	1085
2008-09	365	1488	1218	2327	1088	839	577	1587	1010
2009-10	374	1493	1218	2295	1028	802	548	1587	1039
2010-11	390	1569	1270	2332	1009	763	538	1562	1024
2011-12	372	1576	1297	2325	969	749	497	1558	1061
2012-13	380	1617	1343	2329	967	712	483	1595	1112
2013-14	389	1618	1338	2334	977	716	467	1501	1034
2014-15	374	1629	1355	2355	979	726	477	1500	1023
2015-16	398	1617	1340	2375	1030	758	500	1473	973
2016-17	400	1605	1311	2362	1010	757	492	1457	965

Historical Percentage Changes			
Year	K-12	Diff.	%
2006-07	3386	0	0.0%
2007-08	3397	11	0.3%
2008-09	3344	-53	-1.6%
2009-10	3338	-6	-0.2%
2010-11	3363	25	0.7%
2011-12	3386	23	0.7%
2012-13	3441	55	1.6%
2013-14	3368	-73	-2.1%
2014-15	3378	10	0.3%
2015-16	3348	-30	-0.9%
2016-17	3327	-21	-0.6%
Change		-59	-1.7%



Norwood, MA Historical Enrollment

PK-12, 2006-2016



© New England School Development Council • 508.481-9444 • www.nesdec.org




Norwood, MA Projected Enrollment


School District: **Norwood, MA**


10/25/2016

Enrollment Projections By Grade*																			
Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2011	402	2016-17	106	294	287	258	254	259	253	265	241	251	253	226	235	251	0	3327	3433
2012	375	2017-18	106	276	294	279	248	255	253	249	261	239	253	255	225	234	0	3321	3427
2013	379	2018-19	106	279	276	285	268	249	249	249	245	259	241	255	254	224	0	3333	3439
2014	403	2019-20	106	296	279	268	274	269	243	245	245	243	261	243	254	253	0	3373	3479
2015	412	(prov.) 2020-21	106	303	296	271	257	275	263	239	241	243	245	263	242	253	0	3391	3497
2016	394	(est.) 2021-22	106	290	303	287	260	258	269	258	235	239	245	247	262	241	0	3394	3500
2017	393	(est.) 2022-23	106	289	290	294	276	261	252	264	254	233	241	247	246	261	0	3408	3514
2018	396	(est.) 2023-24	106	291	289	281	282	277	255	248	260	252	235	243	246	245	0	3404	3510
2019	400	(est.) 2024-25	106	294	291	281	270	283	271	251	244	258	254	236	242	245	0	3420	3526
2020	399	(est.) 2025-26	106	293	294	282	270	271	277	266	247	242	260	256	235	241	0	3434	3540
2021	396	(est.) 2026-27	106	292	293	285	271	271	265	272	262	245	244	262	255	234	0	3451	3557

*Projections should be updated on an annual basis in order to reflect changes in births, real estate sales, in-/out-migration of families, and housing construction.

