

Barrington School Department

RIDE Stage II Feasibility Study



SMMA
SYMMEY MAINTENANCE MORELL ASSOCIATES

- 6 Schools
 - 4 Elementary School, 1 Middle School, 1 High School
- Complete Architectural Feasibility Study
 - Design and Educational Program
 - Augmented Facilities Assessments
 - Educational Space Inventory/Needs Assessment/Capacity Analysis
- Cost comparison between alternative projects (review of 5 options)
- Documentation of High Performance Green Standards
- Preliminary energy analysis
- Design and Construction Cost Projection
- Local Support documentation
- Project Timeline
- Project Justification
- Schematic Design Documents



PROJECT DESCRIPTION

Stage I Options to investigate:

1. Maintain current grade alignment and construct additions as necessary
2. Centralize Pre-K and Kindergarten and construct additions as needed
6. Construct new Middle School for grades 5-8, convert all elementary schools to Pre-K-4 and demo existing Middle School
7. Renovate and construct new addition for Middle School, convert all elementary schools to Pre-K-4
8. Renovate and construct new addition for Middle School, convert all elementary schools to Pre-K-4, close 1 elementary school



STAGE I SYNOPSIS

- ☒ Facility round table discussion and middle school walk-through (on-going)
- ☒ Educational space surveys
- ☒ Capacity analysis/space inventory (in progress)
- ☐ Cost estimate
- ☐ Project definition
- ☐ Project timeline (dependent on project definition)



Barrington Public Schools
Facilities Conditions Assessment
Detailed Project Inventory by Building and System

DRAFT

Building: Hampden Meadows

<i>System</i>	<i>Subsystem</i>	<i>Sub-Subsystem</i>	<i>Location</i>	<i>Description</i>	<i>Estimated Cost</i>	<i>Priority</i>
<u>Exterior Shell</u>						
186	Openings	Exterior Doors	Main Entry	Replace door and window wall system at main entry	\$27.0	1
158	Openings	Exterior Doors		Paint exterior doors, frames and railings	\$5.0	1
193	Openings	Exterior Doors		Replace door/window wall systems in lobby east of multi-purpose room	\$20.0	3
164	Openings	Louver		Replace (2) broken tunnel vents	\$0.5	1
160	Openings	Painting		Paint exterior of vestibule adjacent to room 21	\$0.7	1
184	Openings	Windows	Mulri-purpose Room	Replace window wall in multi-purpose room	\$30.0	1
188	Openings	Windows	Kitchen	Install screens on kitchen windows	\$0.4	1
195	Openings	Windows		Repair windows with blown seals and plexiglass in door in vestibule adjacent to room 24; replace broken window in room 22	\$1.6	1
196	Openings	Windows		Recaulk perimeter of windows	\$10.0	3
197	Roof	Gutters		Repair fascia wrapping at scupper above computer room	\$0.2	1
187	Roof	Leaders		Repair selected roof leaders	\$0.7	1
161	Roof	Openings	Roof	Replace kalwal skylight system over library	\$75.0	2
851	Walls	Exterior Masonry		Repair and repoint chimney	\$5.0	1
163	Walls	Exterior Masonry		Caulk perimeter of unit ventilator louvers	\$0.9	1
162	Walls	Exterior Masonry		Repair, recaulk, and repoint exterior masonry	\$5.0	2
Exterior Shell Subtotal					\$182.0	
<u>Interior Shell</u>						
180	Ceilings	Acoustical		Replace stained and broken ceiling tiles throughout	\$1.0	1
167	Ceilings	Acoustical		Replace acoustical ceiling tiles and grids in original building	\$160.0	2
171	Doors	Wood Doors		Refinish wood doors that are not on corridors throughout original building	\$2.3	2
179	Floor	Vinyl		Repair broken vinyl floor tile in corridor and vestibule of addition	\$0.5	2
166	Floor	Vinyl		Replace VAT floor tile throughout original building	\$128.0	2
192	Furnishings	Specialty Furniture	15	Remove abandoned divider track in classroom 15	\$3.0	1



