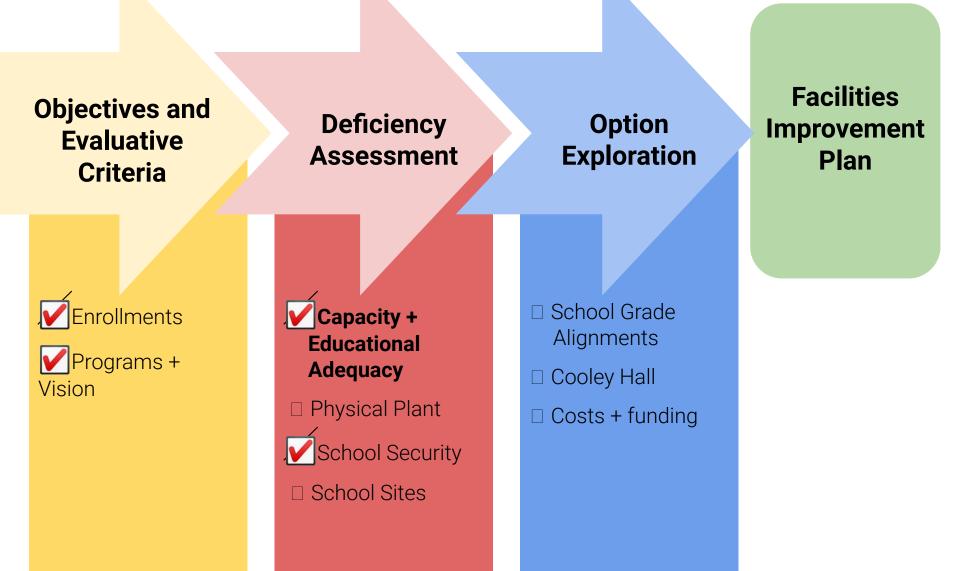
# 2020 Haddonfield School District LONG-RANGE FACILITIES PLAN



### **CAPACITY + EDUCATIONAL ADEQUACY** January 30, 2020

## LRFP | Overview



## LRFP | Enrollment Conclusions

### **Recommended Enrollments for Capacity Planning**

Plan for 2,786 students (86 student increase, 35 students from affordable housing).

- → Incorporate NJDOE-prescribed capacity utilization factors to accommodate additional growth without compromising program delivery
- --> Reset existing school building capacities to consider program accommodations

	PK-5	6-8	9-12	PK-12
10/2019 Enrollments	1,217	820	859	2,696
<b>Modified Cohort-Survival Projection</b> (86 student increase from 10/2019)	1,242	686	855	2,782
DOE Prescribed Capacity Utilization Rate	90%	90%	85%	
Maximum Capacity with 100% Utilization Rate	1,364	755	983	3,102

#### Proposed capacity range with adequate program accommodations:

Where are Haddonfield's school buildings on the capacity range for existing and projected enrollments?

potential surplus capacity

School Capacity Range room use, class size policies, scheduling overcrowding and/or compromised educational adequacy

flexibility for uncertain enrollments

### NJDOE Facilities Efficiency Standards (FES)

- → Basis for NJDOE's determination of educational adequacy and new construction funding
- → Not updated in almost 20 years

#### **FES Criteria**

Grades	General Classroom Net Square Feet	Students per Classroom	Capacity Utilization Factor	GSF per Student Allowance
PK	950 (incl. toilet rm.)	15	100%	125.00
К	950 (incl. toilet rm.)	21	90%	
1-3	850	21	90%	
4-5	800	23	90%	
6-8	800	23	90%	134.00
9-12	750	24	85%	151.00

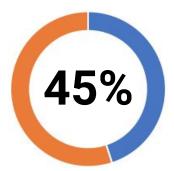
### **Why Educational Adequacy Matters**

Research supports the benefits of modern classroom design.



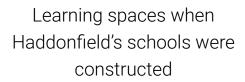
of students reported better grades, better attendance, or improved creativity in newly designed active learning environments.

Source: Mark Fehlandt, Hamline University, "Flexible Classroom Design and Its Effects on Student-Centered Teaching and Learning," August 2017



**increase in academic engagement** can result from improvements to classroom layout such as creating space for independent work or making a clear pathway to access school supplies

ISTE, "Designing Engaging Learning Spaces," January 2016





Learning spaces today













### **Districtwide Issues**

- → Prioritization of capacity over program accommodations
- → Piecemeal educational upgrades
- → Dated furniture unresponsive to program needs and/or not suited for classroom sizes
- → Missing or inadequate specialized classrooms
- Inadequate number of small group instruction and collaboration spaces
- No toilet rooms on select classroom floors and non-compliant classroom toilet rooms
- Minimum accommodations for administration and student services
- → Inadequate and inefficient classroom and building storage

