

TOWN OF NATICK

Meeting Notice

POSTED IN ACCORDANCE WITH THE PROVISIONS OF M.G.L. CHAPTER 30A, Sections 18-25

Natick Finance Committee

DAY, DATE AND TIME

February 27, 2018 at 6:30 PM
Library 22 Rutledge Road, Natick,
MA 01760

PLACE OF MEETING

Wilson Middle School

MEETING AGENDA

1. **Public Concerns/ Comments**
2. **Meeting Minutes**
 - a. Meeting Minutes for February 13 & 15, 2018- Review and Approve
3. **2018 Special Town Meeting #1 Warrant Articles - Public Hearing**
 - a. Article 1 - Appropriate, borrow or transfer from available funds, an amount of money to be expended under the direction of the School Building Committee to design, construct, equip and furnish the new John F. Kennedy Middle School
4. **Adjourn**

Please note the committee may take the items on this agenda out of order.

SUBMITTED BY

ITEM TITLE: Meeting Minutes for February 13 & 15, 2018- Review and Approve
ITEM SUMMARY:

ITEM TITLE: Article 1 - Appropriate, borrow or transfer from available funds, an amount of money to be expended under the direction of the School Building Committee to design, construct, equip and furnish the new John F. Kennedy Middle School

ITEM SUMMARY: Information on the Building Project is available at this link:
<https://sites.google.com/a/natickps.org/kms-building-project/home>

ATTACHMENTS:

Description	Upload Date	Type
Article #1 - Updated Motion	2/8/2018	Exhibit
Q&A for February 8 Public Hearing	2/8/2018	Exhibit
Value Engineering Tracking List	2/8/2018	Exhibit
Natick High School Form 3011 _MSBA	2/8/2018	Exhibit
Additional Staff Commitment for new KMS FY2021	2/8/2018	Exhibit
KMS Form 3011_MSBA	2/8/2018	Exhibit
Base Repairs versus 5 Year Captial Projects for KMS	2/8/2018	Exhibit
Responses to FInCom Questionnaire	2/2/2018	Exhibit
Presentation on Project	2/2/2018	Exhibit
KMS Project Budget As of Feb 2 2018	2/2/2018	Exhibit
Educational Plan - KMS Building Project	2/2/2018	Exhibit
MSBA Busget Statement- Preferred Schematic	2/2/2018	Exhibit
Presentation for Article 1 incl. Responses to FInCom Questions	2/5/2018	Exhibit

STM #1 – Article 1 Proposed Motion

ARTICLE

To see if the Town will vote to appropriate, borrow or transfer from available funds, an amount of money to be expended under the direction of the School Building Committee to design, construct, equip and furnish the new John F. Kennedy Middle School, 165 Mill Street, Natick, Massachusetts, 01760, including all necessary site improvements which school facility shall have an anticipated useful life as an educational facility for the instruction of school children of at least 50 years, for which the Town may be eligible for a school construction grant from the Massachusetts School Building Authority (“MSBA”). The Town acknowledges that the MSBA’s grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any project costs the Town incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the Town. Any grant that the Town may receive from the MSBA for the Project shall not exceed the lesser of (1) 48.21 percent (%) of eligible, approved project costs, as determined by the MSBA, or (2) the total maximum grant amount determined by the MSBA.

MOTION/VOTE/ORDER

Move the Town of Natick vote to appropriate the sum of \$105,835,000 which, in addition to the previously appropriated sum not to exceed \$3,725,000 for the feasibility , schematic design and design development work under Article 9 of the warrant for the 2013 Fall Annual Town Meeting and Article 17 of the warrant for the 2017 Fall Annual Town Meeting, brings the total appropriation to the sum of One Hundred Nine Million, Five Hundred and Sixty Thousand Dollars (\$109,560,000) for the purpose of paying costs to design, construct, equip and furnish the new John F. Kennedy Middle School, 165 Mill Street, Natick, Massachusetts, 01760, including all necessary site improvements which school facility shall have an anticipated useful life as an educational facility for the instruction of school children for at least 50 years, said sum to be expended under the direction of the School Building Committee, and to meet said appropriation the Natick Board of Selectmen, is authorized to borrow said sum under M.G.L. Chapter 44, or any other enabling authority; that the Town of Natick acknowledges that the Massachusetts School Building Authority’s (“MSBA”) grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any project costs the Town of Natick incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the Town of Natick; provided further that any grant that Town of Natick may receive from the MSBA for the Project shall not exceed the lesser of (1) 48.21 percent (%) of eligible, approved project costs, as determined by the MSBA, or (2) the total maximum grant amount determined by the MSBA; provided that any appropriation hereunder shall be subject to and contingent upon an affirmative vote of the Town to exempt the amounts required for the payment of interest and principal on said borrowing from the limitations on taxes imposed by M.G.L. 59, Section 21C (Proposition 2½); and that the amount of borrowing authorized pursuant to this vote shall be reduced by any grant amount set forth in the Project Funding Agreement that may be executed between the Town of Natick and the MSBA.

Attachment B

BALLOT QUESTION

Shall the Town of Natick be allowed to exempt from the provisions of Proposition two-and-one-half, so called, the amounts required to pay for the bonds issued in order to design, construct, equip and furnish a new John F. Kennedy Middle School located at 165 Mill Street, Natick Massachusetts and related facilities, buildings, appurtenant structures and grounds?

Special Town Meeting #1 – Article 1 Kennedy School Building Project

Questions coming out of the Public Hearing on Tuesday, February 6, 2018
Material for tonight:

- Can the borrowing for this project have different terms for different aspects of the project such as five years for technology and twenty years for building, etc.

Yes, different aspects of the project can be bonded differently.

- It was stated that ~\$3.8 M is in the BAN that will need to be considered along with the total requested authorization of ~\$107.9M. What does the Town expect the total appropriation to be, consistent with the Motion and then how much is actually going to go to borrowing. What happens to the \$3.9M?

the design money can be funded in a few ways, which Bill and the town treasurer have yet to decide. He expects you to ask him about this tonight.

- Provide the listing and some detail, including expected cost (savings) behind each item in the Value Engineering list and with that what are the risks of executing each item on the Value Engineering list specifically. Please also identify where this list resides inside the Building Committee document set so that committee members or Town Meeting can access it at later dates. ([attached list](#))
- Provide as best as can be done on short notice a breakdown of the KMS project compared to the NHS and WMS projects using the Form 3011 data showing cost by trades, etc. Please consider adding qualitative information for any line comparison that shows a higher or lower than average cost increase with an explanation, as best as can be given, for what maybe driving the cost variance. For example, if the cost between WMS and NHS for roofing was consistent with other costs between those two projects but then growing significantly higher for the proposed KMS, what would be the drivers? Increased cost of petroleum based products, supply shortages due to 2017 hurricane damage, etc. ([attached](#))
- Further comparative analysis of the WMS, NHS and KMS projects, showing the cost in current dollars shown on a slide in the presentation. The request is to show the cost comparison using something other than today's \$483 cost/sq ft. Possible cost factors could be non energy CPI, compounded inflation rate between two periods, construction index factor, etc. Please foot note the chart for town meeting to explain the assumptions used to determine the costs.

([attached](#)) --but a slide is coming to aggregate the results--could not be completed by tonight.

Referencing the KMS DRAFT technology budget presentation, [LISTED HERE](#) What is the additional cost to the taxpayer for including these items in the debt schedule for a 20 year period at the anticipated interest rate of 4%

- What is the square footage of a proposed classroom for the new building?

The proposed new Kennedy Middle School typical classroom is 900sf (MSBA requires classrooms to fall between 850 and 950 sf). A typical Science Classroom for grades 6-8 at the new Kennedy School is 1,200sf (MSBA requires science classrooms to be 1,200sf).

- What is the current square footage on average for the NHS, for the current KMS and the state allotted space. If different types of classrooms typically have different space parameters, such as labs versus traditional, etc please break it down?

Delivered by Dr, Nolin to Finance Committee Chair via email on February 8, 2018

Special Town Meeting #1 – Article 1 Kennedy School Building Project

Questions coming out of the Public Hearing on Tuesday, February 6, 2018

The Natick High School is approximately 251,000sf. At the time Natick High School was built, The MSBA set the model school typical classroom size for high schools to be between 825sf and 950sf. The typical classroom size at Natick High School is 825sf.

The existing Kennedy Middle School is 106,735sf and the overall building is 114,885sf - with the modular classroom included. The proposed New Kennedy Middle School is 182,195sf. The average classroom size for the 23 general classrooms in the existing Kennedy School is 786sf, the average science lab size for the 6 science labs in the existing Kennedy School 1,063sf.

Within the four story classroom block are there any spaces- such as the collaborative space or the multiple dining spaces that MSBA doesn't include for reimbursement. If so what are those spaces and what is the total square footage for those spaces?

The MSBA determined that the total ineligible GSF over their program was 5,475 gsf. This was down from the 6,000 gsf projected by the project team in December. The MSBA did not attribute the excluded program to any specific individual program or space. The reason for the 5,475 gsf was related to the MSBA program allotment as calculated off a 1,000 student school and their metric for at least 80% utilization rate for all spaces. The MSBA recognized the need for all the program spaces provided in the educational program. The MSBA identifies a typical middle school designed for 1,000 students would be 160,000sf, however, the MSBA does realize the vast majority of new middle school projects identify a need to build middle schools larger than the MSBA proposed guideline. The MSBA typically approves projects over their mandated gross square footage guideline the amount for which they reimburse the square foot overage is different for each project. The MSBA does not participate in the reimbursement for auditoriums at the middle school level for any new project. The MSBA expects Districts to use a "cafetorium" which is the student dining space with a raised platform at one end of the space. Both the School Committee and the Building Committee justified the need for an auditorium to accommodate half the student population (500 seats) at the new Kennedy School. This space would be equal to the auditorium provided at the Wilson Middle School which supports half of the designed student population as well. The Auditorium program was deemed ineligible as expected. However the MSBA did not take any exclusions from the design team or OPM team fees related to this ineligible work.