Building Solutions

FACILITIES DISCUSSION

Page 1 of 3

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 1/22/2010
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Barrington School District - Facilities Analysis						
	Elementaries			Secondary		
Building	SES	NES	PES	HMES	BMS	BHS
Grades	K-3	K-3	K-3	4-5	6-8	9-12
Sq. ft.	29,300	34,000	36,000	46,500	147,000	189,000
capacity	350	475	475	550	950	1,200
enrollment 10	272	368	344	560	779	1,144
year built	1968	1954	1953	1955	1950	1949
nat gas heating (yes or no)	Y	Y	Y	Y	Y	Y
insured value						
ASSET CONDITION WORKSHEET	(1=worst, 10=best)					
Envelope						
1- Roof	10	10	10	10	2	7
2- Exterior Openings(w&d)	5	8	8	8	4	7
3- Exterior Walls	2	7	7	7	5	6
Elec+LS						
4- Ext Lights	9	7	8	8	7	10
5- Electric Service	10	3	3	8	2	2/8
6- Interior Lights	10	8	8	9	7	9
7- Fire Alarm	7-8	10	7-8	8	9	9
8- Fire Protection(sprinkler)	n/a	n/a	n/a	n/a	n/a	10
HVAC						
9- Boiler, Furnace	8	3	3	8-9	6	8/4
10- AC/AHU's	n/a	8	8	8	4	6
11- Controls & Burners	9	9	9	9	4	7
12- Fuel systems	9	7	7	7	9	9
Interior						
13 - Floors	8	3	3	4	3	8
14- Ceiling & Walls, Paint	7-8	7	7	6	4-5	8
15- Plumbing	7	6-7	6-7	6	5	7
Grounds						
16- Playgrounds	8-9	10	8	6	n/a	n/a
17- Fields	8	7	8	5	8	8
18- Sidewalks	8	7	8	10	7	8
19- Roadways & lots	3	7	7	7	5-6	10
20- Sewerage	9	9	8	9	5-6	9
Building Key				Rating System		
Sowams Elementary School	SES			1 – Worst Condition		
Nayatt Elementary School	NES			4 – Or Below, Items To Be Replaced		
Primrose Elementary School	PES			5-7 – May Require Replacement, More Input Needed		
Hampden Meadows Elementary School	HMES			8 – Or Above, Items To Retain		
Barrington Middle School	BMS			10 – Best Condition		
Barrington High School	BHS					



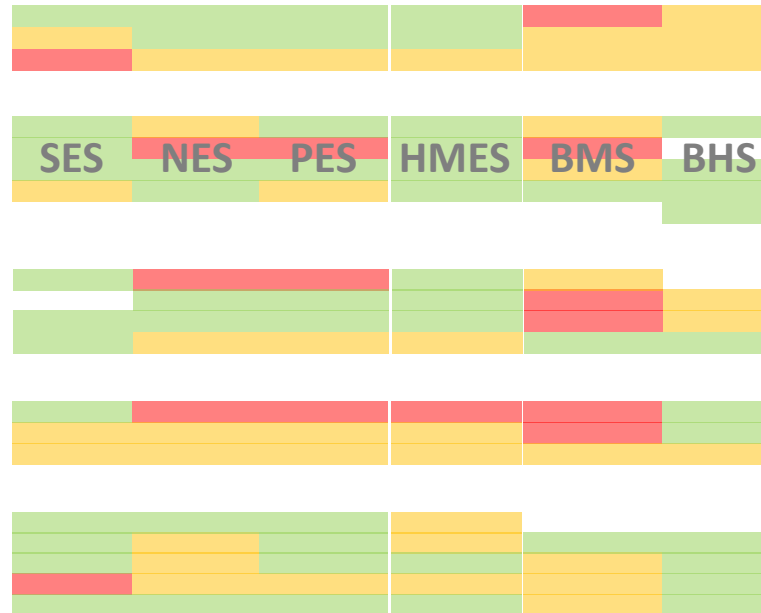
FACILITIES DISCUSSION

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Barrington Middle School	BMS			10 – Best Condition		
Barrington High School	BHS					



FACILITIES DISCUSSION

- 1-4: To be replaced
- 5-7: May require replacement, more input needed
- 8-10: In good condition, to be retained



FACILITIES DISCUSSION



BARRINGTON MIDDLE SCHOOL WALK-THROUGH PHOTOS

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BARRINGTON MIDDLE SCHOOL WALK-THROUGH PHOTOS

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SURVEY

Project:	Barrington Educational Program	Project No.:	11056
Re:	Progress Update	Meeting Date:	TBD
Prepared by:	Keelia Kentor	Meeting Time:	TBD
Distribution:	(MF)		

Please respond to the questions below with regard to your particular school building.