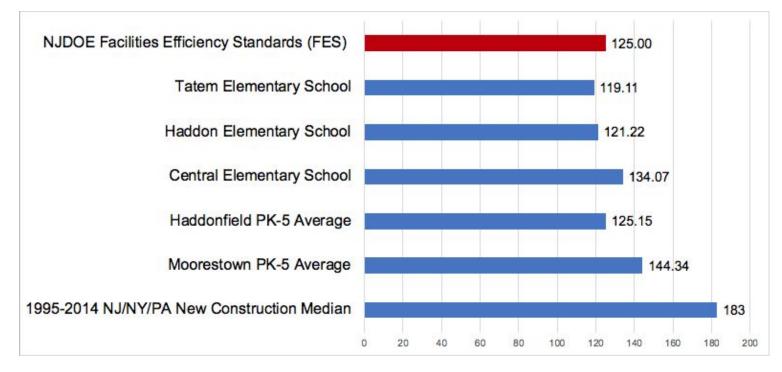
### Haddonfield's Elementary Schools

PK-5	Central	Elizabeth Haddon	J. Fifthian Tatem
10/2019 Enrollment	415	372	429
Construction Years	1947, 1964, 2002	1913, 1952, 1963, 1989, 2002	1923, 1954, 1990, 2002
Total GSF	55,639	45,092	51,099
Total NSF	33,905	29,881	33,133
General Classroom SF	15,538	16,305	18,263
Specialized Space SF	16,328	11,032	12,964
Administrative/ Support SF	2,220	2,544	2,906

### **Elementary Schools: SF/Student**

(based on October 2019 enrollments)

#### Low SF/student: program spaces inadequate to support school enrollments



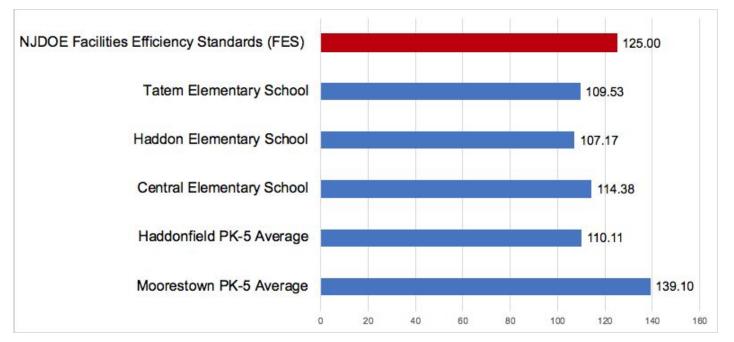
SOURCES: Moorestown LRFP Major Amendment Approval, September 16, 2019 (posted on NJDOE website); "20<sup>th</sup> Annual School Construction Report," School Planning and Management, February 2015

### **Elementary Schools: NJDOE Adjusted SF/Student**

(based on October 2019 enrollments)

NJDOE exclusions:

- --> General classroom SF in excess of FES
- --> Grossing factor SF (circulation, mechanical, etc.) that exceeds 40% of the total SF



SOURCES: Moorestown LRFP Major Amendment Approval, September 16, 2019 (posted on NJDOE website); "20<sup>th</sup> Annual School Construction Report," School Planning and Management, February 2015

### **Elementary Schools: Existing Capacity**

- --> Non-departmentalized organization
- --> Capacity-generating classrooms: "homerooms"
- → Half-day PK/K

DOE LRFP Approval --> Current room assignments (no consideration for educational adequacy)

	Central	Haddon	Tatem	Totals
Number of PK-5 Classrooms	18	18	20	56
Number of Self-Contained SE Clrms.	0	1	0	1
Number of STEM, Art, and Music Clrms. (non-capacity generating)	3	2	4	9
CAPACITY RANGE				
NJDOE FES Class Sizes (K-5: 21-23/clrm.)				
90% utilization	326	329	364	1,019
100% utitilzation	362	365	404	1,131
District Practices (K-5: 25/clrm.)				
90% utilization	424	428	486	1,338
100% utitilzation	471	475	540	1,486