Slide 19 of presentation details two tax impacts. Why was this slide presented as detailed? What objective is to be served by showing two options?

The goal of presenting this in two ways was total transparency of the total cost of the project, with a nod to the fact that some spending had already occurred (3.73 million). In some discussions with the town administrator, he indicated that the monies might be bonded differently, so we showed the total cost of the project and the cost of the current appropriation request. In this way, we covered all of our bases about how this project might be handled and showed the tax impact of what was left to fund and the total project cost impact.

- Has the Building Committee done the analysis of a more distributed chart showing tax impact by say ten strata's representing the middle 80% of home value ranges, so that taxpayers can more easily understand their likely first year tax impact. If so can it be provided to the committee.

No, the town and building committee have not conducted this analysis. The DOR does not even ask for this level of detail apparently.

- Has the Building Committee created an analysis that shows the tax impact by year for the total 20 year bonding period? If so can it be provided to the committee? This document was provided for you in anticipation of Tuesday's meeting. I've attached it again below.

Special Town Meeting #1 – Article 1 Kennedy School Building Project

Questions coming out of the Public Hearing on Tuesday, February 6, 2018

- 1. Would it be possible to split off the athletic field component of the Kennedy project - perhaps placing it in the queue along with the Navy Yard and East School field projects we handled in the fall?

While the Building Committee can vote not to do athletic field component, it can't be taken out of the budget appropriation request. We probably should reiterate that the MSBA board has approved a project with a budget of \$109.5M – the appropriation will need to meet that. Of course, that doesn't mean that the Town needs to spend all of that. They can elect to reduce the costs of the project so long as it doesn't reduce the educational program (IE – size of the building; functionality). While the field could be placed in a different funding structure, it's currently part of the appropriation here and may cost more money to fund it differently as the East and Navy projects were.

2. Can the project borrowings be structured into a series of bond issues of varying maturities to align with prior debt exclusions coming off the books - with the goal of getting more favorable rates that would be available on shorter term issues.--Yes, we can structure them into a series of bond issues of varying maturities, but they may not be able to align with the elimination of the Wilson debt. It may not be practical. It may, indeed increase first year costs.

3. How would be any potential cost overruns allocated between the town and the general contractor? I'm not sure I understand the question but once we have a bid in hand, the GC is responsible to build the project per the plans and specifications. If the bids come in high, it is not the GC's responsibility. Also, the GC will get change orders for changes to the project or the plans and specifications.

Not Material for Tomorrow Night but Important:

- Cost analysis of the turf versus grass field, which has been submitted already

-	Field w goals -	\$100,000
-	Irrigation -	\$ 80,000
-	Lights -	\$350,000
-	Indirects –20%	\$100,000
-	TOTAL	\$630,000

Here's more from Art Goodhind on maintenance and upkeep.

Usually a higher end High School/recreational field falls within 7K to 10K per acre per year for maintenance. You can pick and choose what activities you do in house vs. contract out, but 7K-10K is a good number no matter the management choices.

A well built natural field runs anywhere between 350K to 500K and has a life expectancy of about 10 years depending on use. A natural field can be renovated for about 300K.

A Natural field and a Synthetic field for routine maintenance run close to the same. With a synthetic field you pay a premium to use it during inclement weather and to extend the season a little (earlier spring, later fall). A synthetic field is also more likely to melt at times during the winter and provide a surface for phys. ed where maybe a grass field would not.

For irrigation of a natural grass field we would prefer a well (part of the 350K) that way you are not using treated drinking water. Irrigation maintenance is captured within the 7-10K. If a variable frequency drive pump is used the electricity costs would hardly be noticeable when looking at the whole picture.

Usually a higher end High School/recreational field falls within 7K to 10K per acre per year for maintenance. You can pick and choose what activities you do in house vs. contract out, but 7K-10K is a good number no matter the management choices.

Special Town Meeting #1 – Article 1 Kennedy School Building Project

Questions coming out of the Public Hearing on Tuesday, February 6, 2018

- Showing the actual FTE's and positions for the expected headcount for the project for Day one opening at project completion. The information exists in a spreadsheet but it would be helpful to put it on the slide or as a second slide in the presentation so people can immediately understand the requested staff. [The net ad is two custodians and four teachers. I have broken them out in the attached slides. At the time of the creation of this spreadsheet, and what was known at that time, no added VP was included. Due to the now four story scope of the campus and the manner of the building layout, we may need a part time or FTE VP, but that was not in Peter's initial proposal.](#)

It is also important to identify whether the first year costs for all these new adds driven by the building design and education program are being covered in the requested appropriate of \$107M--[no they are not covered in the cost of the building, nor are increased supplies or utilities to run the building. or if they are expected to show up in the operating budget in FY22. It is our intent to gradually add and ask for the new staff over the next three two years of budgeting as we will need to address class size even before the open of the new facility.](#)

There is an impact for each way and it should be noted for public understanding that even if the project is authorized that the Building Committee and NPS Administration acknowledge the long term commitment to these positions can not guaranteed. We can't be in a position now of having to guarantee a position that is not scheduled to be filled until FY22. [MSBA's expectation for granting funding is that you will fully staff the building you propose to build with the educational plan they approved. So, we have already made a commitment and will curate our other asks accordingly.](#)

- Further analysis on the distributed fiber and data center approach. I would like to have the current analysis provided to the committee now for our understanding. I'd like to see an update to the analysis take into consideration some new factors such as the proposed fire station training tower and communications tower on Speen near Travis Rd. I'd like to have a risk management analysis completed on the impacts to the District's day-to-day operating plan for data and software if the KMS data center goes off-line due to both fiber lines being damaged.

[Dennis has indicated he would meet with you, Patrick, to give you this analysis.](#)



526 BOSTON POST ROAD
WATLAND, MA 01778

T: 508-358-0790
F: 508-358-0784



Total Project Budget: \$109,500,000 (Based upon Designer's reconciled cost estimate: \$87,384,629)

Items currently not included in Schematic Design scope

Item #	Category	Item	Cost (PMC) *	Owner Decisions		Comments By Team
				Approved Value	Y/N (BC Vote on) TBD (Decide On/By)	
1	Site Access	Hartford street Pedestrian stair access	\$164,551	164,551	Y - 12.2017	
2	Site Access	Increase width of existing paved Surrey Lane path to 9' wide and install open bottom culverts for wetland water management	\$136,850	136,850	Y - 12.2017	Surrey Lane Access Option 1
3	Site Access	9' wide paved emergency access path with turnaround from Surrey Lane	\$59,500		N - 12.2017	Surrey Lane Access Option 2
4	Landscaping	Large caliper tree to medium caliper Evergreen trees	\$31,654		TBD 5-9-18	Consider with Design Development CE
5	Landscaping	Large caliper tree to medium caliper Deciduous trees	\$62,475		TBD 5-9-18	Consider with Design Development CE
6	Site Athletics	Sports turf field lighting & timer	\$416,500	416,500	Y - 12.2017	
7	Site Athletics	Scoreboard for athletic field	\$28,858		TBD 3-21-18	Inclusion in Design Development documents
8	Site Athletics	Softball backstop & removable mound	\$63,025		TBD 3-21-18	Inclusion in Design Development documents
9	Site Athletics	Wall ball court and wall	\$41,460		TBD 3-21-18	Inclusion in Design Development documents
11	Site	Change bituminous to unit paver at fire lane	\$135,303		TBD 3-21-18	change product type Inclusion in Design Development documents
12	Security	Card reader and magnetic hold opens to all classroom doors	\$341,530		TBD 5-9-18	Cost to only prep doors for future depolyment, add \$82,000 - Consider with Design Development CE
13	Security	Electrified classroom door sidelights and remove manual shades	\$160,650		TBD 5-9-18	Includes wiring and installation Consider with Design Development CE
14	Site Athletics	Basketball court lighting & timer	\$71,400	71,400	Y - 12.2017	
15	Exterior	Lightning protection	\$97,566		TBD 5-9-18	Consider with Design Development CE
	Subtotal		\$1,811,320	\$789,301		

Cost saving oppurtunities that can be removed/changed within Schematic Design scope
Owner Decisions

