



PELHAM PUBLIC SCHOOLS

# Capacity Study, Building Conditions Survey & Five Year Plan BOE Presentation September 18, 2024

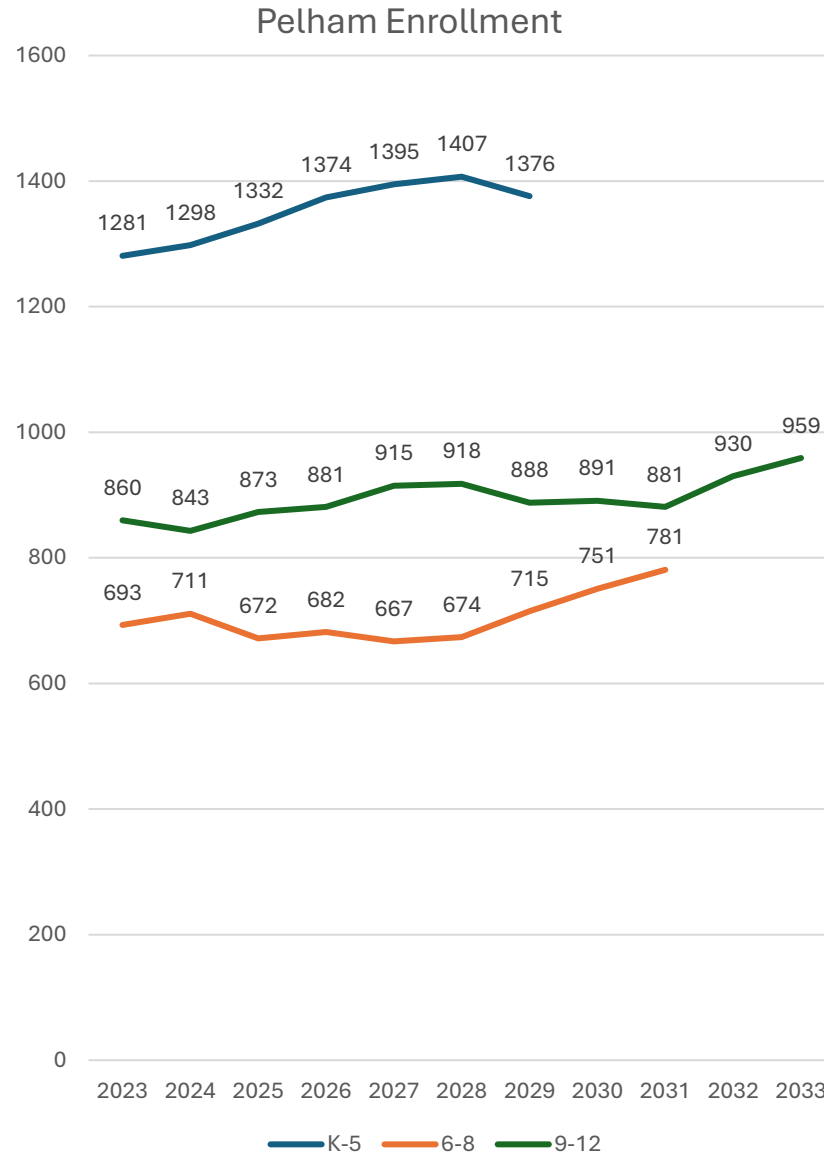


1. Do Pelham's School Buildings adequately accommodate the District's existing and projected enrollment?
2. Are the District's School buildings in satisfactory condition?
3. What is needed to bring the overall facilities into overall good condition?
4. What other improvements should be considered to deliver the District's educational programs?