### **Elementary Schools: Existing Capacity and Enrollments**

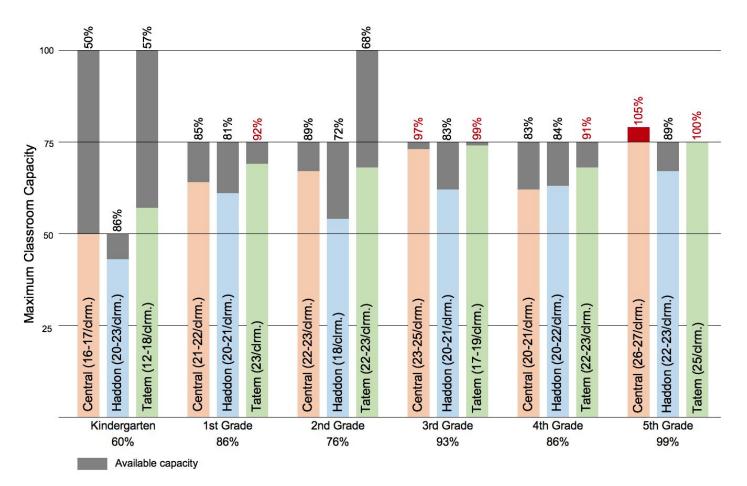
Projected 25 student increase in grades PK-5

- → Inconsequential for planning
- → Important to provide flexibility
- □ 90% capacity utilization rate applied
  - --> Consistent with FES and DOE review standards
  - --> Needed to address inefficiencies of neighborhood schools

		Central	Haddon	Tatem	Totals
	10/2019 PK-5 Enrollments	415	373	429	1,217
	Number of Specialized Classrooms	3	2	4	9
	NJDOE FES (K-5: 21-23/clrm.)				
DOE LRFP Approval	90% utilization	326	329	364	1,019
	Capacity Status	-89	-44	-65	-198
	District Practices (K-5: 25/clrm.)				
	90% utilization	424	428	486	1,338
	Capacity Status	9	55	57	121

### **Elementary Schools: Existing Capacity Utilization**

--> Shows inefficiencies of neighborhood schools



### **Elementary Schools: Districtwide Capacity Utilization**

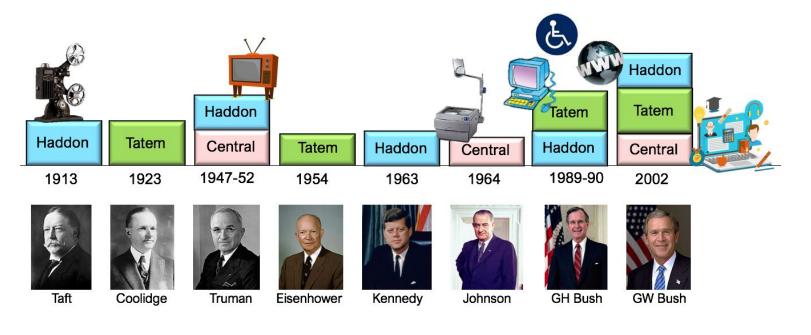
Ability to utilize all available grade level capacity:

- --> Reduces the number of classrooms required (potentially 5)
- --> Better able to absorb enrollment "bubbles" and growth within existing facilities
- --> Frees space to accommodate other program needs

Grade	10/2019 District Enrollment	Total Available Seats	Capacity Utilization
Kindergarten (½ day; 50/room)	150	250	60%
1st	194	225	86%
2nd	190	250	76%
3rd	210	225	93%
4th	193	225	86%
5th	222	225	<b>99%</b>
K-5 Total	1,156	1,400	83%

### **Elementary Schools: Age Considerations**

- -> "New wing" in each school designed 20 years ago
- -> No major reconfiguration or comprehensive modernization since original construction
- -> Varying quality of educational environment within each school due to different vintages of construction
- -> Furniture and equipment upgraded piecemeal as educational technologies evolved
- --> Lack of quality specialized classrooms



### **Elementary Schools: Furniture**

CENTRAL

HADDON

TATEM

### **Elementary Schools: Cabinetry**

CENTRAL

HADDON

TATEM



### **Elementary Schools: PK/K Classrooms**

Only 3 of 9 classrooms comply with all NJDOE standards and/or regulations.



#### CENTRAL (1947 wing, PK clrm.)

- → Basement room not originally designed for instruction
- → Limited daylighting
- → No toilet room (required NJDOE waiver)



#### HADDON (1963 wing, K clrm.)

- → Small, non-accessible toilet room
- → Triangular shape not ideal for PK/K classroom organization (activity stations)



#### TATEM (2002 wing, PK clrm.)

→ Undersized classroom

### **Elementary Schools: General Classrooms (grades 1-5)**

- -> 41 of 46 classrooms constructed before 1970
- $\rightarrow$  30 of 46 classrooms undersized based on FES



#### CENTRAL (1947 wing, general clrm.)

- → Different vintages furniture and cabinetry
- → No girls' toilet room on 1st floor



#### TATEM (1923 wing, general clrm.)

→ Undersized classroom

### **Elementary Schools: General Classrooms (grades 1-5)**



#### HADDON (1913 wing, general clrms.)

- → Piecemeal furniture and storage upgrades
- → No elevator
- $\rightarrow$  No toilet rooms on upper floor