Item #	Category	Item	Cost (PMC) *	Approved Value	Y/N (BC Vote on) TBD (Decide On/By)	Comments By Team
1	Materials - Exterior	Change roof membrane from PVC to EPDM	(\$148,750)		TBD 5-9-18	Consider with Design Development CE
2	Materials - Exterior	Change roof insulation from extruded to polyiso	(\$34,510)		TBD 5-9-18	Consider with Design Development CE
3	Materials - Exterior	Use lower cost fiber cement material at rear of building	(\$499,800)		TBD 5-9-18	Product size and color limitations Consider with Design Development CE
4	Site Athletics	Remove Basketball court	(\$53,550)		TBD 3-21-18	Inclusion in Design Development documents
5	Site Athletics	(9) outdoor fitness equipment stations within exterior Fit Trail	(\$29,750)		TBD 3-21-18	Inclusion in Design Development documents
6	Technology	Remove Huddle spaces (3 stations per classroom) monitors & associated wiring, switching and controls in each Classroom.	(\$761,600)		TBD 5-9-18	Removal will leave Teaching wall w/ interactive projector, voice lift and document camera to remain - similar to High School. This would shift from the NPS Technology prototype classroom Consider with Design Development CE
7	Exterior	Reduce Fly loft height above stage from 4' high to flat (align w/ 2 story roof)	(\$96,390)		TBD 3-21-18	Inclusion in Design Development documents
8	Site	Change concrete sidewalks to asphalt	(\$247,520)	(123,760)	Y - 12.2017	
9	Site	Change granite curb to precast curb	(\$130,900)		TBD 5-9-18	Consider with Design Development CE
10	Site	Change granite curb to asphalt berm	(\$252,280)	(126,140)	Y - 12.2017	Change product
11	Landscaping	Reduce amount of trees by 25%	(\$59,322)		TBD 3-21-18	Inclusion in Design Development documents
12	Landscaping	Reduce amount of trees by 50%	(\$118,643)		TBD 3-21-18	Inclusion in Design Development documents
13	Finishes	Reduce wood paneling in Auditorium by 25%	(\$65,450)		TBD 5-9-18	Consider with Design Development CE
14	Finishes	Reduce extent of wall tile in gang bathrooms from full-height to 4' above finish floor	(\$178,500)	(178,500)	Y - 12.2017	
15	Finishes	Reduce extent of wall tile in gang bathrooms to height of 4' above finish floor only on plumbing wall	(\$238,000)		N - 12.2017	
16	Finishes	Remove tile in kitchen and replace with Fiberglass wall panels	(\$26,180)		N - 12.2017	
17	Equipment	Remove video display scoreboards in gym	(\$185,640)	(185,640)	Y - 12.2017	
	Subtotal		(\$3,126,785)	(\$614,040)		

* Numbers above include the 19% markup from construction estimate for Design Contingency, Escalation, Fee, Insurance and Bonds
19%

Cost list last updated 12/13/17 during KMSBC meeting

\$175,261

Net Change to the Total Project Budget

**Total Project Budget Template
PFA after Bid Adjustments**

Natick
Natick High School

TOTAL PROJECT BUDGET - ALL COSTS ASSOCIATED WITH THE PROJECT ARE SUBJECT TO 963 CMR 2.16(f)				*Cost/Scope Items Excluded from the Total Facilities Grant	*Ineligible Costs
Feasibility Study Agreement					
OPM Feasibility Study	\$342,500				
A&E Feasibility Study	\$374,087				
Env. & Site					
Other					
Feasibility Study Agreement Subtotal	\$716,587			\$0	\$0
Administration					
Legal Fees	\$60,000				\$60,000
Owner's Project Manager					
Design Development					
Construction Contract Documents	\$117,500				
Bidding	\$45,000				
Construction Contract Administration	\$1,280,000				
Closeout	\$250,000				
Extra Services					
Reimbursable & Other Services	\$107,500				
Cost Estimates					
Advertising	\$5,000				
Permitting					
Owner's Insurance					
Other Administrative Costs	\$65,000				
Administration Subtotal	\$1,870,000			\$0	\$0
Architecture and Engineering					
Basic Services					
Design Development					
Construction Contract Documents	\$1,888,455				
Bidding	\$82,531				
Construction Contract Administration	\$636,050				
Closeout	\$33,391				
Other Basic Services	\$108,600				
Reimbursable Services					
Construction testing					
Printing (over minimum)	\$25,000				
Other Reimbursable Costs					
Hazardous Materials	\$150,000				
Geotech & Geo-Env.	\$110,000				
Site Survey	\$8,500				
Wetlands	\$22,500				
Traffic Studies	\$16,500				
Architectural/Engineering Subtotal	\$3,081,527			\$0	\$0
GM & Risk Preconstruction Services					
Pre-Construction Services	\$0				\$0
Site Acquisition					
Land/Building Purchase					
Appraisal Fees					
Recording fees					
Site Acquisition Subtotal	\$0			\$0	\$0

Proposed Revised PFA Budget 12/7/10	ProPay Cost Category	*Cost/Scope Items Excluded from the Total Facilities Grant	*Ineligible Costs	Comments
\$342,500	0001-0000			
\$374,087	0002-0000			
	0003-0000			
	0004-0000			
\$716,587		\$0	\$0	
\$60,000	0101-0000		\$60,000	
\$117,500	0102-0400			
\$45,000	0102-0500			
\$1,280,000	0102-0600			
\$250,000	0102-0700			
	0102-0800			
	0102-0900			
\$107,500	0102-1000			
	0102-1100			
\$5,000	0103-0000			
	0104-0000			
	0105-0000			
\$65,000	0199-0000			Printing
\$1,870,000		\$0	\$0	
\$1,888,455	0201-0400			Site Analysis+Technology+Equipment(FFE)
\$82,531	0201-0500			
\$636,050	0201-0600			
\$33,391	0201-0700			
	0201-0800			
\$108,600	0201-9900			Green Design
	0203-0100			
\$25,000	0203-0200			
	0203-9900			
\$150,000	0204-0200			
\$110,000	0204-0300			
\$8,500	0204-0400			
\$22,500	0204-0500			
\$16,500	0204-1200			
\$3,081,527		\$0	\$0	
\$0	0501-0000		\$0	
	0301-0000			
	0302-0000			
	0303-0000			
\$0		\$0	\$0	

Designer Fees
\$3,014,514
4.96% Basic Services

OPM Fees
\$2,035,000
3.35%

**Natick
Natick High School**

Insurance	0.5%
Sub Bonds	0.6%
Gen Cond.	4.4%
OH & P	3.0%
Subtotal	8.5%
VCT Abatement	\$225,000
Site Exclusion	\$220,121
Subtotal	\$445,121
Total Markup	\$37,835

**Total Project Budget Template
PFA after Bid Adjustments**

Natick
Natick High School

TOTAL PROJECT BUDGET - ALL COSTS ASSOCIATED WITH THE PROJECT ARE SUBJECT TO 963 CMR 2.16(f)					MSBA Board Approved Budget January 2010	*Cost/Scope Items Excluded from the Total Facilities Grant	*Ineligible Costs	Proposed Revised PFA Budget 12/7/10	ProPay Cost Category	*Cost/Scope Items Excluded from the Total Facilities Grant	*Ineligible Costs	Comments
** Const. Contingency					\$3,628,800			\$3,628,800	0507-0000			
Miscellaneous Project Costs												
Utility company Fees					\$100,000		\$100,000	\$100,000	0601-0000		\$100,000	
Testing Services					\$85,000		\$85,000	\$85,000	0602-0000		\$85,000	
Swing Space/Modulars					\$800,000		\$800,000	\$800,000	0603-0000		\$800,000	
Other Project Costs (Walling & Moving)					\$125,000		\$125,000	\$125,000	0699-0000		\$125,000	
Misc. Project Costs Subtotal					\$1,110,000	\$0	\$1,000,000	\$1,110,000		\$0	\$1,000,000	Includes Structural Peer review & Moving
Furnishings and Equipment												
Furnishings					\$1,900,000			\$1,900,000	0701-0000			
Equipment									0702-0000			
Computer Equipment					\$1,910,000			\$1,910,000	0703-0000			
Scope Excluded FFE Costs										\$690,000		
FF&E Subtotal					\$3,810,000	\$690,000	\$0	\$3,810,000		\$690,000	\$0	
Owner's Contingency												
** Owner's Contingency					\$1,200,000			\$1,200,000	0801-0000			
Soft Costs that exceed 20% of Const'n Cost												
Total Project Budget					\$88,987,414	\$2,500,351	\$1,785,000	\$77,618,614		\$1,733,604	\$1,785,000	
Alternates					\$2,685,500			\$1,371,700				
Ineligible cost					\$1,785,000			\$1,785,000				
Scope items excluded					\$2,500,351			\$1,733,604				
Estimated Basis of Total Facilities Grant					\$82,016,563			\$72,728,310				
Reimbursement Rate					52.63%			52.63%				
Estimated Total Maximum Facilities Grant					\$43,165,317			\$38,276,909				
District Share of Total Project Cost					\$45,822,097			\$39,341,705				

*NOTE: This document was prepared by the MSBA based on a preliminary review of information, estimates and construction Bids / Guaranteed Maximum Price provided by the OPW of the District of Natick for the Natick High School project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement. It is the responsibility of the District of Natick to determine which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion, whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

**Note: Pursuant to Section 3.20 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the re-allocation or transfer of funds from either the Owner's Contingency or the Construction Contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority.