## Capacity -

- Enrollment
- # of Assignable Classrooms
- Size of Classrooms
- Class Size (# of students)
- Program Offerings (Secondary)



Projections based on Western Suffolk BOCES study completed in 2023 - 2024



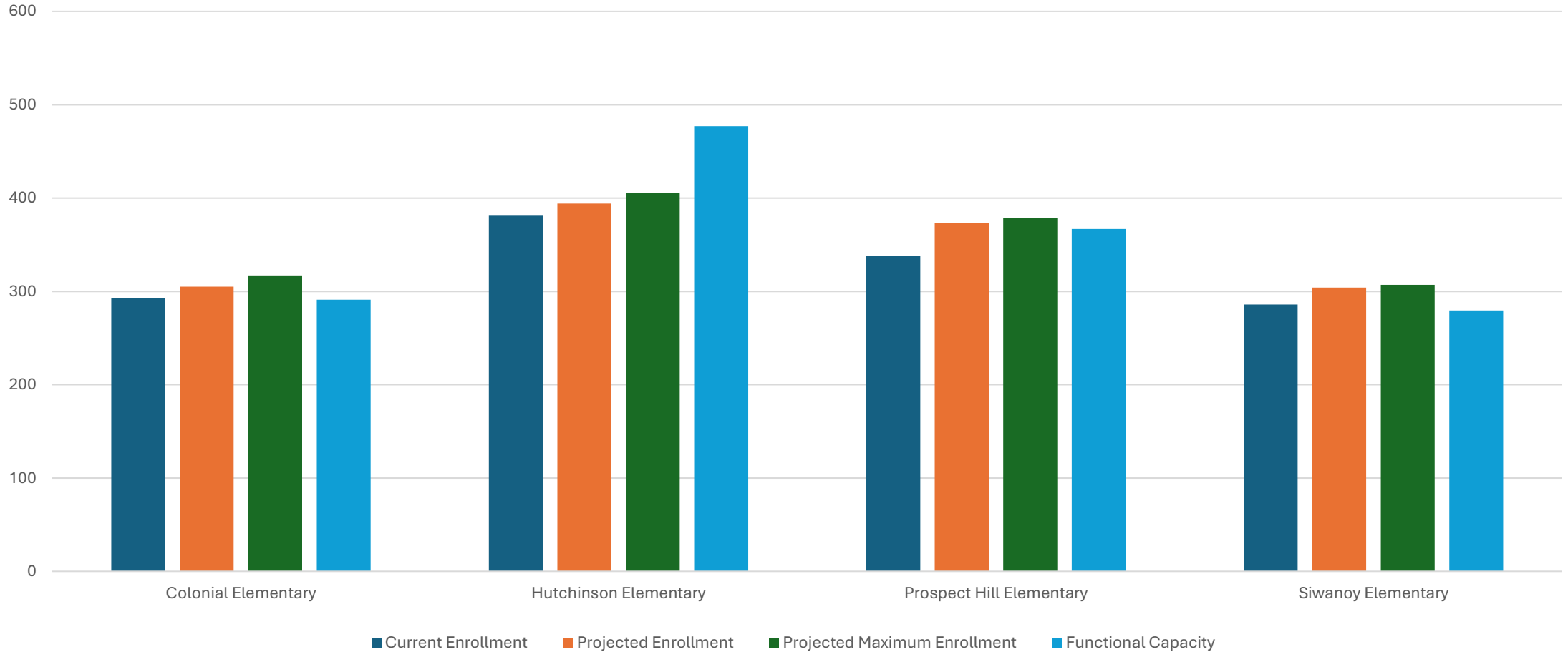
# PELHAM PUBLIC SCHOOLS

	2024 Enrollment <sub>5</sub>	2024 Enrollment <sub>1</sub>	Projected Enrollment <sub>1</sub>	Projection Year <sub>2</sub>	Max. Enrollment (10 years) <sub>1</sub>	Max. Enrollment Year <sub>1</sub>	Class Size <sub>3</sub>	Functional Capacity <sub>4</sub>	Max. shortfall
Colonial Elementary	294	293	305	2029	317	2028	K-3-23,4-25, 5-26	291	26
Hutchinson Elementary	369	381	394	2029	406	2028	K-3-23,4-25, 5-26	477	-71
Prospect Hill Elementary	336	338	373	2029	379	2028	K-3-23,4-25, 5-26	367	12
Siwanoy Elementary	286	286	304	2029	307	2027	K-3-23,4-25, 5-26	280	27
	Subtotal								
	Elementary	1298	1376		1409				
Pelham Middle School	706	706	751	2030	784	2032	28	861	-77
							26	818	-34
							24	774	10
Pelham High School	890	843	959	2033	959	2033	28	891	68
							26	851	108
							24	811	148

1 - Figures obtained from Western Suffolk BOCES report - 2023-24  
 2 - Projection Years based on NYSED Capital Project Planning Guidelines (5 yrs. for Grades K-5, 10 yrs. for Grades 9-12)  
 3 - Class size listed is for general classroom instruction  
 4 - Figures calculated by KG+D based on square foot per student for a full sized room applied to the actual size of the room.  
 5 - Based on 2024 interviews with building principals.