1. What are the hours of operation for your school for the following:
 - a. Instructional day
 - b. Extracurricular Activities
 - c. Public access
2. Are there programs or curricula that you are unable to deliver because of building deficiencies? Please describe.
3. What are your typical class sizes? (number of students per class)
4. What about your school building is standing in the way of delivering your desired curriculum?
5. Are there any special programs that are hosted ONLY by your school in the Bristol Warrant School District? Please describe.
6. Are there programs in your school that require smaller class spaces? Please describe.
7. Please describe any other issues (ADA accessibility, day-to-day operations, security) that you believe are caused by inadequate facilities.
8. Using the emergency escape route plan for your building, please identify CURRENT usage for each room on the plan. Please be specific regarding the grade, function, program (including any special programs, such as SPED, ELL, etc.) In addition to classrooms and educational space, please include notes regarding support (such as custodial spaces), administrative, art & music, vocational/technical, health and physical education, auditorium/drama, dining and food service and medical spaces. (Please note, if you do not have a current emergency route map for your building, SMMA will be happy to provide a floor plan to enable completion of this exercise.)

kw/kw/Document?

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Cambridge, Massachusetts 02138
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400 Westminster Street
Providence, Rhode Island 02903
T 401.421.0447 F 800.648.4920

Survey Questions

- Hours of operation
- Class size
- Building deficiencies
- Types of spaces needed
- Room uses/program



EDUCATIONAL SURVEYS

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Common Issues

Elementary Schools

- Limited space for staff (i.e., conference rooms, staff work rooms, offices, etc.)
- Lack of private, smaller spaces for special ed., counseling and other special services
- “Cafegymatorium” – too many uses, hard to schedule
- Lack of ADA accessibility
- General lack of space/overcrowding
- General lack of storage



Common Issues

Middle School

- Built as junior high, but functions as team-based middle school – lacks larger meeting spaces to accommodate full teams
- Water infiltration into abandoned basement
- Mold
- Lack of bathrooms
- ADA issues
- Multiple citations from Fire Marshal



Common Issues

High School

- Lack of private meeting spaces
- Lack of storage
- Need to expand, renovate TV Production Room
- Need to expand, renovate Kitchen
- Undersized science rooms




EDUCATIONAL SURVEYS

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School	Grades	(A) Existing Building GSF	(B) Building GSF Based on RIDE GSF/Student Standard = D X H	(C) Deviations = A - B	(D) Existing SY10-11 Enrollment	(E) Capacity based on RIDE SF Standards = A ÷ H	(F) Deviation = D - E	(G) Existing GSF/ Student = A ÷ D	(H) RIDE Recommended GSF/Student	(I) Deviation = G - H
Barrington HS	9-12	189,000	211,640	-22,640	1,144	1,022	122	165	185	-20
Barrington MS	6-8	147,000	124,640	22,360	779	919	-140	189	160	29
Hampden ES	4-5	46,500	84,000	-37,500	560	310	250	83	150	-67
Nayatt ES	K-3	34,000	63,664	-29,664	368	197	171	92	173	-81
Primrose ES	K-3	36,000	60,200	-24,200	344	206	138	105	175	-70
Sowams ES	K-3	29,300	48,960	-19,660	272	163	109	108	180	-72
Totals		481,800	593,104	-111,304	3,467	2,815	652			