### **Elementary Schools: Small Group Instruction Rooms**

- -> Inadequate in quantity and location to classroom wings
- → Typical deficiency in older schools due to new programs and evolving teaching methodologies, such as inclusive special education services
- -> Includes subdivided classrooms and former storage rooms



#### CENTRAL (1947 wing)

→ Windowless basement room likely originally designed for storage or building services



#### HADDON (1913 wing)

→ No barrier-free access to OT/PT room



#### TATEM (2002 wing)

→ Furniture prevents efficient room usage

### **Elementary Schools: Small Group/Collaboration Spaces**

- -> Corridors in new schools configured to support collaborative and informal learning
- → Learning and support functions (storage, teacher copy centers) located in traditional linear corridors to compensate for lack of space



#### CENTRAL (left), HADDON (center), TATEM (right)

-> Excessive use of corridors for small group activities, teacher support, and storage

### **Elementary Schools: Specialized Learning Spaces**

- -> Significant deficiencies in size and fit-out
- --> Most located in classrooms not designed for original function
- -> Year-to-year accommodations depend on capacity needs



### **Elementary Schools: STEAM Lab**

--> For whole class experiential learning in multiple subject areas

-> Typically replaces elementary school computer and science labs



#### TATEM (2002 wing, STEAM lab)

→ Located in former science room with available furniture and equipment



#### HADDON (1989 wing, SE clrm.)

→ Originally designed for science; currently functions as SE classroom

### **Elementary Schools: Computer Lab**

- -> Still provided in all 3 elementary schools
- -> Obsolete as a standalone classroom due to in-class computing



#### **CENTRAL (1947 wing, computer lab)**

- -> Retrofitted classroom with old cabinets
- → Undersized; can only accommodate computer-based activities



#### HADDON (1989 wing, computer lab)

→ Windowless room next to media center

### **Elementary Schools: Art Rooms**

- --> None adequately sized based on current standards
- --> Functional but dated
- --> Lack display, barrier-free accessibility within room



CENTRAL (2002 wing)

TATEM (2002 wing)

#### HADDON (1913 wing)

→ Must exit school for accessible route

### **Elementary School: Music Rooms**

- --> Room designed and constructed for music in each school from 1989 to 2002
- --> Adequately sized but sparse fitout (no secure instrument storage)
- -> Typically first specialized room to be reassigned to general classroom use for enrollment needs (Central last year; Haddon ongoing)





TATEM (1990 wing)

CENTRAL (1989 wing)

### **Elementary Schools: Music Rooms**



#### HADDON (1989 wing)

- → 4th grade class currently assigned to music room (left)
- -> Stage used for music instruction (right)

### **Elementary Schools: Media Center/Learning Commons**

- --> Should balance traditional media and digital resources and support collaboration, social learning, makerspace, and individual study in a creative setting
- -> Only large space opportunity in each school (multi-purpose room overused)



### **Elementary Schools: Media Centers**

- -> All require comprehensive modernization to address 21st century learning
- -> Size limits functioning to traditional media center



HADDON (1989 wing)

#### TATEM (1954 wing)

→ Perimeter functions as a corridor

### **Elementary Schools: Multi-Purpose Rooms**

- --> One room for PE, lunch, and assembly
- --> Adequately sized but lack adequate storage to support various functions



#### CENTRAL (2002 wing)

→ PE equipment and assembly chairs stored along perimeter

#### HADDON (2002 wing)

→ Assembly chairs and AV equipment stored in corridor

### **Elementary Schools: Kitchen/Serving**

--> Severely undersized warming kitchen and serving in Haddon and Tatem



Norther Barrier and Andrew Barrier and Andr

HADDON (2002 wing)

TATEM (2002 wing)

### **Elementary Schools: Faculty Support**

 $\hdots$  No small workrooms in each classroom wing for copy machines and shared storage

-> Main faculty rooms remote from classroom wings



#### CENTRAL

→ Faculty copy center in corridor (typical in all schools)





#### HADDON

- → Basement faculty room
- --> No barrier-free toilet room

#### TATEM

→ Ground floor faculty room across from mechanical room

### **Elementary Schools: Administration + Student Services**

- -> All inadequately or marginally sized
- --> No dedicated CST/itinerant offices
- -> Inadequate conferencing space

**CENTRAL** (shared with Middle School, constructed in 2005)

- → Location issues: remote from Central portion of building; must travel through middle school cafeteria to access nurse and guidance offices
- HADDON (located in 1913 wing)
  - --> No defined waiting area or reception counter to separate staff and visitors
  - -> Small, windowless guidance office
- TATEM (constructed in 1990)
  - --> Students enter main office to access nurse's office