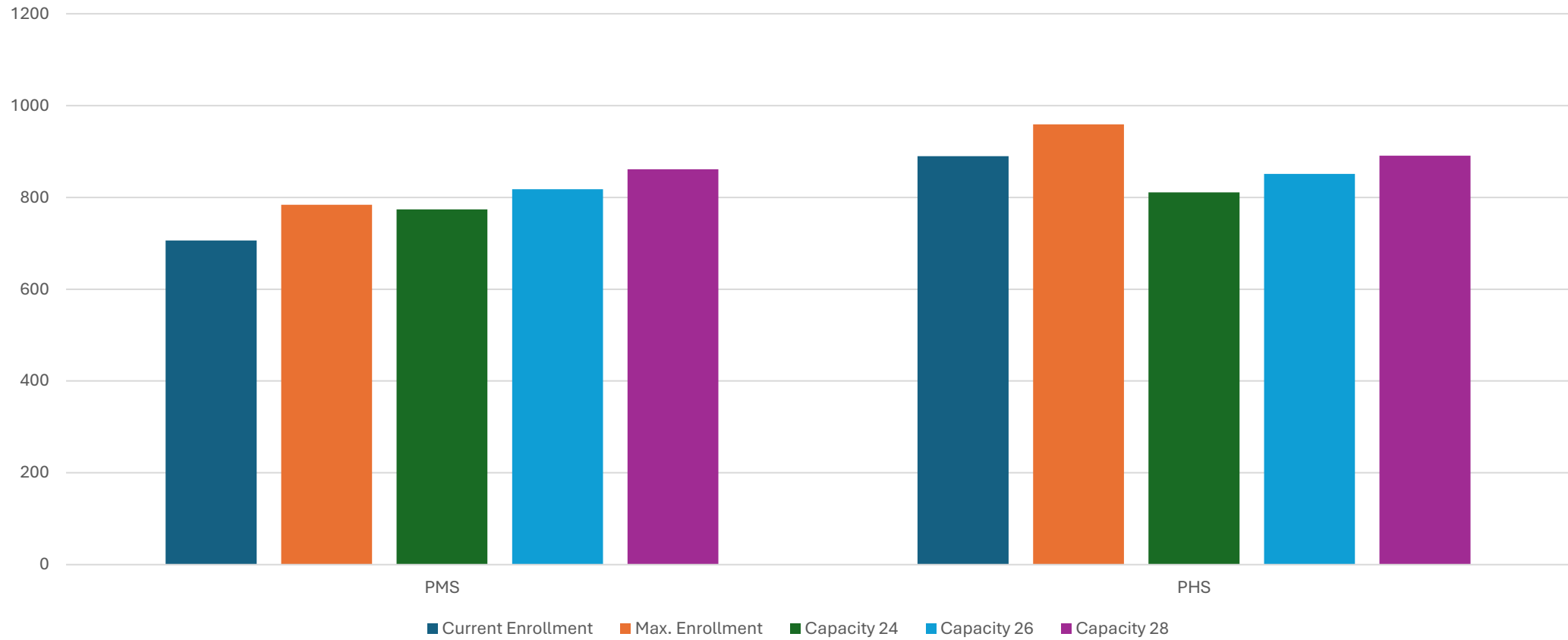


### Pelham Elementary Schools Capacity Metrics



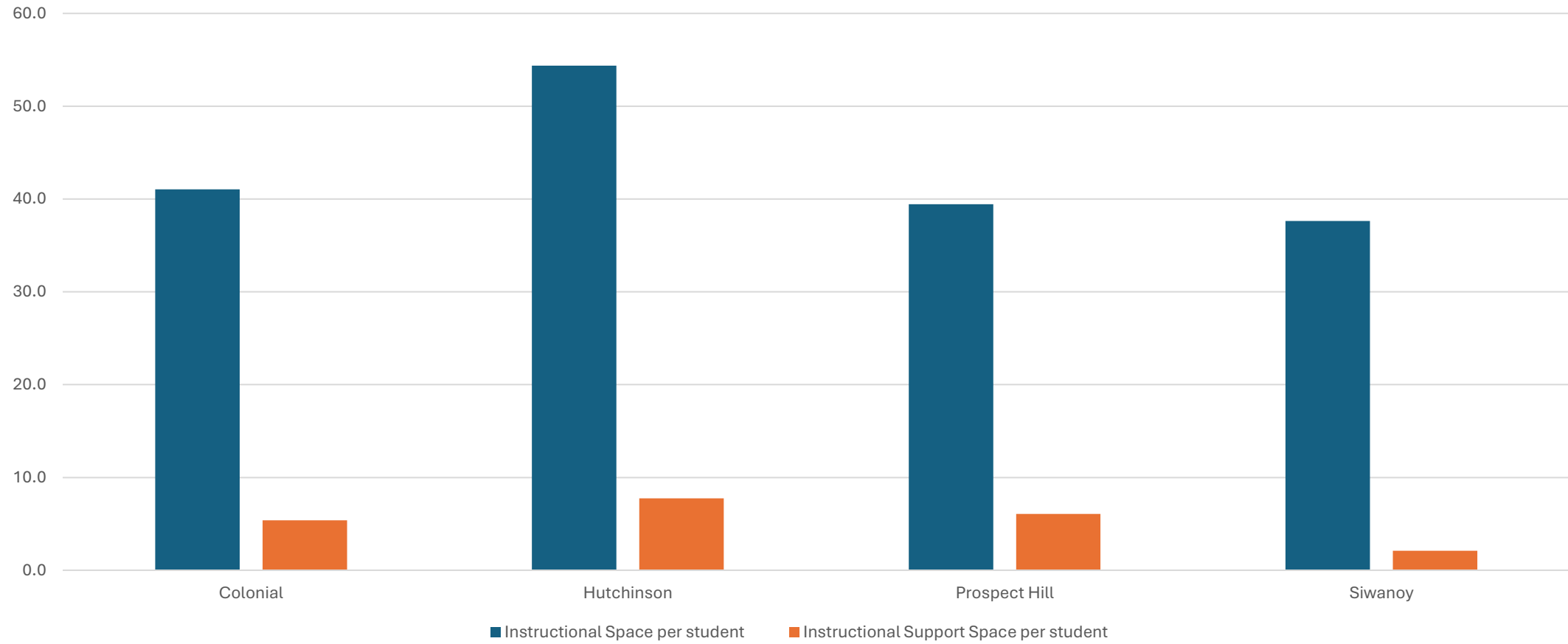


### Pelham Secondary Schools Enrollment and Capacity





### Pelham Elementary Schools Instructional Space Metrics







## Building Conditions Survey -

- Assessment of Existing Conditions
- Identify Scope and costs to bring existing facilities into overall “good” condition.
- Primarily the work being recommended is due to the age of the existing facilities which have been well maintained.





Building Conditions Survey - Heating Plant, Ventilation and Air Conditioning Options  
Major Issues @ Colonial, Siwanoy, Prospect Hill and the Middle / High School

1. Replace Steam Boiler with New Steam Boilers
2. Replace Steam Boilers with New High Efficiency Hot Water Boilers including new piping.
3. Install Mechanical Ventilation to introduce filtered fresh air in accordance with current codes. This will result in improved indoor air quality. Provide mechanical cooling of spaces delivered by new ventilation systems. New Ventilation and Cooling will impact electrical service and distribution.