 Existing Conditions Data

 RIDE Standard

 Calculated Deviation




CAPACITY ANALYSIS

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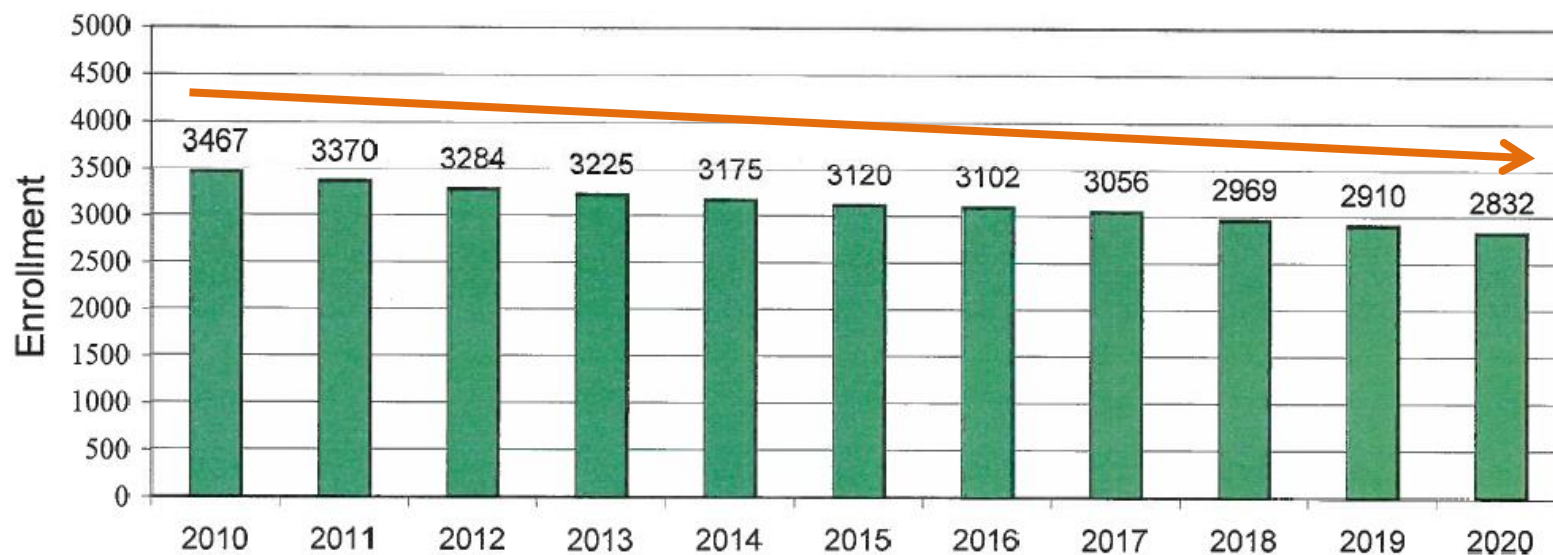


CAPACITY ANALYSIS

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Barrington, RI Projected Enrollment

PK-12 TO 2020 Based On Data Through School Year 2010-11



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CAPACITY ANALYSIS
NESDEC Report

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Barrington, RI Projected Enrollment

School District: Barrington, RI

11/22/2010

Enrollment Projections By Grade*																				
Year	Births		School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2005	155		2010-11	0	177	241	255	277	266	294	255	235	288	277	265	302	297	38	3467	3467
2006	135		2011-12	0	157	229	252	261	284	269	300	258	238	286	277	263	296	0	3370	3370
2007	117		2012-13	0	136	203	239	258	267	287	274	304	261	237	286	274	258	0	3284	3284
2008	114		2013-14	0	132	176	212	244	264	270	292	278	308	260	237	283	269	0	3225	3225
2009	133	(est.)	2014-15	0	155	171	184	217	250	267	275	296	281	306	260	235	278	0	3175	3175
2010	131	(est.)	2015-16	0	152	201	179	188	222	253	272	279	300	279	306	258	231	0	3120	3120
2011	128	(est.)	2016-17	0	146	197	210	183	193	224	258	276	282	298	279	303	253	0	3102	3102
2012	124	(est.)	2017-18	0	144	189	206	215	188	195	228	261	279	280	298	276	297	0	3056	3056
2013	126	(est.)	2018-19	0	146	187	198	211	220	190	199	231	264	277	280	295	271	0	2969	2969
2014	128	(est.)	2019-20	0	149	189	195	202	216	222	194	202	234	263	277	277	290	0	2910	2910
2015	127	(est.)	2020-21	0	148	193	198	199	207	218	226	197	204	233	263	274	272	0	2832	2832

*Projections should be updated on an annual basis.