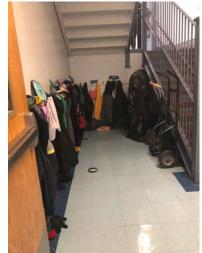
### Storage

- -> District-wide problem
- → Impacts all areas of school and overall quality of learning environment as clear floor area disappears



Central (PK storage)





Haddon (science kits)

Tatem (class coats)

### Haddonfield Middle School

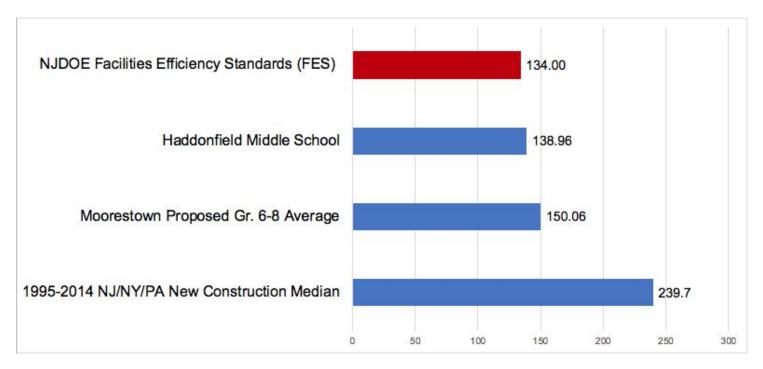
- -> Shared building with Central School
- → Separate facilities except for shared use of main office, media center, nurse's office, and auditorium (if available)



10/2019 Enrollment	620
Construction Years	1964, 2002
Total GSF	86,155
Total NSF	56,650
General Classroom SF	16,396
Specialized Space SF	36,700
Administrative/ Support SF	3,554

#### Middle School: SF/Student

(based on October 2019 enrollments)



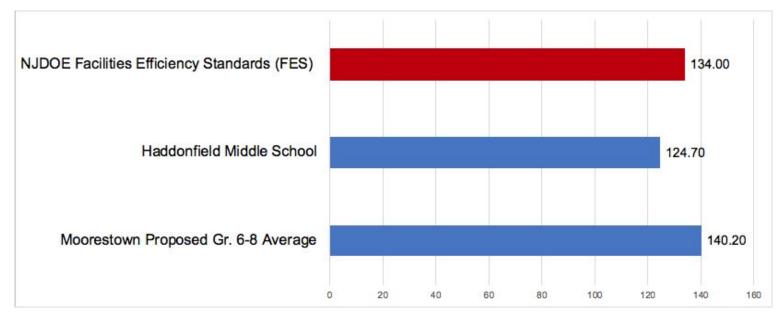
SOURCES: Moorestown LRFP Major Amendment Approval, September 16, 2019 (posted on NJDOE website); "20<sup>th</sup> Annual School Construction Report," School Planning and Management, February 2015

#### Middle School: NJDOE Adjusted SF/Student

(based on October 2019 enrollments)

NJDOE exclusions:

- -> General classroom SF in excess of FES
- -> Grossing factor SF that exceeds 40% of the total building SF



SOURCES: Moorestown LRFP Major Amendment Approval, September 16, 2019 (posted on NJDOE website); "20<sup>th</sup> Annual School Construction Report," School Planning and Management, February 2015

## LRFP | Capacity Analysis

#### Middle School: Existing Capacity

- → Calculated for team organization (only team/core classrooms generate capacity) and departmentalized organization (most classrooms generate capacity)
- → Based on current room assignments
- → Assumes 25 max./class

	TEAM Organization Capacity (current practice)	25/class
DOE LRFP Approval	90% Utilization	540
	100% Utitilzation	600
	DEPARTMENTALIZED Organization Capacity	
	90% Utilization	608
	100% Utilization	657

### LRFP | Capacity Analysis

#### **Middle School: Capacity and Enrollments**

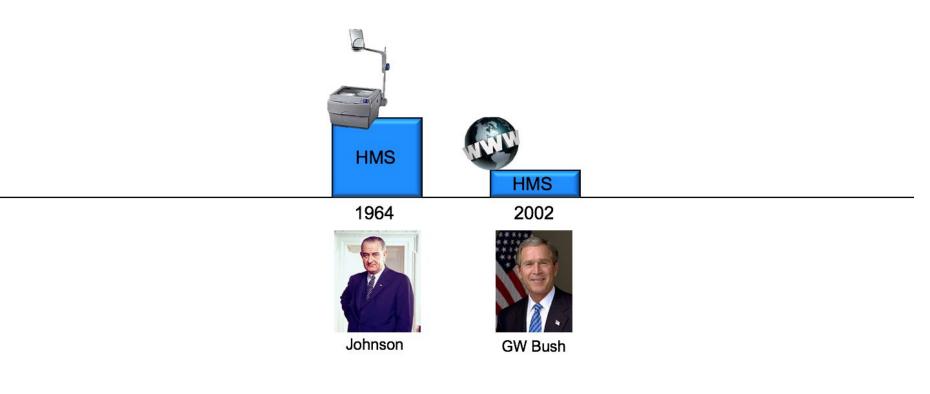
Based on 25 max./class, current room assignments:

- --> Existing class sizes exceed target
- --> Schedule adjustments inadequate to address projected shortfall

	Maximum Capacity	10/2019 Enrollment	Projected Enrollment
Enrollment		620	679
TEAM Organization Capacity (current practice)	600		
Capacity Status		-20	-79
Capacity Utilization		103.33%	113.17%
DEPARTMENTALIZED Organization Capacity	675		
Capacity Status		+55	-4
Capacity Utilization		91.85%	100.60%

#### Middle School: Age Considerations

- --> Overall newest school facilities in district (18-56 years old)
- --> More uniform conditions due to only 1 building addition
- --> Lack of quality specialized classrooms to support curriculum



#### Middle School: General Classrooms

- --> Most comfortably sized for 25, except for 621 SF room (below, left)
- --> Limited flexibility in classrooms with 28+ desks



#### **Middle School: Science Rooms**

- -> Some overcrowded rooms due to class sizes
- -> Student tables limit teaching flexibility; oversized for room size and occupants



#### Middle School: Small Group Rooms

- -> Some undersigned for furniture and occupants
- --> Need flexible furniture and efficient storage to improve function



#### Middle School: STEAM Lab

- --> Former computer lab reassigned to a STEAM Lab
- --> Changes limited to furniture
- -> Comprehensive modernization needed to create creative, collaborative environment



#### Middle School: Technology and Art Rooms

- --> Reflect industrial arts room design typical in the 1960s
- --> Require comprehensive modernization tailored to curriculum
- --> Total SF adequate to include digital media studio if reconfigured







#### Middle School: Media Center/Learning Commons

--> Should balance traditional media and digital resources and support collaboration, social learning, makerspace, and individual study in a creative setting



#### **Middle School: Auditorium**

- → Requires modernization
- -> New seating and flooring could improve configuration and function



#### Middle School: Building Organization Considerations

- □ Classrooms organized by grade level
  - --> Supports team structure
  - --> Limits student movement between classes
  - --> Science labs dispersed on each floor
- □ No physical separation between HMS and Central School on 2 upper floors
  - --> Can realign classroom boundaries based on capacity needs

### **Haddonfield Memorial High School**

--> Only school with new construction from 2016 referendum (cafeteria, kitchen, faculty room, dance room, offices)

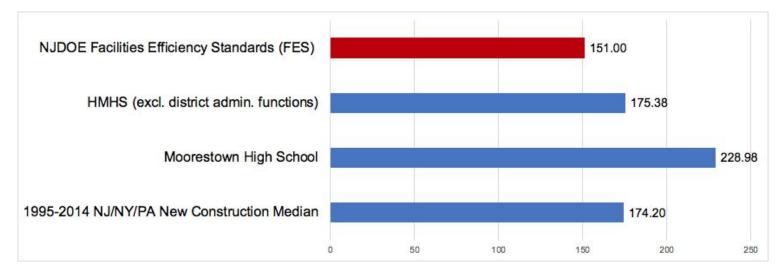


10/2019 Enrollment	859
Construction Years	1926 (A-wing) 1955, 2018 (B-wing) 1971 (C-wing)
Total GSF	152,757
Total NSF	108,148
General Classroom SF	20,439
Specialized Space SF	79,278
Administrative/ Support SF	8,431

#### HMHS: SF/Student

(based on October 2019 enrollments; excl. SF used for district functions)

- → Higher ratio due to rooms that have low utilization rates (A-gym) and are not scheduled during school day to support curriculum (wrestling room)
- → Higher enrollments allow greater SF/student efficiency (select spaces required regardless of school population)



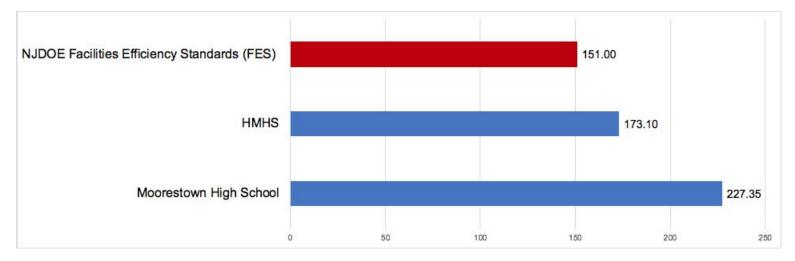
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#### **HMHS: NJDOE Adjusted SF/Student**