	Colonial	Siwanoy	Prospect Hill	High School	Annex
Replace Steam Boilers	\$1,700,000	\$1,700,000	\$1,850,000	\$2,500,000	
New Hot Water Boilers &...	\$2,900,000	\$2,900,000	\$3,500,000	\$7,000,000	
Ventilation and Air Conditioning	\$2,700,000	\$3,000,000	\$2,400,000	\$9,500,000	\$1,400,000

Costs above do not include related General Construction related to HVAC installations.



Building Conditions Survey - Heating Plant, Ventilation and Air Conditioning Options  
Major Issues @ Colonial, Siwanoy, Prospect Hill and the Middle / High School

1. The proposed systems utilize air source heat pumps which are both an energy efficient and carbon free method of providing cooling and heating for ventilation air.
2. Ground source heat pump systems (aka geothermal) would involve drilling wells under playing fields or parking lots and add significant initial costs as well as costs related to restoring fields or parking lots. This would eliminate some of the costs related to a new hot water boiler but still include the piping and ventilation equipment within the building. An order of magnitude budget for this additional first cost is provided below.

	Colonial	Siwanoy	Prospect Hill	High School
Net Add for Ground Source Heat Pump Systems	\$900,000	\$1,000,000	\$1,400,000	\$3,500,000

Costs above do not include related Site Restoration & General Construction related to HVAC installations.



Building	Priority 1	Priority 2	Priority 3	Priority 4	Total (Priority 1-4)
COLONIAL ES	\$ -	\$ -	\$ 5,655,871	\$ 8,469,458	\$ 14,125,329
SIWANOY ES	\$ -	\$ -	\$ 6,491,631	\$ 9,388,628	\$ 15,880,259
PROSPECT ES	\$ -	\$ -	\$ 17,049,420	\$ -	\$ 17,049,420
HUTCHINSON ES	\$ -	\$ -	\$ -	\$ 183,193	\$ 183,193
MIDDLE SCHOOL	\$ -	\$ -	\$ 2,094,962	\$ 38,165	\$ 2,133,127
HIGH SCHOOL	\$ -	\$ 91,596	\$ 40,153,307	\$ 7,492,583	\$ 44,745,339
GLOVER FIELD	\$ -	\$ -	\$ -	\$ 2,381,506	\$ 1,862,460
Total	\$ -	\$ 91,596	\$ 71,445,191	\$ 27,953,533	\$ 95,979,127



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All Priorities (1-4) by Work Type	Site	Building Envelope	Roof (Priority 1 - 2)	Roof (Priority 3 - 4)	MEP (HVAC ONLY)	MEP (ALL OTHER MEP)	General Construction (Priority 1 - 3)	General Construction (Priority 4)	Total (Priority 1-4)
COLONIAL ES	\$ -	\$ 1,399,108	\$ -	\$ 68,058	\$ 8,469,458	\$ 228,255	\$ 3,960,451	\$ -	\$ 14,125,329
SIWANOY ES	\$ -	\$ 2,098,026	\$ -	\$ -	\$ 8,091,013	\$ 233,571	\$ 4,160,034	\$ 1,297,615	\$ 15,880,259
PROSPECT ES	\$ -	\$ 2,000,338	\$ -	\$ 2,289,909	\$ 8,091,013	\$ 242,593	\$ 4,425,567	\$ -	\$ 17,049,420
HUTCHINSON ES	\$ -	\$ 183,193	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 183,193
MIDDLE SCHOOL	\$ -	\$ 38,165	\$ -	\$ 2,094,962	\$ -	\$ -	\$ -	\$ -	\$ 2,133,127
HIGH SCHOOL	\$ 4,500,435	\$ 5,628,216	\$ -	\$ 3,022,680	\$ 27,326,252	\$ -	\$ 4,267,756	\$ -	\$ 44,745,339
GLOVER FIELD	\$ 1,511,340	\$ -	\$ -	\$ 274,789	\$ 45,798	\$ -	\$ -	\$ -	\$ 1,862,460
Total	\$ 6,011,775	\$ 11,347,045	\$ -	\$ 7,750,399	\$ 52,054,066	\$ 704,418	\$ 16,813,807	\$ 1,297,615	\$ 95,979,127