Based on an estimate of births

Based on children already born

Based on students already enrolled

Projected Enrollment in Grade Combinations*									
Year	K-3	K-5	4-5	K-8	5-8	6-8	7-8	7-12	9-12
2010-11	950	1510	560	2288	1072	778	523	1664	1141
2011-12	899	1452	553	2248	1065	796	496	1618	1122
2012-13	836	1390	554	2229	1126	839	565	1620	1055
2013-14	764	1298	534	2176	1148	878	586	1635	1049
2014-15	727	1244	517	2096	1119	852	577	1656	1079
2015-16	720	1195	475	2046	1104	851	579	1653	1074
2016-17	736	1153	417	1969	1040	816	558	1691	1133
2017-18	754	1137	383	1905	963	768	540	1691	1151
2018-19	742	1152	410	1846	884	694	495	1618	1123
2019-20	735	1173	438	1803	852	630	436	1543	1107
2020-21	738	1163	425	1790	845	627	401	1443	1042

See "Reliability of Enrollment Projections" section of accompanying letter.

Projections are more reliable for Years 1-5 in the future than for Years 6 and beyond.

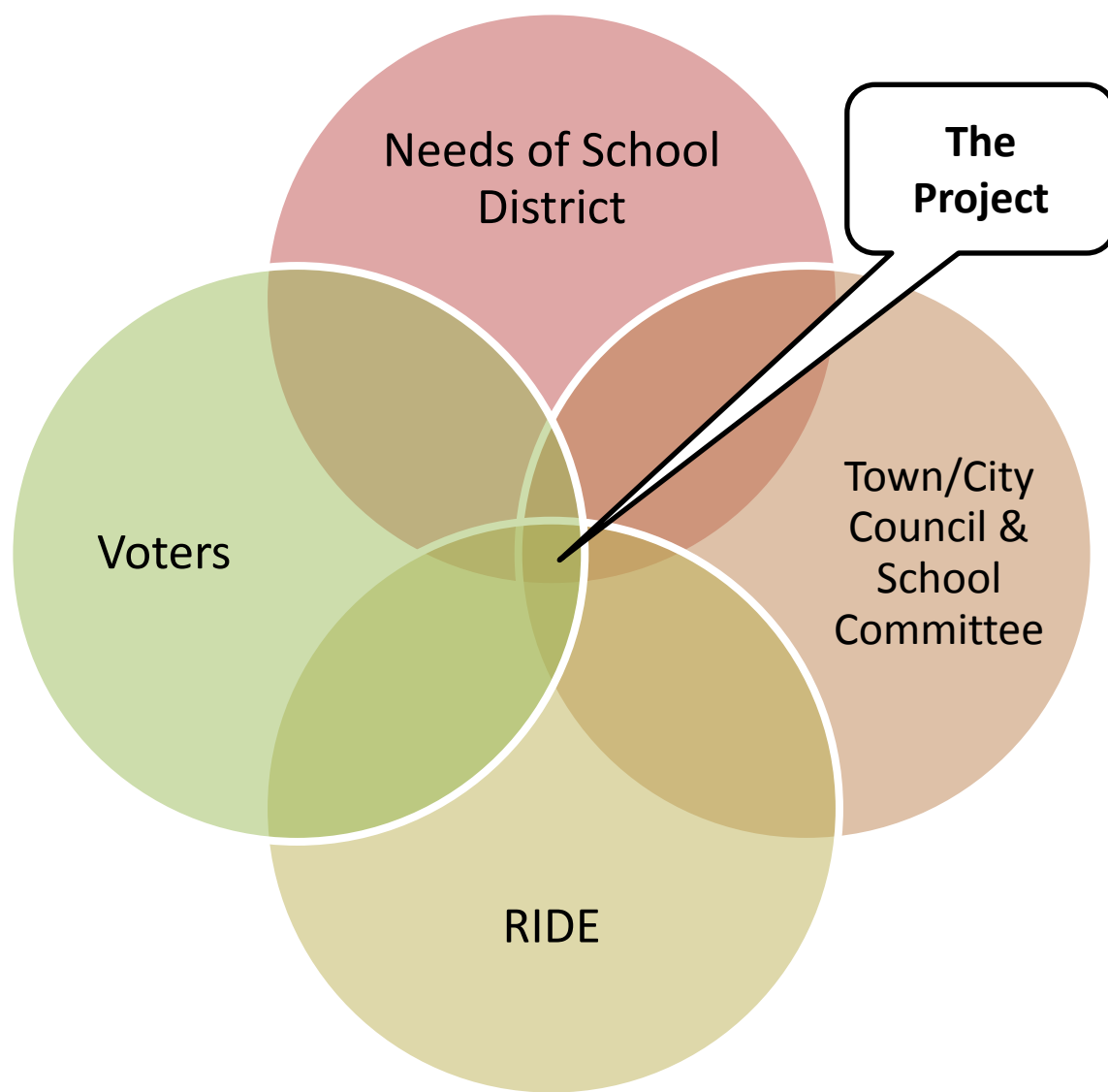
Projected Percentage Changes			
Years	K-12	Diff.	%
2010-11	3467	0	0.0%
2011-12	3370	-97	-2.8%
2012-13	3284	-86	-2.6%
2013-14	3225	-59	-1.8%
2014-15	3175	-50	-1.5%
2015-16	3120	-55	-1.7%
2016-17	3102	-18	-0.6%
2017-18	3056	-46	-1.5%
2018-19	2969	-87	-2.8%
2019-20	2910	-59	-2.0%
2020-21	2832	-78	-2.7%
K-12 Change	-635		-18.3%