1000127

\$11,368,800
\$5,983,399

\$4,888,408
\$6,480,392

350.2131644

Added Staff KMS Project
at Building Opening

Category			Staff (FTE)
<u>Salaries</u>			
Administration			
Admin. Secretary			0.00
Assistant Principal			0.00
Business Office			0.00
Curriculum Director/Coord.			0.00
Custodians/Maintenance Staff			2.00
Executive Secretary			0.00
Facilities Manager			0.00
Guidance			0.00
Adjustment Counselor			0.00
Guidance Counselors			0.00
Guidance Director			0.00
Legal			0.00
Nurse			0.00
Other			0.00
Principal			0.00
Special Education Admin			0.00
Superintendent/Asst. Superintendent			0.00
Transportation			0.00
Treasurer			0.00
Total Administration			2.00

Category	Staff (FTE)
Instruction - Teaching Services	
Arts	0.00
Business	0.00
Communications	0.00
Coping Instructor	0.00
Culinary Arts	0.00
ELL	0.00
English Language	0.00
Family Consumer Services	0.00
Foreign Language	0.00
Health Services	0.00
History & Social Science	0.00
Instructional Assistant/Paraprofessionals	0.00
Library/Media	0.00
Mathematics	0.00
MCAS	0.00
Music	0.00
Other	4.00
Physical Education	0.00
Reading	0.00
School Adjustment Counselor	0.00
Science	
Biology	0.00
Botany	0.00
Chemistry	0.00
Geology	0.00
Physics	0.00
Special Education	0.00
Substitute Teachers	0.00
Technology	0.00
Vocational Tech.	0.00
Total Instruction - Teaching Services	4.00

Total Project Budget

Town of Natick
John F. Kennedy Middle School

DRAFT

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Estimated Basis of Maximum Facilities Grant or Otherwise Ineligible	Estimated Basis of Maximum Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
1 Feasibility Study Agreement				
2 OPM Feasibility Study	\$175,000	\$0	\$175,000	
3 A&E Feasibility Study	\$480,177	\$0	\$480,177	
4 Environmental & Site	\$83,698	\$0	\$83,698	
5 Other	\$11,125	\$0	\$11,125	
6 Feasibility Study Agreement Subtotal	\$750,000	\$0	\$750,000	\$361,575
7 Administration				
8 Legal Fees	\$25,000	\$25,000	\$0	\$0
9 Owner's Project Manager				
10 Design Development	\$124,000	\$0	\$124,000	
11 Construction Contract Documents	\$111,800	\$0	\$111,800	
12 Bidding	\$44,720	\$0	\$44,720	
13 Construction Contract Administration	\$2,498,671	\$0	\$2,498,671	
14 Closeout	\$67,173	\$0	\$67,173	
15 Extra Services	\$0	\$0	\$0	
16 Reimbursable & Other Services	\$5,000	\$0	\$5,000	
17 Cost Estimates	\$66,000	\$0	\$66,000	
18 Advertising	\$1,000	\$0	\$1,000	
19 Permitting	\$75,000	\$0	\$75,000	
20 Owner's Insurance	\$55,000	\$0	\$55,000	
21 Other Administrative Costs	\$50,000	\$0	\$50,000	
22 Administration Subtotal	\$3,123,364	\$25,000	\$3,098,364	\$1,493,721
23 Architecture and Engineering				
24 Basic Services				
25 Design Development	\$2,405,416	\$0	\$2,405,416	
26 Construction Contract Documents	\$3,720,949	\$0	\$3,720,949	
27 Bidding	\$273,571	\$0	\$273,571	
28 Construction Contract Administration	\$1,595,561	\$0	\$1,595,561	
29 Closeout	\$143,295	\$0	\$143,295	
30 Other Basic Services	\$0	\$0	\$0	
31 Basic Services Subtotal	\$8,138,792	\$0	\$8,138,792	
32 Reimbursable Services				
33 Construction Testing	\$36,650	\$0	\$36,650	
34 Printing (over minimum)	\$30,000	\$0	\$30,000	
35 Other Reimbursable Costs	\$199,950	\$0	\$199,950	
36 Hazardous Materials	\$106,975	\$0	\$106,975	
37 Geotechnical & Geo-Environmental	\$190,345	\$0	\$190,345	
38 Site Survey	\$49,865	\$0	\$49,865	
39 Wetlands	\$40,000	\$0	\$40,000	
40 Traffic Studies	\$13,200	\$0	\$13,200	
41 Architectural/Engineering Subtotal	\$8,805,777	\$0	\$8,805,777	\$4,245,265
42 CM at Risk Preconstruction Services				
43 Pre-Construction Services	\$0	\$0	\$0	\$0
44 Site Acquisition				
45 Land / Building Purchase	\$0	\$0	\$0	
46 Appraisal Fees	\$0	\$0	\$0	
47 Recording fees	\$0	\$0	\$0	
48 Site Acquisition Subtotal	\$0	\$0	\$0	\$0
49 Construction Costs				
50 SUBSTRUCTURE				
51 Foundations	\$2,738,705	\$0		
52 Basement Construction	\$0	\$0		
53 SHELL				
54 Super Structure	\$7,622,103	\$0		
55 Exterior Closure	\$0	\$0		
56 Exterior Walls	\$6,871,683	\$0		
57 Exterior Windows	\$2,739,101	\$0		
58 Exterior Doors	\$168,218	\$0		
59 Roofing	\$2,212,848	\$0		
60 INTERIORS				
61 Interior Construction	\$9,282,006	\$0		
62 Staircases	\$548,614	\$0		
63 Interior Finishes	\$4,332,224	\$0		
64 SERVICES				
65 Conveying Systems	\$509,000	\$0		
66 Plumbing	\$2,904,835	\$0		
67 HVAC	\$7,085,764	\$0		
68 Fire Protection	\$750,546	\$0		
69 Electrical	\$8,837,737	\$0		
70 EQUIPMENT & FURNISHINGS				
71 Equipment	\$1,236,484	\$0		
72 Furnishings	\$513,993	\$0		
73 SPECIAL CONSTRUCTION & DEMOLITION				
74 Special Construction	\$50,000	\$0		
75 Existing Building Demolition	\$919,080	\$0		
76 In-Building Hazardous Material Abatement	\$513,000	\$0		
77 Asbestos Containing Floor Material Abatement	\$150,000	\$150,000		
78 Other Hazardous Material Abatement	\$0	\$0		
79 BUILDING SITEWORK				
80 Site Preparation	\$1,606,330	\$0		
81 Site Improvements	\$3,954,009	\$0		
82 Site Civil / Mechanical Utilities	\$1,577,654	\$0		
83 Site Electrical Utilities	\$743,020	\$0		
84 Other Site Construction	\$0	\$0		
85 Scope Excluded Site Cost		\$3,212,704		
86 Construction Trades Subtotal	\$67,866,954	\$3,362,704		
87 Contingencies (Design and Pricing)	\$6,786,695	\$336,270		
88 D/B/B Sub-Contractor Bonds	\$678,670	\$33,627		
89 D/B/B Insurance	\$1,153,738	\$57,166		
90 D/B/B General Conditions	\$5,848,077	\$289,763		
91 D/B/B Overhead & Profit	\$2,036,009	\$100,881		
92 GMP Insurance	\$0	\$0		
93 GMP Fee	\$0	\$0		
94 GMP Contingency	\$0	\$0		
95 Escalation to Mid-Point of Construction	\$3,189,747	\$158,047		
96 Ineligible Auditorium & PE Areas beyond Guidelines		\$5,334,438		
97 Overall Excluded Construction Cost		\$17,191,607		
98 Construction Budget	\$87,559,890	\$26,864,504	\$60,695,386	\$29,261,246
99 Alternates				
100 Ineligible Work Included in the Base Project	\$0	\$0	\$0	
101 Alternates Included in the Total Project Budget	\$0	\$0	\$0	
102 Alternates Excluded from the Total Project Budget	\$0	\$0	\$0	
103 Subtotal to be Included in Total Project Budget	\$0	\$0	\$0	\$0
104 Miscellaneous Project Costs				
105 Utility Company Fees	\$200,000	\$0	\$200,000	
106 Testing Services	\$100,000	\$0	\$100,000	
107 Swing Space / Modulers	\$0	\$0	\$0	
108 Other Project Costs (Mailing & Moving)	\$70,000	\$70,000	\$0	
109 Misc. Project Costs Subtotal	\$370,000	\$70,000	\$300,000	\$144,630
110 Furnishings and Equipment				
111 Furniture, Fixtures, and Equipment	\$1,795,000	\$595,000		
112 Technology	\$2,406,910	\$1,206,910		
113 FF&E Subtotal	\$4,201,910	\$1,801,910	\$0	\$0
114				
115 Soft Costs that exceed 20% of Construction Cost		\$0		
116 Project Budget	\$104,810,941	\$28,761,414	\$76,049,527	\$36,663,477

118 Board Authorization		43.63 Reimbursement Rate Before Incentive Points
119 Design Enrollment	1,000	4.58 Total Incentive Points ³
120 Total Building Gross Floor Area (GSF)	182,195	48.21% MSBA Reimbursement Rate
121 Total Project Budget (excluding Contingencies)	\$104,810,941	
122 Scope Items Excluded or Otherwise Ineligible	\$28,761,414	
123 Third Party Funding (Ineligible)	\$0	
124 Estimated Basis of Maximum Total Facilities Grant ¹	\$76,049,527	
125 Reimbursement Rate ³	48.21%	
126 Est. Max. Total Facilities Grant (before recovery) ¹	\$36,663,477	
127 Cost Recovery ⁴	\$12,929	
128 Estimated Maximum Total Facilities Grant ¹	\$36,650,548	
129		
130 Construction Contingency ²	\$4,249,059	
131 Ineligible Construction Contingency ²	\$3,373,460	
132 "Potentially Eligible" Construction Contingency ²	\$875,599	
133 Owner's Contingency ²	\$500,000	
134 Ineligible Owner's Contingency ²	\$0	
135 "Potentially Eligible" Owner's Contingency ²	\$500,000	
136 Total Potentially Eligible Contingency ²	\$1,375,599	
137 Reimbursement Rate ³	48.21%	
138 Potential Additional Contingency Grant Funds ²	\$663,176	
139 Maximum Total Facilities Grant	\$37,313,724	
140 Total Project Budget	\$109,560,000	

NOTES
This document was prepared by the MSBA based on a preliminary review of information and estimates provided by the Town of Natick for the John F. Kennedy School project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement by the MSBA. Nor is it intended to be a final determination of which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

1 - The Estimated Basis of Total Facilities the "MSBA Board Approved Budget" column subject to review and audit by the MSBA. Facilities Grant, and Maximum Total Facilities column have been adjusted to account for and any budget revision requests submitted Revised Budget PFA column of the PFA by the MSBA.