PELHAM PUBLIC SCHOOLS

**Overall Condition:** Satisfactory

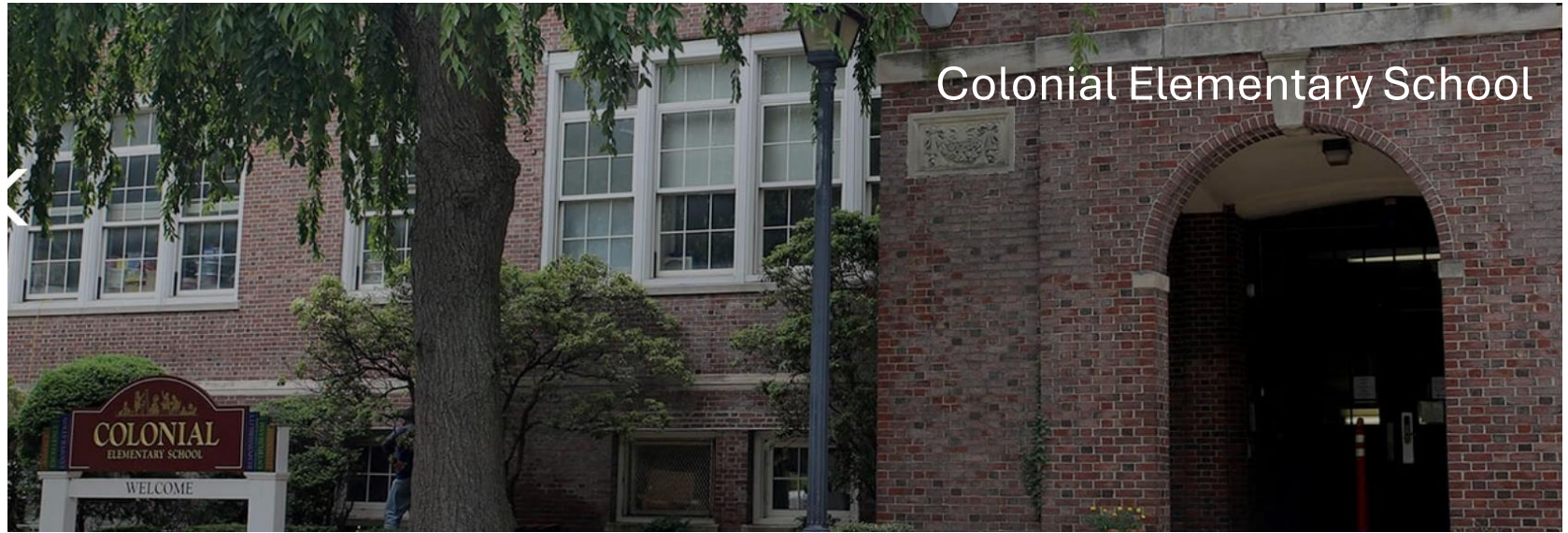
Grade Levels – K-5

Current Enrollment - 294

Functional Capacity - 291

Projected Enrollment – 317

Overall Square Footage – 32,570



### **Infrastructure Summary**

Heating System – Convert from Steam to Hot water

New Ventilation and Air Conditioning

New Electrical related to HVAC work

General Construction Work related to HVAC – New piping pathways and casework surrounding radiators.

Masonry Restoration – Repointing and Repairs

Roof – Cupola Repair

Windows – Replacement in older section of building

Classroom Interiors – dated appearance and deteriorated casework

Accessibility – Upgrade interior toilet rooms

Security – Improve Secure Vestibule & additional cameras

**Capacity / Program Related Improvements** – 2 story addition with classrooms above cafeteria



PELHAM PUBLIC SCHOOLS

**Overall Condition:** Excellent  
Grade Levels – K-5  
Current Enrollment - 369  
Functional Capacity - 477  
Projected Enrollment – 406  
Overall Square Footage – 56,475



**Infrastructure Summary** – The building is in excellent condition but should be monitored over the next 5 years to identify emerging concerns.