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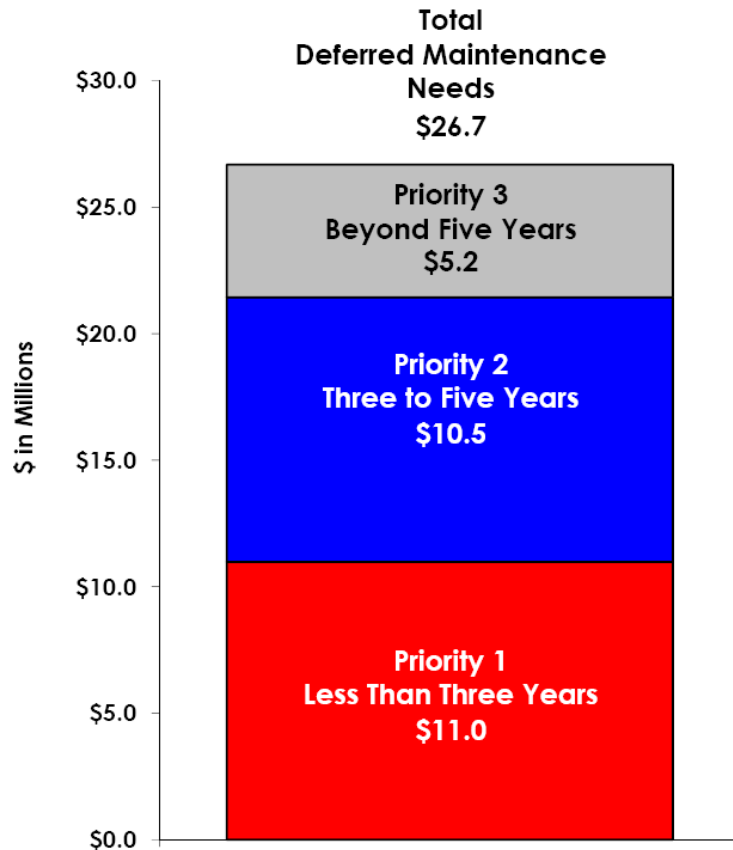
CAPACITY ANALYSIS
NESDEC Report

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PROJECT DEFINITION

Facilities Conditions Assessment Deferred Maintenance Needs



Priority 3 - Deferrable - Projects recognized for the impending nature of their existence. However, at this time, these issues can be deferred until a later date.

Priority 2 - Important - Projects improve the quality of the School environment for faculty, staff and students.