 Based on an estimate of births

 Based on children already born

 Based on students already enrolled

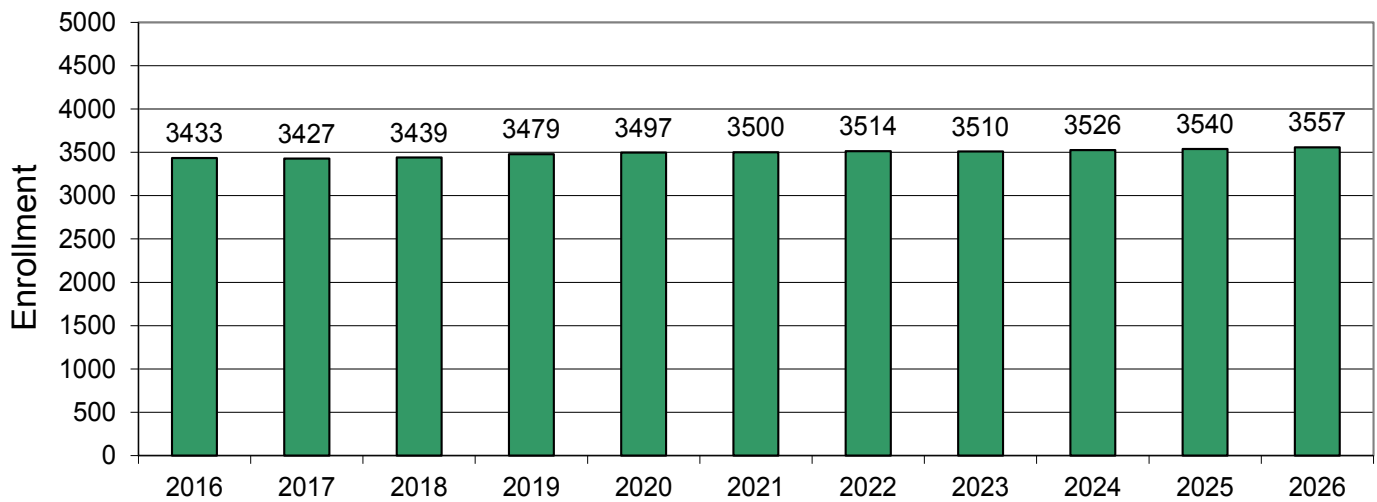
Projected Enrollment in Grade Combinations*									
Year	PK-K	K-5	1-5	K-8	5-8	6-8	7-8	7-12	9-12
2016-17	400	1605	1311	2362	1010	757	492	1457	965
2017-18	382	1605	1329	2354	1002	749	500	1467	967
2018-19	385	1606	1327	2359	1002	753	504	1478	974
2019-20	402	1629	1333	2362	976	733	488	1499	1011
2020-21	409	1665	1362	2388	986	723	484	1487	1003
2021-22	396	1667	1377	2399	1001	732	474	1469	995
2022-23	395	1662	1373	2413	1003	751	487	1482	995
2023-24	397	1675	1384	2435	1015	760	512	1481	969
2024-25	400	1690	1396	2443	1024	753	502	1479	977
2025-26	399	1687	1394	2442	1032	755	489	1481	992
2026-27	398	1677	1385	2456	1044	779	507	1502	995

Projected Percentage Changes			
Year	K-12	Diff.	%
2016-17	3327	0	0.0%
2017-18	3321	-6	-0.2%
2018-19	3333	12	0.4%
2019-20	3373	40	1.2%
2020-21	3391	18	0.5%
2021-22	3394	3	0.1%
2022-23	3408	14	0.4%
2023-24	3404	-4	-0.1%
2024-25	3420	16	0.5%
2025-26	3434	14	0.4%
2026-27	3451	17	0.5%
Change		124	3.7%



Norwood, MA Projected Enrollment

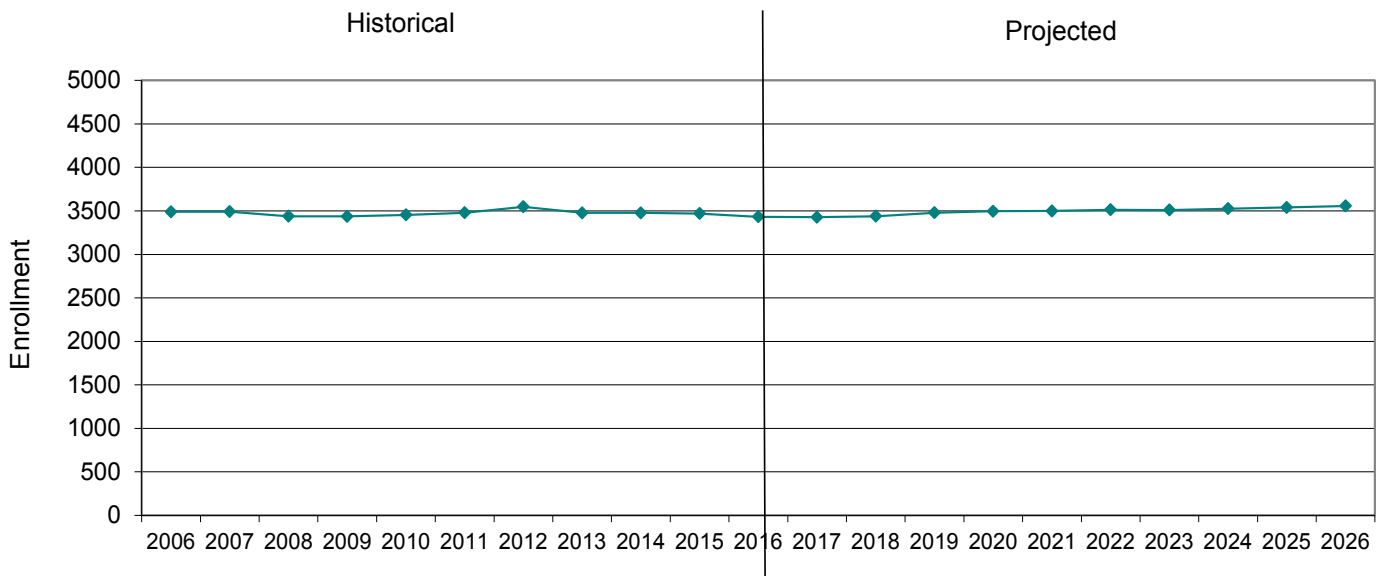
PK-12 TO 2026 Based On Data Through School Year 2016-17