Roof – Consider adding green roof over gymnasium as per original design intent

**Capacity / Program Related Improvements** – May be able to assign additional capacity to other District initiatives.



PELHAM PUBLIC SCHOOLS

**Overall Condition:** Satisfactory

Grade Levels – K-5

Current Enrollment - 336

Functional Capacity - 367

Projected Enrollment – 379

Overall Square Footage – 53,400



Prospect Hill Elementary School

### **Infrastructure Summary**

Heating System – Convert Steam to Hot Water

New Ventilation and Air Conditioning

Electrical work related to HVAC work

General Construction Work related to HVAC – piping pathways, radiator covers and casework.

Masonry Restoration

Roof – Slate Roof needs replacement

Windows – Windows need to be replaced

Classroom Interiors - dated appearance and deteriorated casework

Site Drainage – New waterproofing, storm drainage on east side of building

Security – Additional Cameras

**Capacity / Program Related Improvements** – Create informal learning “nooks” in corridors





PELHAM PUBLIC SCHOOLS

**Overall Condition:** Satisfactory

Grade Levels – K-5

Current Enrollment - 286

Functional Capacity - 280

Projected Enrollment – 307

Overall Square Footage – 36,250



### **Infrastructure Summary**

Heating System – Convert Steam to Hot Water

New Ventilation and Air Conditioning

New Electrical related to HVAC work

General Construction Work related to HVAC – piping pathways and casework enclosing radiators

Masonry Restoration – repairs -

Windows – Replace windows -

Classroom Interiors - dated appearance and deteriorated casework

Accessibility – New addition with elevator (see below) and new stair lifts or another elevator at south end

Security – Improve secure entrance and add cameras

**Capacity / Program Related Improvements** – Two story addition with elevator – New Kindergarten and Fifth Grade Classrooms and a separate Cafeteria facing the playground.



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**Overall Condition:** Satisfactory

Grade Levels – 6-8

Current Enrollment - 706

Functional Capacity - 861

Projected Enrollment – 784

Overall Square Footage – 61,400



### **Infrastructure Summary**

Heating System – Boiler Plant in Annex also serves the Middle School

Ventilation and Air Conditioning – The MS has air conditioning. Provide AC and ventilation to the Annex and related electrical work

Masonry Restoration – repairs

Roof – The roof is past its expected useful life

Security - Improvements to create a secure visitor entrance from Franklin Place that could be shared with the HS & additional cameras

**Capacity / Program Related Improvements** - A three story addition over the current location of the breezeway with classrooms on the second and third levels over a cafeteria on the ground level could provide instructional space for the Middle School so the rooms they currently use in the high school can return to use as high school rooms.



PELHAM PUBLIC SCHOOLS

**Overall Condition:** Satisfactory

Grade Levels – 9-12

Current Enrollment - 890

Functional Capacity - 891

Projected Enrollment – 959

Overall Square Footage – 151,000

### **Infrastructure Summary**

Heating System – Convert from Steam to Hot Water

New Ventilation and Air Conditioning and related Electrical Service

General Construction Work related to HVAC – piping pathways, chases, casework and radiator enclosures.

Masonry Restoration – repairs need to continue

Roof – Portions of the roof need to be replaced

Windows – Windows need to be replaced

Classroom Interiors - dated appearance and deteriorated casework

Security – See MS for new secure visitor entrance – add cameras

**Capacity / Program Related Improvements** - Renovate / Update Science rooms in the Annex, add classroom space, dedicated cafeteria, renovate for District Office



Pelham High School



## POSSIBILITIES TO EXPLORE...???

**Colonial** – Addition to provide a dedicated cafeteria space and full sized classrooms...

**Siwanoy** – Addition to provide for elevators, a dedicated cafeteria space and full sized classrooms...

**Middle / High School** – Additional classroom space to accommodate increase in enrollment and additional student commons / cafeteria space

**District Office** – Renovate space in MS/HS for District Office and construct new classrooms to compensate for displaced classroom space.



PELHAM PUBLIC SCHOOLS

## Typical Process From Here:

Develop a pre bond prioritization process with input from stakeholders.

Prioritize Infrastructure and Program Improvements

Implement Improvements District-wide

Pre Bond Process – 3 – 6 months

- Public Vote – TBD
- Design and Permitting – 9 – 12 months
- Construction – 12 – 24 months