2 - Pursuant to Section 3.20 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

3 - The MSBA has provisionally included two (2) incentive points for energy efficiency, subject to the District meeting certain sustainability requirements for the project. If the District does not meet the requirements for the energy efficiency, the District will not qualify for these incentive points and the MSBA will adjust the reimbursement rate accordingly.

4 - Cost associated with the commissioning of ineligible square footage will result in the recovery of a portion of the overall commissioning cost. The MSBA has calculated this recovery of funds to be \$12,929. A total of \$12,929 has been deducted from the Estimated Maximum Total Facilities Grant and the Maximum Total Facilities Grant.

Cost recovery associated with the costs associated with commissioning of ineligible square footage:

Auditorium Area: 11,100 gsf x 0.78 = \$8,658
Other Areas: 5,475 gsf x 0.78 = \$4,271
Total Cost Recovery (Commissioning): \$12,929

Legal Fees are categorically ineligible for reimbursement.	ProRated 20% Exclusion	
	\$0 -Administration	
	\$0 -A/E Services	
	\$0 -Miscellaneous Proj Costs	
	\$12,954,141 Sum of Three Soft Costs	
Soft Cost Reimbursement	Eligible Soft Costs	Category
Estimated Budget	\$3,309,489	-Administration
Excluded	\$25,000	-A/E Services
	\$9,369,652	\$0 -Miscellaneous Proj Costs
		\$12,954,141
		Ineligible therefore not included in calculation
	\$370,000	\$70,000
	\$4,201,910	\$1,801,910
		\$300,000 -Miscellaneous Proj Costs
		\$2,400,000 FFE
		Not included in this calculation
		\$15,354,141 Owners Contingency
		Total Eligible Soft Costs
Construction Costs associated with Soft Cost Cap Calculation	Construction Costs	Category
Estimated Budget	\$0	-CM Preconstruction services
	\$87,559,890	\$87,559,890 -Construction Cost
		Not included in this calculation -Construction Contingency
		\$87,559,890 Total Construction Cost
		20% Soft Cost Allowance
		\$17,511,978 Reimbursable Soft Cost
		-\$2,157,837 Eligible minus Reimbursable
		-If Eligible minus Reimbursable is negative OK.
		-If Eligible minus Reimbursable is positive enter value into Soft Costs that exceed 20% of Construction Cost below in the Ineligible column.
Construction Budget	\$87,559,890	
OPM Services	Eligible Fees	% of Total Construction
Basic Services	\$3,021,364	\$3,021,364
Extra Services	\$82,125	0.09%
Designer Services		Designer Value @
Basic Services	\$8,618,969	\$8,618,969
Extra Services	\$750,683	0.86%
Site Cost Reimbursement =	8.0%	
Direct Site Cost	Excluded	Eligible Site Costs
	\$7,881,013	\$0
		\$7,881,013 Eligible Site Costs
Direct Building Cost		
	\$58,353,861	
		\$4,668,309 Reimbursable Site Cost
		\$3,212,704 Eligible minus Reimbursable
		Scope Excluded Site Cost
		If Eligible minus Reimbursable is negative OK. No ineligible needed
		If Eligible minus Reimbursable is positive enter value into Scope Excluded Site Cost
Construction Cost Reimbursement		
	\$919,080 Eligible Demo	
	\$513,000 Eligible Abatement	
	\$1,432,080 Total Eligible Demo & Abatement	
	\$143,208 D&P	10.00% % of Trades
	\$14,321 Bonds	1.00% % of Trades
	\$24,345 Insurance	1.70% % of Trades
	\$123,402 Gen Cond	8.62% % of Trades
	\$42,962 O&P	3.00% % of Trades
	\$0 GMP Ins	0.00% % of Trades
	\$0 GMP Fee	0.00% % of Trades
	\$0 GMP cont	0.00% % of Trades
	\$67,308 Escalation	3.78% % of Cumulative sum of Trades and Markups
	\$1,847,626 Marked Up Demo & Abatement	
	11,100 Excess Auditorium & PE Areas (ineligible nsf x grossing factor)	
	5,475 Other Ineligible Areas (ineligible nsf x grossing factor)	
	176,720 Eligible Areas (inclusive of Auditorium & PE Areas)	
	\$333 Reimbursable Construction Cost for Ineligible Core Academic Area: (e)	
	\$58,847,760 Reimbursable Construction Cost	2,450 nsf x 1.5 = 3,675 gsf
	\$1,847,626 Marked Demo & Abatement	
	\$60,695,386 Reimbursable Construction Cost	Ineligible Voc/Tech Area: 1,200 nsf x 1.5 = 1,800 gsf
	\$0 Eligible Minus Reimbursable	
	If Eligible minus Reimbursable is negative OK. No ineligible entry	
	If Eligible minus Reimbursable is positive enter value into Overall Excluded Construction Cost	
FFE Reimbursement	Funding Limits	Enrollment
	\$1,200 /student	1,000
	\$1,200 /student	1,000
		\$1,200,000
		\$1,200,000
		\$2,406,910
		\$1,206,910
		* If Ineligible is \$0 or negative OK. No ineligible entry needed.
		* If Ineligible is positive enter value for each into scope excluded costs.
	1.58 (0-2) Maintenance	
	0.00 (0-1) CM @ Risk	
	0.00 (0-6) Newly Formed Regional School District	
	0.00 (0-5) Major Reconstruction or Reno/Reuse type in rounded to 2 decimal places	
	0.00	0 gsf Renovated or Existing to Remain
		1 gsf Total at Conclusion of Project
	1.00 (0-1) Overly Zoning 40R and 40S	
	0.00 (0-0.5) Overlay Zoning 100 units or 50% of units 1,2, or 3 family structures	
	2.00 (0-2) Energy Efficiency - "Green Schools"	
	0.00 (5) Model Schools	
	4.58 Total Incentive Points	
Construction Budget	\$87,559,890	
Construction Cost/SF (Total GSF)	\$481	
Design Enrollment	1,000	
Total Gross Square Feet	182,195	
Project Budget	\$104,810,941	
Scope Exclusions / Ineligible Costs	\$28,761,414	
Estimated Basis of Total Facilities Grant	\$76,049,527	
Reimbursement Rate	48.21%	
Estimated Maximum Total Fac. Grant before Recovery	\$36,663,477	
Cost Recovery	\$12,929	
Estimated Maximum Total Facilities Grant	\$36,650,548	
Potentially Eligible Owner's & Construction Cont.	\$1,375,599	
Potential Additional Grant Funds for Contingencies	\$663,176	
Total Project Budget	\$109,560,000	
Maximum Total Facilities Grant	\$37,313,724	

QUESTIONS FROM FIN COMM

Kennedy Middle School Base Repair Costs /Code Compliance Upgrades*

\$50-\$55 Million**

*Base repair approach identifies expenditures to resolve basic infrastructure, handicap accessibility, replacement of mechanical, electrical, plumbing systems & code compliance.

The Base Repair approach **would not** be eligible for MSBA reimbursement in the current program

The Base Repair Option would required 60 months of phased occupied construction with significant disruption to the delivery of the educational program.

- Base Repair approach **does not** resolve physical or educational deficiencies within the Kennedy Middle School
- Base Repair approach **does not** provide additional educational space identified in the educational program
- Base Repair approach **does not** modernize any existing educational space
- Base Repair approach **does not** provide new community resources

**A minimum of \$8,580,000 in capital repair cost would be expended in the next 5 years if the KMS project is not approved. (These costs are identified in the chart to the right)

Kennedy Middle School Capital Repair Costs Required in next 5 years

\$8,580,000

Capital Repair	5 year Cost
Install Temporary Modular Units at KMS	\$455,000
Relocate Modulares to Memorial	\$600,000
Install security cameras	\$35,000
Replace carpets	\$45,000
Replace exterior doors	\$140,000
Replace univents	\$220,000
Replace HVAC	\$600,000
Install sprinkler system	\$850,000
Retile floors	\$635,000
Replace boilers	\$1,000,000
Replace exterior windows	\$1,000,000
Replace science and tech ed classes	\$1,500,000
Replace entire roof	\$900,000
Replace VCT floor tiles	\$600,000

Kennedy Middle School – FinCom questions 01.29.18

1. Putting aside the costs associated with building a new KMS for the moment, I'm trying to understand what the incremental effect of KMS may be on the operating and capital budgets for FY2020 – FY2025 (I believe the new building would open in FY2020). With this in mind, please provide the following information:

[in spreadsheet on MSBA budget statement.](#)

a. All costs (e.g., salary, benefits, pension if applicable, professional development, etc.) associated with additional a) teaching staff, and b) support staff (excluding TIM custodial/maintenance for now, [see below](#)) needed (do not include staff transferred within NPS) at KMS.

[In spreadsheet on MSBA budget statement](#)

b. As the proposed KMS is physically larger than the current building. What, if any, increase in maintenance costs (staff and supplies) will be necessary to service the new KMS?

[Two \(2\) FTE custodians will be required to clean the new building since the square footage has increased. We anticipate custodial supply cost to increase, an early estimate would be a 40% increase or roughly \\$6,000 annually.](#)

c. Specifically what are the projected operating and capital expenses associated with a) the hydroponics lab, b) the greenhouse, and c) the planetarium?