Priority 1 - High Priority - Projects address issues of asset protection, quality of space, physical environments or regulatory concerns

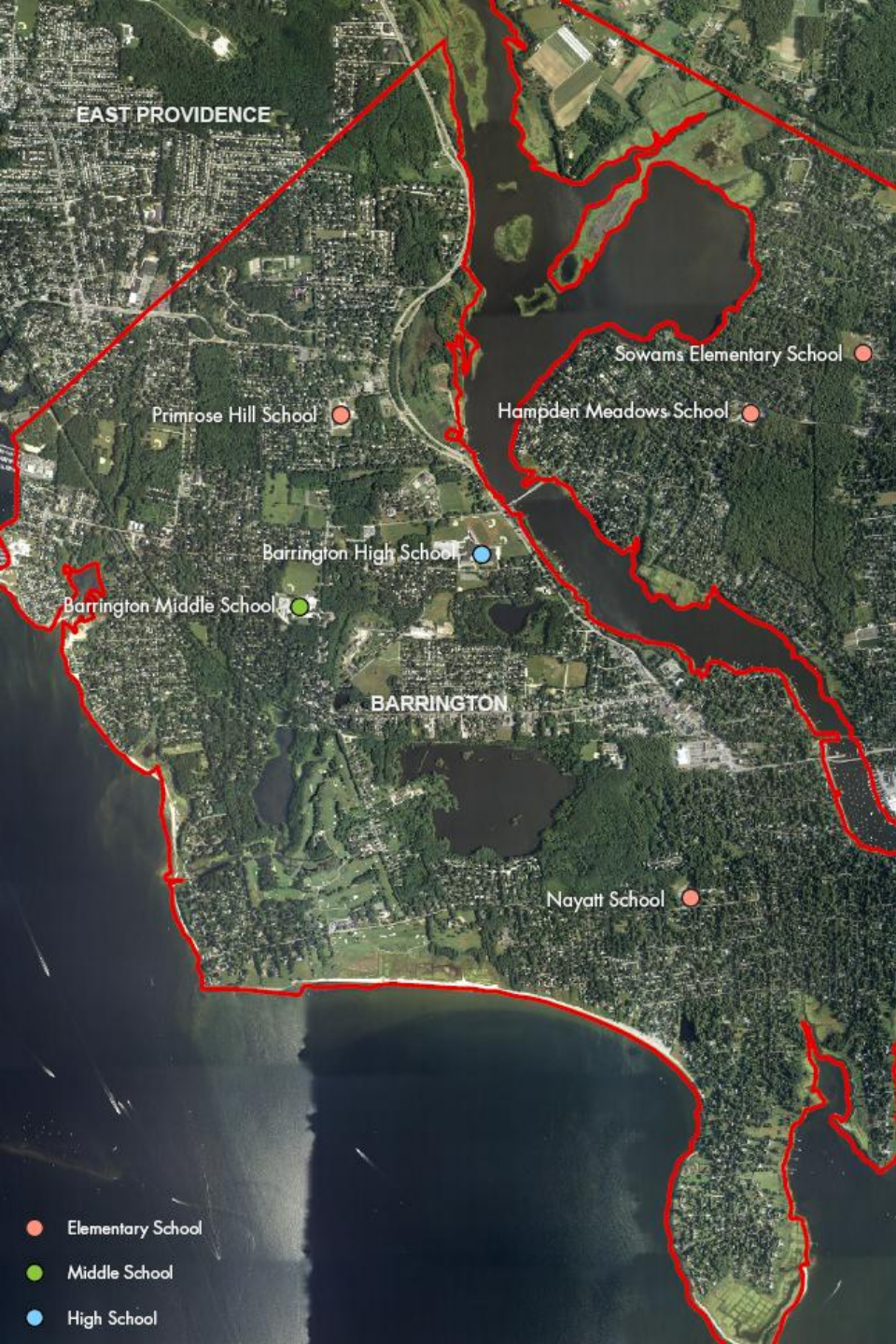


SBS FACILITES ASSESSMENT

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- RIDE 3-year moratorium on school construction
- ONLY allows funding for **emergency health/safety-related projects** for next 18 months
- May impact what the project is and how it is phased





Questions?



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