(based on October 2019 enrollments; excl. SF used for district functions)

NJDOE exclusions:

- --> General classroom SF in excess of FES
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# LRFP | Capacity Analysis

#### **HMHS School: Existing Capacity**

Capacity calculation assumptions:

- -> Based on current room uses and scheduling (classroom sharing)
- → All classrooms capacity-generating except instrumental music and large group (C-8)
- → Media center, cafeteria, and auditorium not capacity generating in accordance with high school planning practices and FES guidelines
- -> All classrooms filled to a max. of 25 unless room is significantly undersized
- → Areas used for PE (B-gym, A-gym, training room, dance studio) assigned 75 students max. per period

DOE LRFP Approval	85% Utilization per FES	958
	100% Utilization (requires extensive policy/course changes)	1,065

### LRFP | Capacity Analysis

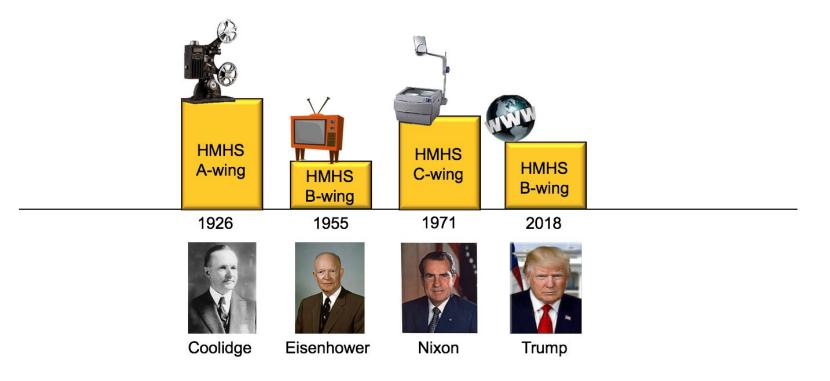
#### **HMHS: Capacity and Enrollments**

- --> Adequate capacity for existing and current enrollments
- -> Projected capacity utilization of 84.6% likely to impact class scheduling

	Existing Max. Capacity	10/2019 Enrollment	5-Year Projected High
Enrollment		859	901
Capacity (100% utilization)	1,065		
Capacity Status		+206	+164
Capacity Utilization		80.66%	84.6%

#### **HMHS: Age Considerations**

- -> No major reconfiguration or comprehensive modernization since original construction
- -> 1926 wing mostly intact in terms of configuration and built-in cabinetry
- -> Lack of quality specialized classrooms to support curriculum
- → No typical 21st century high school features: student commons, STEAM focused, technology-infused classrooms, informal breakout space



#### **HMHS: General Classrooms**

- --> Classroom wings originally designed 50-95 years ago
- -> Periodic upgrades addressing instructional needs







#### HMHS: General Classrooms, A-Wing (1926)

- --> Rooms significantly undersized for class sizes: 13<660 SF (10<565 SF)
- -> No comprehensive upgrade as new technologies installed
- --> Varying conditions throughout



### HMHS: Science Lab, C-Wing (1971)

- -> Upper level science rooms undersized based on current standards
- -> Could improve function with flexible furniture







#### **HMHS: Visual Arts and Technology Classrooms**

Significantly deficient:

- --> Rooms not representative of typical high school accommodations
- --> Undersized rooms located in former general classrooms with little or no renovation
- -> No dedicated robotics lab or broadcasting/multimedia studio



#### **HMHS: Art Studios, A-Wing**

Requires reconfiguration and modernization:

- → SF not allocated based on program needs
- → Inadequate cabinetry and storage requires excessive floor area
- → Inadequate display and collaboration spaces
- --> Dated corridor "art gallery"









#### HMHS: Digital Arts Lab, C-Wing

- → Undersized at 656 SF (typically 900+ SF)
- → Not ideally located in building (typically grouped with art rooms to provide technology support)



#### **HMHS: Computer Science and Business Labs, C-Wing**

- -> Both located in undersized classrooms
- → Room fitout not tailored to programs



**COMPUTER SCIENCE LAB** 

**BUSINESS LAB** 

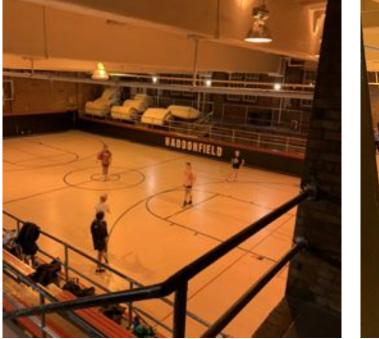
#### HMHS: Media Center/Learning Commons, C-Wing