[In our presentation and in BOS presentation from last week](#)

d. When Wilson was built, monies were included for changes at KMS to provide “parity” between the schools.

i. Are similar expenditures at Wilson anticipated if we build a new KMS in terms of either operating costs or capital expenses? How much will they cost and specifically what changes would be made at Wilson?

The costs of modularity

ii. If no “parity” funds are planned, what programmatic differences will Wilson students experience? ANNA

iii. I have heard on the street that WMS students may be bussed to a new KMS to partake of new facilities/capabilities. If this is the case, how often would WMS students be at KMS (e.g., daily, weekly, once or twice a month, once in a while)? What is the expected annual cost? How much class time would WMS students lose?

[Impossible to estimate at this time given our first year of deployment of the new STEM standards, but to take one whole grade level \(250 kids\) on a bus from WMS to KMS 2 x per month each month of school year costs: 30K](#)

[Loss of time, 20 min load, 20 min drive/unload.](#)

currently, we only do this with two grades, 10K to take all of grade 5 to Planetarium and it disrupts a full week of school/classes as the planetariums cannot accommodate large groups of students. This cost is totally pushed to parents as a field trip.

Every grade level has new STEM standards related to Earth and Space Science in the curriculum (different from 2 grade levels needing this in the prior curriculum landscape).

iv. Will/how will this affect the plans/changes that the School Committee has put in place over the past few years to achieve programmatic parity?

ANNA

e. In addition to the items in c (above), are there any other new capabilities/facilities included at KMS? If so, what are their 5-year capital and operating budgets?

In presentation

2. If a new KMS is NOT built, what incremental operating and capital expenditures can we expect? The five year capital plan has \$6.5M in improvements to the building infrastructure only, facilities would anticipate additional items to be added over the next five years including but not limited to boilers, HVAC distribution systems and site improvement These capital items do not reflect programmatic improvements also needed.

Operating and repairs expenses are also expected to increase due to the age and condition of the existing school.

Below is a sampling of the projects needed to simply sustain the infrastructure and improve security. If the building were to remain in use past 2021, more than **\$8 million** in capital projects would need to be considered, including:

Repair	Cost for 5 years
Install Temporary Modular Units at KMS	\$455,000
Relocate Modulares to Memorial	\$600,000
Install security cameras	\$35,000
Replace carpets	\$45,000
Replace exterior doors	\$140,000
Replace univents	\$220,000

Replace HVAC	\$600,000
Install sprinkler system	\$850,000
Retile floors	\$635,000
Replace boilers	\$1,000,000
Replace exterior windows	\$1,000,000
Replace science and tech ed classes	\$1,500,000
Replace entire roof	\$900,000
Replace VCT floor tiles	\$600,000
TOTAL	\$8,580,000

(Source, Town Administrator's Preliminary Budget January 2, 2019)

These are basic maintenance costs to the existing building.

If a new building could not be achieved, the district will need ten 10 modular classrooms at a cost of approximately \$7,000,000 within the next 5 years, account for the needs of larger, middle school learners, more advanced technology in the modulators for secondary use and inflation costs/ building costs as they rise in the coming years.

3. Please provide a detailed comparison of what it will cost to build and operate a) a new KMS that includes the incremental facilities/programs such as the hydroponics lab, greenhouse, planetarium and anything identified in e (above) to those of a new KMS which excludes these incremental programs/facilities?

In presentation, expanded from BOS presentation I also included for your review.

4. Please provide the detailed technology plan and budget for the new KMS.

[KMS Proposed / Working Technology Budget \(January 2018\)](#)

Please note, the proposed technology budget for KMS is in the infancy stage, with more granular details coming as the shape of the project develops and classroom specifications are

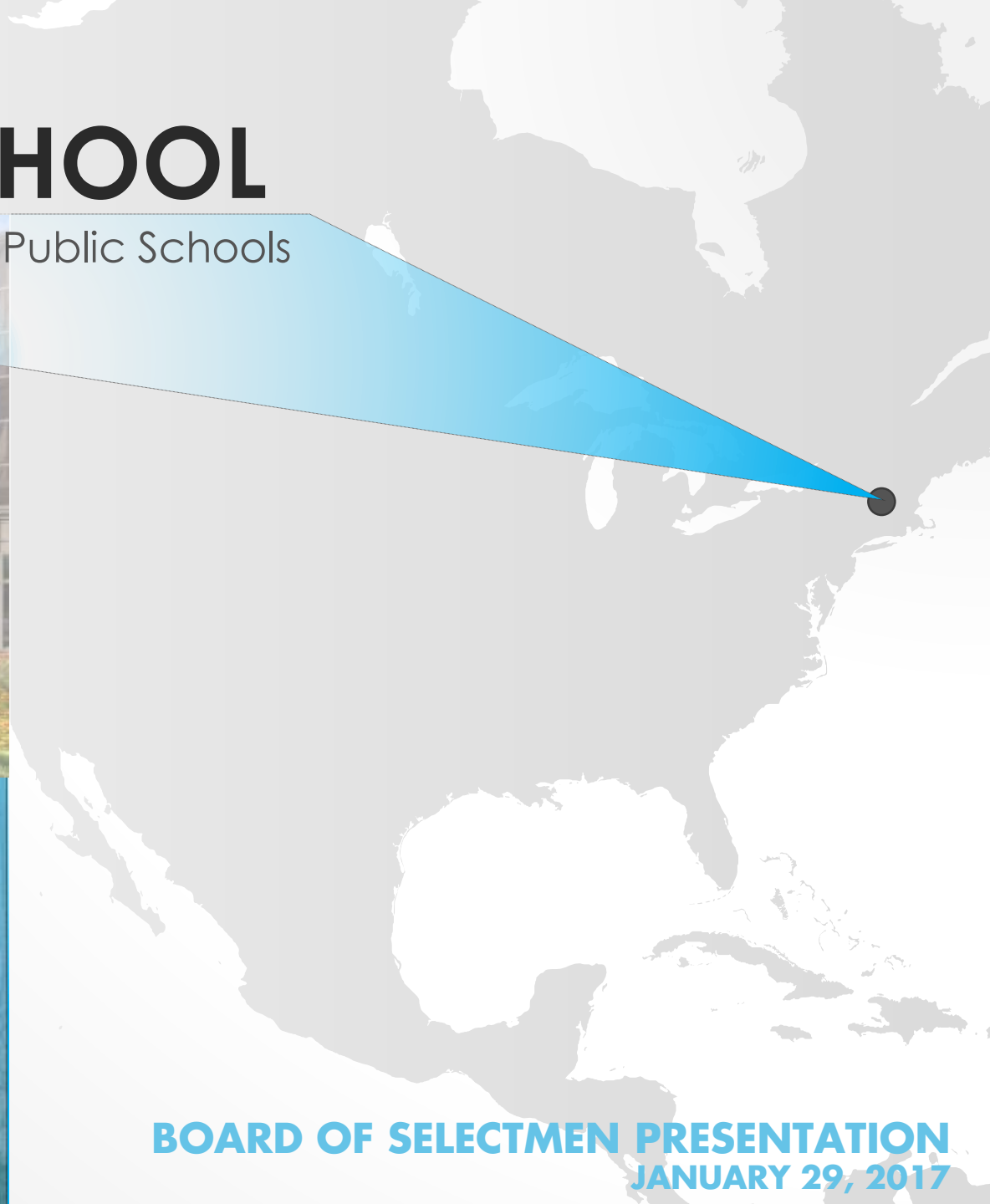
finalized. These are broad categories and more detail will be available as we move through the technology and FFE sections of building planning.

Dennis will speak to the below 3 questions in person at the meeting on the 6th.

- a. Are there any items/costs within the plan/budget that would still need to be purchased/expended even if a new KMS is not funded?
- b. Likewise is anything in the plan/budget intended to provide services beyond KMS?
- c. Are any new devices (laptops, etc.) included in the building costs?

KENNEDY MIDDLE SCHOOL

Natick Public Schools



BOARD OF SELECTMEN PRESENTATION
JANUARY 29, 2017

NATICK MIDDLE SCHOOLS

Since 2012, the Natick School Committee studied the deficiencies of the aging Kennedy Middle School & the rising student enrollment affecting both **Wilson Middle & Kennedy Middle Schools**

Natick Schools Master Study

May, 2012

Natick Public Schools Master Plan prepared for Kennedy Middle, Memorial & Johnson Elementary Schools.

SOI #2

April, 2014

Natick submits Statement of Interest #2 to the MSBA.

SOI #3

April 10, 2015

Natick submits Statement of Interest #3 to the MSBA.

2012

2013

2014

2015

2016

SOI #1

April, 2013

Natick submits Statement of Interest #1 to the MSBA.