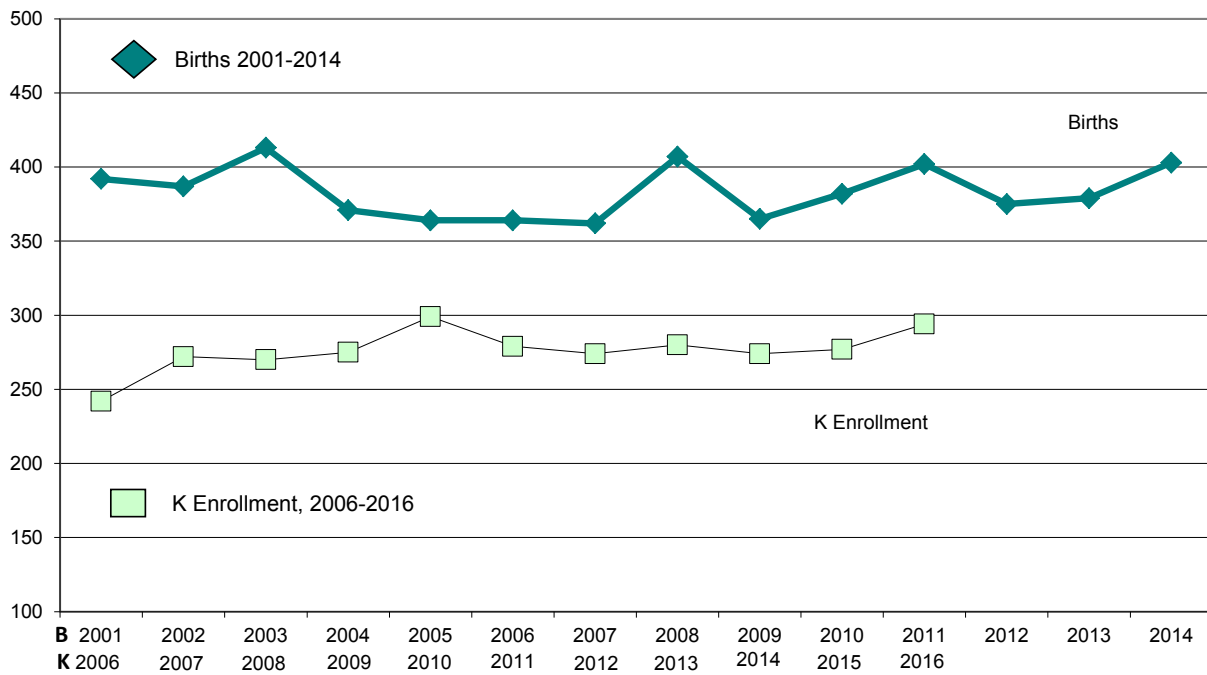
Norwood, MA Historical & Projected Enrollment

PK-12, 2006-2026





Norwood, MA Birth-to-Kindergarten Relationship





Norwood, MA Additional Data

Building Permits Issued		
Year	Single-Family	Multi-Units
2005	33	6
2012	5	12
2013	13	0
2014	9	0
2015	12	44
2016	11 to Jun 30	6 to Jun 30

Source: HUD and Building Department

Enrollment History		
Year	Voc-Tech 9-12 Total	Non-Public K-12 Total
2005-06	n/a	n/a
2012-13	81	478
2013-14	70	n/a
2014-15	n/a	427
2015-16	60	384
2016-17	64	n/a

Residents in Non-Public Independent and Parochial Schools (General Education)														
Enrollment Jan. 1, 2016	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	35	29	29	24	32	26	33	30	40	21	26	33	26	384

K-12 Home-Schooled Students	
2016	20

K-12 Residents "Choiced-out" or in Charter or Magnet Schools	
2016	46

K-12 Special Education Outplaced Students	
2016	62

K-12 Choiced-In, Tuitioned-In, & Other Non-Residents	
2016	0

The above data were used to assist in the preparation of the enrollment projections. If additional demographic work is needed, please contact our office.

Supplemental Site Analysis