- → Only large-scale, flexible space
- -> Targeted updates to improve function for evolving needs over the years
- → Needs cohesive plan to maximize academic and social function



#### HMHS: A-Gym, A-Wing

- → No barrier-free access
- → Remote from PE wing, including locker rooms
- -> Bleachers used for wrestling mat storage
- --> Drama storage in former locker room without renovation



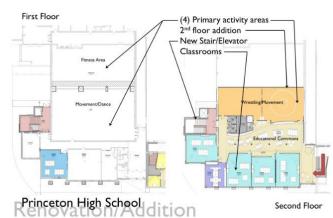


#### **HMHS: Student Commons/Community Spaces**

- → No interior student commons
- → Can be carved out of existing space by reconfiguring non-structural walls (for example, remove faculty area in center of 1st floor C-wing)







#### **HMHS: Faculty Spaces**

--> Need modernization to improve function and reduce SF allocation



#### **HMHS: Administration/Student Services**

#### □ Main office

- -> Reconfiguration required to control school access (including securing courtyard)
- -> Attendance office remotely located
- --> No conference room

#### **Guidance offices**

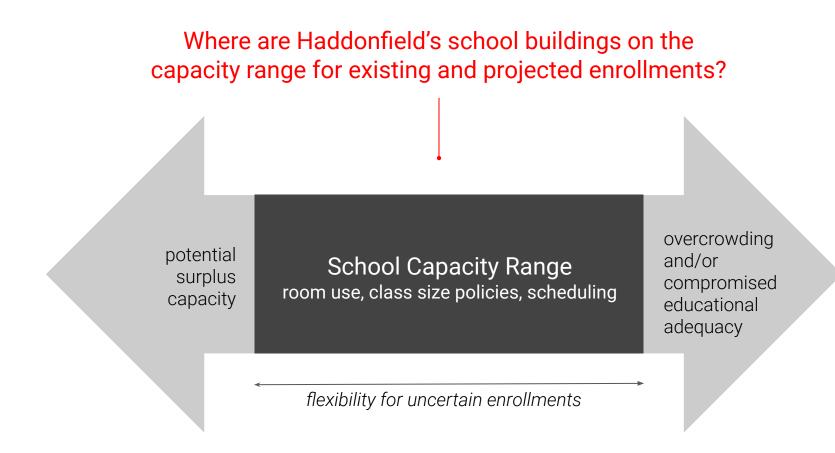
- -> Poorly located on 2nd floor (parents travel through classroom corridors)
- --> Undersized (freshman counselor remotely located)

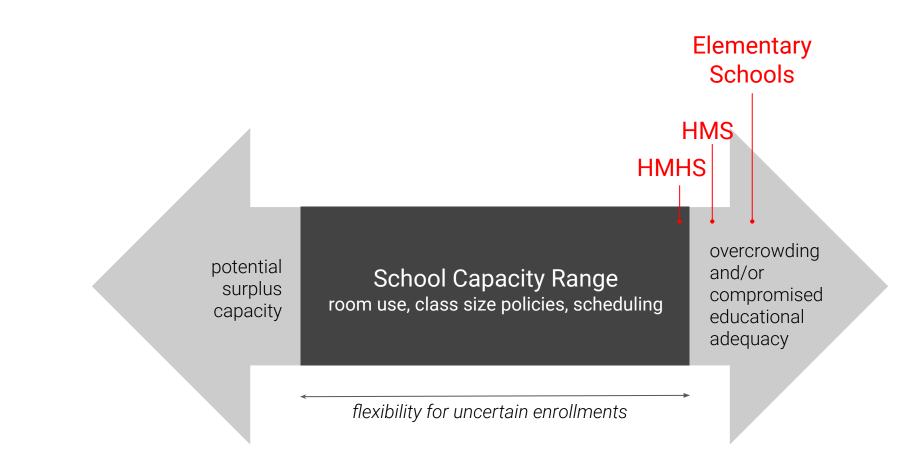
#### **CST offices**

→ No barrier-free access

#### **HMHS: Space Considerations**

- District staff or functions located at HMHS:
  - --- Curriculum director
  - --> Special education director
  - → CST members
    - → IT staff
  - → Technology infrastructure
  - --> Custodial services supervisor
- □ Relocation frees up approximately 2,000 SF for high school functions





#### **Older School Buildings: Renovation Potential**



Downingtown STEM Academy - renovated 1930s building (#1 PA school; #29 nationally)

# LRFP | Next Steps

#### **Facilities Condition Assessment**

- Physical plant
- School sites

### **Option Analysis**

- Deficiency prioritization
- □ School configuration and scope scenarios

#### **Capital Plan**