MSBA Invitation

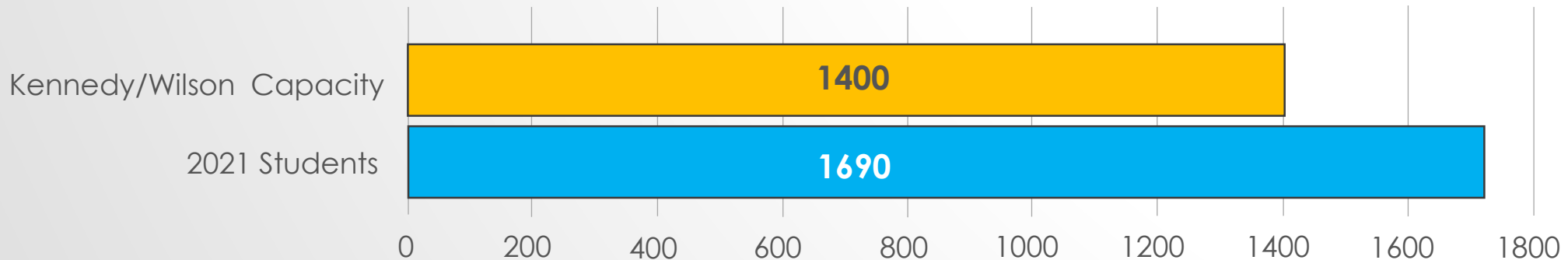
May 25, 2016

MSBA Board of Directors voted to issue an invitation to enter into the Eligibility Period



NATICK MIDDLE SCHOOLS

The Natick School Committee & Natick School Building Committee support construction of a new Kennedy Middle School to address the deficiencies of the aging KMS facility and to solve the severe overcrowding issues at both **Wilson Middle** and **Kennedy Middle** Schools



CHALLENGES AT THE KENNEDY MIDDLE SCHOOL

Currently experiencing severe overcrowding at the middle school level

- In February 2021 when a potential Kennedy could open, our middle schools will be overcrowded by 290 students
- Building infrastructure including mechanical, electrical, and plumbing systems have reached the end of their useful life
- Extraordinary capital funds in the last five years are being expended to address maintenance costs of the tired facility
- Kennedy Middle School does not provide an environment equal to Wilson Middle School. Dated science labs, no project based learning labs, poor indoor air environment.



KENNEDY MIDDLE SCHOOL

- The MSBA is reserving over \$37 million in funding for the Kennedy Middle School
- Renovations to bring the building up to current code would cost \$50-\$55 million
- Comprehensive renovations which would not meet the approved Educational Program for Kennedy would cost \$105- \$112 million
- The Town of Natick has spent \$3.74 million of the study & design of Kennedy Middle School
- **The cost of a new school Kennedy Middle School continues to rise each year the project is delayed. If the project is not approved, it could be another 3 years for the project to be considered by the MSBA.**

TAX IMPACT

SCENARIO #1

Includes Previous Design Articles

Total Project Budget- per MSBA 3011 \$109.56 Million

Town of Natick Portion \$72.25 Million

MSBA Max Grant* \$37.31 Million

Average Household Value \$512,540

Maximum Tax Impact * \$410/yr

Average (20 Year)* \$308/yr

Impact per \$100k Valuation \$60/yr

*Based on borrowing for 20 years @ 4% interest rate

TAX IMPACT

SCENARIO #2

Excludes Previous Design Articles

Total Project Budget	\$105.83 Million
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Town of Natick Portion	\$69.83 Million
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MSBA Max Grant*	\$36.00 Million
-----------------	-----------------

Average Household Value	\$512,540
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Maximum Tax Impact*	\$393/yr
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Average (20 Year)*	\$295/yr
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Impact per \$100k Valuation	\$57/yr
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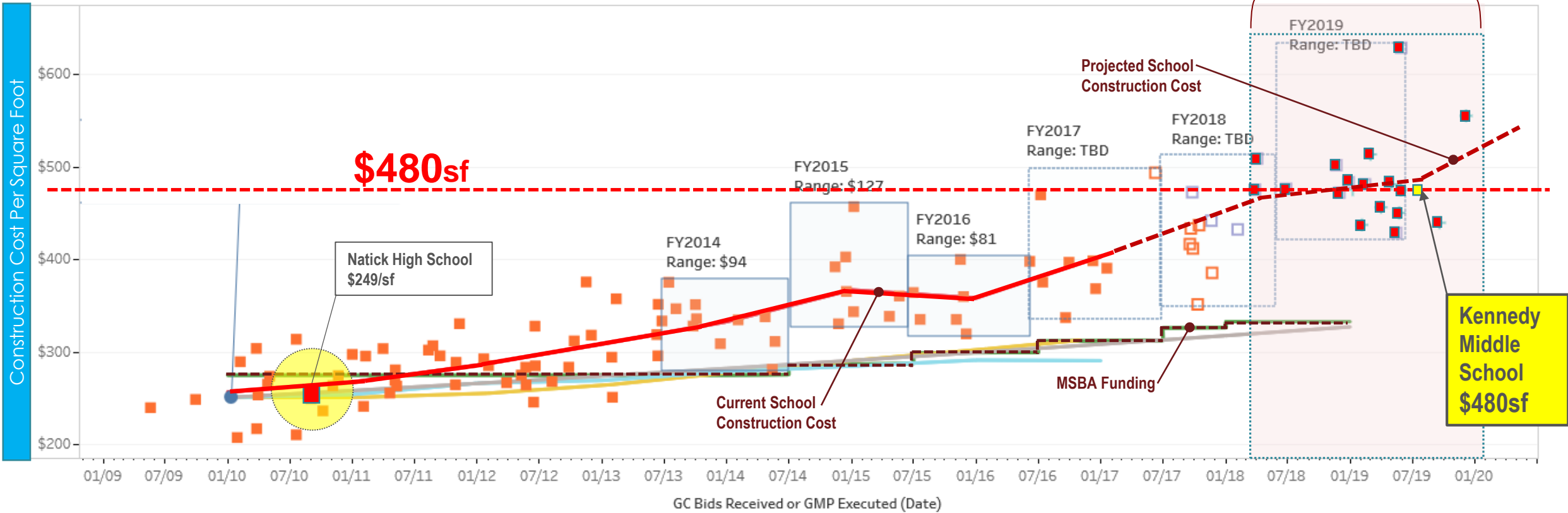
*Based on borrowing for 20 years @ 4% interest rate

COST & AFFORDABILITY

MSBA SCHOOL CONSTRUCTION COSTS: 2009-2020

\$481 Lynn	\$426 Attleborough HS
\$502 Middleborough HS	\$629 Boston
\$513 Marlborough ES	\$472 Cape Cod
\$476 Saugus	\$475 Harvard Elem
\$428 Westport	\$450 Ipswich
\$481 Worcester	\$483 Lexington

\$483sf
Average



The information and data contained in this chart is based on the MSBA's review of construction cost estimates, contracts and other documentation provided by cities, towns, and regional school districts. This information and data is intended for informational purposes only. The data may have changed based on actual construction bids or contract amendments, for example, and the MSBA shall have no responsibility or duty to update any of the information. Please contact the Districts for the most current information. The MSBA hereby disclaims any and all liability and responsibility that may arise in connection with the information contained in this chart. (Updated December 2017)

COST & AFFORDABILITY

Total Project Costs In today's dollars:

Wilson Middle School  \$81.0 MILLION
800 pupils

Kennedy Middle School  \$109.56 MILLION
1,000 pupils

Natick High School  \$150.4 MILLION
1,350 pupils

COST & AFFORDABILITY

Similar High School Total Project Costs

Middleborough High School

PS&B 10/25/17 750 pupils, 165,600sf

\$103.47 MILLION

Stoughton High School

PS&B 5/18/16 1,065 pupils, 216,000sf

\$123.54 MILLION

Cape Cod Technical High School

PS&B 2/15/17 650 pupils, 214,000sf

\$128.06 MILLION

Saugus Middle/High School

PS&B 6/28/17 1,360 pupils, 269,070sf

\$160.72 MILLION

South High Community School

PS&B 6/28/17 1,420 pupils, 359,994sf

\$209.97 MILLION

COST & AFFORDABILITY

Similar Total Project Costs

Abington Middle/High School	\$96.40 MILLION
Beverly Middle School	\$109.21 MILLION
Kennedy Middle School	\$109.56 MILLION
Saugus Middle/High School	\$160.72 MILLION
Lynn Middle Schools	\$188.5 MILLION

COST & AFFORDABILITY

To reduce cost, the New Kennedy School will have.....

- A 4-story academic core reducing the overall building footprint

Advantage: smaller, compact building footprint means lower cost for excavation, footings, foundations, and slab

- Exterior composed predominately of prefabricated cementitious reinforced panels

Advantage: more economical than masonry products, reduced labor cost and time

- LEED Silver Certification

Advantage: lower operating and maintenance cost compared to non-certified school

- Energy efficient building envelope

Advantage: increased insulation reduces heat loss and cooling loads and reduce size of HVAC system needed

- Increased daylighting and windows

Advantage: reduces electric lighting usage, minimizes heat gain, reduces heating and cooling loads

- LED lighting utilized throughout the school

Advantage: reduces cooling loads, reduces electric light usage, lowers maintenance cost

PBLL VS. SCIENCE LABS*

Natick Public Schools currently spends a minimum of \$10,000 per year for Planetarium experiences for Earth & Space Science standards

Planetarium	Building Cost	FF&E Cost	Technology Cost	Total Cost: Planetarium
	\$193,384.00	\$0.00	\$0.00	\$193,384.00

Aquaponics	Building Cost	FF&E Cost	Technology Cost	Total Cost: Aquaponics
	\$31,374.57	\$2,880.00	\$0.00	\$34,254.57

Greenhouse	Building Cost	FF&E Cost	Technology Cost	Total Cost: Greenhouse
	\$27,040.00	\$9,000.00	\$0.00	\$36,040.00

3D Studio Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: 3D Studio Lab
	\$52,200.00	\$31,400.00	\$65,000.00	\$148,600.00
	\$303,998.57	\$43,280.00	\$65,000.00	\$412,278.57

TOTAL COST TO
FIT OUT (4)
PBLL'S

Science Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00

Science Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00

Science Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00

Science Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00
	\$100,000.00	\$100,000.00	\$50,000.00	\$250,000.00

TOTAL COST TO
FIT OUT (4)
SCIENCE LABS

EACH Project Based Lab is
APPROXIMATELY
\$40,500
MORE THAN A TYPICAL
SCIENCE LAB

*Cost Data based upon information presented to Building Committee on 10/25/17

COMMUNITY EVENTS @ NPS

High School Building Use 2017

QUESTIONS & COMMENTS?

Last Updated: 2-2-2018

MDF - Network Equipment:

Unit Cost

Connecting new Building to School Network - Internet Services, TV, Phones, etc.	\$100,000.00
Backup Appliance	\$50,000.00
Core Router & Smart Net Coverage	\$200,000.00
Server Infrastructure, Storage, Windows & VM Licensing, SmartNet Coverage	\$400,000.00
Installation of Sevicees for Core & Servers	\$60,000.00
Firewalls - Sonicwall	\$70,000.00
Installation of Firewalls	\$10,000.00
Content Filters - Lightspeed	\$50,000.00
Installation of Content Filters	\$5,000.00
Digital TV System - Discover Video	\$75,000.00
Shoretel Phone System & Phone Handsets	\$150,000.00
Installation of Phone System	\$20,000.00
MDF UPS - Core	\$6,000.00
MDF UPS - Servers	\$4,500.00

IDF - Networking Equipment:

1st Floor - 1 MDF and 2 IDFs, 2nd Floor 1 IDF, 3rd Floor 1 IDF, 4th Floor 1 IDF.

Edge Switching - Aruba 5400R	\$31,000.00
Installation of Edge Switching	\$30,000.00
UPS for IDFs	\$4,800.00
Patch Cables	\$10,000.00

Classroom Equipment:

Aruba Classroom AP (215)	\$1,000.00
Aruba Large Space AP (225)	\$1,500.00
Installation Costs Wireless APs	\$30,000.00
4 Acer Chromeboxes & Wireless Keyboards for each classroom	\$550.00
Wall Mounted Charging Stations (16 devices each)	\$1,000.00

Labs:

Gym - 1st Floor - Portable Projector & Whiteboard on Wheels	\$1,500.00
Tech Literacy - Karin 1st Floor - Wall based Chargers	\$1,000.00
Tech Literacy - Karin 1st Floor - Wall Mounted Video Display	\$3,000.00
Adaptive PE & OT/PT - 2nd Floor - Imac Wotkstation	\$1,500.00
Zspace Lab Computers - 2nd Floor (15 Units)	\$5,000.00
Tech Education Lab - 2nd Floor - Tom Stefanni	\$0.00
Kiosk for Circulation Browsing - 2nd Floor Library - Imac Workstations	\$1,500.00
Library Circulation Desk - Imacs Workstations	\$1,500.00
Video Production Lab - 2nd Floor Library - IMacs or Laptops	\$1,500.00
Midi Lab - 3rd Floor - Mac Laptops	\$1,000.00

Mobile Devices:

Chromebooks (1000 students plus 10% Breakage)	\$411.00
Chromebooks (100 faculty - Plus 10% breakage)	\$411.00

Building Wide:

Chromeboxes Wireless Keyboards for Digital Signage -Twelve 90", 2 Large LED in Gym, Ten 42", Four 70"	\$550.00
Digital Signage Subscription Service - Arreya	\$1,500.00
Digital Signage Installation	\$10,000.00
Copiers (Copy/Print/Scan) 14 in total needed. Using 5 from existing school	\$15,000.00
Cafe POS Systems - Two Cafes	\$5,000.00
Visitor Checkin System: (ie: https://raptortech.com/)	\$10,000.00
Front Office Admin Computers - IMacs	\$1,500.00
Total	

Tech		Construction	
Quantity	Budget	Quantity	Budget
0	\$0.00	1	\$100,000.00
1	\$50,000.00		
1	\$200,000.00	0	\$0.00
1	\$400,000.00	0	\$0.00
1	\$60,000.00	0	\$0.00
1	\$70,000.00	0	\$0.00
1	\$10,000.00	0	\$0.00
1	\$50,000.00	0	\$0.00
1	\$5,000.00	0	\$0.00
0	\$0.00	1	\$75,000.00
1	\$150,000.00	0	\$0.00
1	\$20,000.00	0	\$0.00
2	\$12,000.00	0	\$0.00
10	\$45,000.00	0	\$0.00
0	\$0.00	18	\$558,000.00
1	\$30,000.00	0	\$0.00
18	\$86,400.00		
1	\$10,000.00		
120	\$120,000.00	0	\$0.00
20	\$30,000.00	0	\$0.00
1	\$30,000.00	0	\$0.00
156	\$85,800.00	0	\$0.00
82	\$82,000.00	0	\$0.00
1	\$1,500.00	0	\$0.00
2	\$2,000.00	0	\$0.00
1	\$3,000.00	0	\$0.00
1	\$1,500.00	0	\$0.00
15	\$75,000.00	0	\$0.00
0	\$0.00	0	\$0.00
1	\$1,500.00	0	\$0.00
2	\$3,000.00	0	\$0.00
30	\$45,000.00	0	\$0.00
30	\$30,000.00	0	\$0.00
1100	\$452,100.00	0	\$0.00
110	\$45,210.00	0	\$0.00

28	\$15,400.00	0	\$0.00
1	\$1,500.00	0	\$0.00
1	\$10,000.00	0	\$0.00
9	\$135,000.00	0	\$0.00
4	\$20,000.00	0	\$0.00
1	\$10,000.00	0	\$0.00
6	\$9,000.00	0	\$0.00
	\$2,406,910.00		\$733,000.00

Utility Costs

Summer 2020

Must Haves

Need full access to MDF and IDFs
Add new Kennedy to INet
Core router
IDF closets
WAPs
Phones
Security Cameras

Summer 2021

Nice to Haves

VM Infrastructure may be able to run all vms from high
Implement 2nd Internet circuit
Firewalls
Content Filters

1 school in short term.



NEW KENNEDY MIDDLE SCHOOL

EDUCATIONAL PLAN HIGHLIGHTS

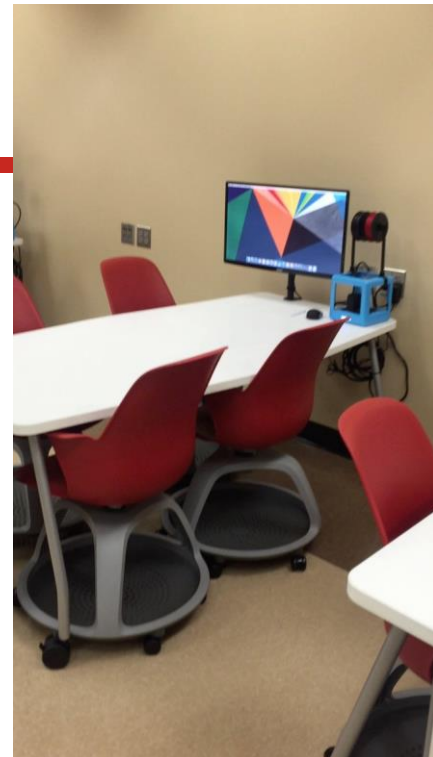
Kennedy Middle School Building Project





CORE ACADEMICS 5-8

- ELA
- Math
- Social Studies
- Science
- 5th Reading
- 7th World Language



- Classroom of the future design, maximize teacher and student workflow, streamline space, seamless technology integration



STEM & OUR CORE ACADEMIC FRAMEWORK

Overarching Standards: *Integration of disciplinary core ideas and practices reflects the interconnected nature of science and engineering. The standards emphasize preparation for postsecondary success for citizenship, college, and careers.*

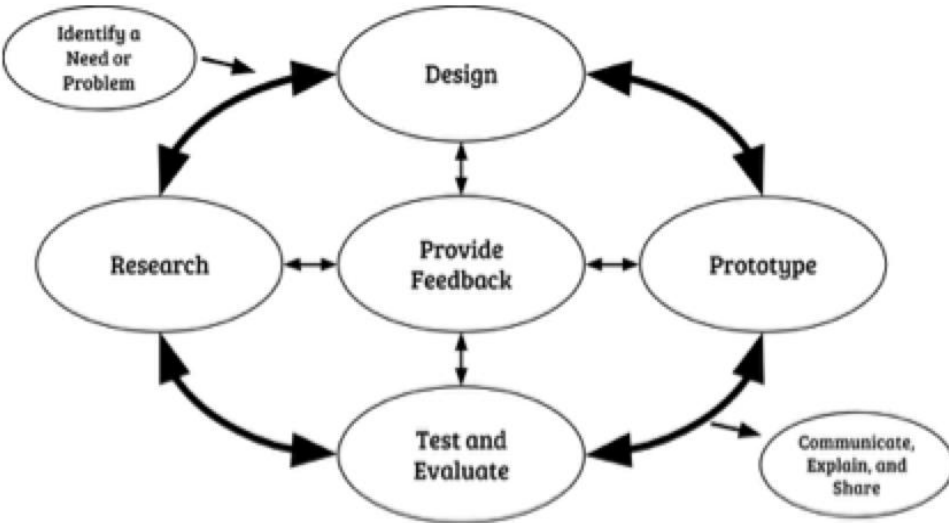
The *Framework for K-12 Science Education* (NRC, 2012) provides specific criteria for what constitutes a core idea. To be regarded as core, each idea must meet at least two, though preferably three or four, of the following criteria:

1. Have broad importance across multiple sciences or engineering disciplines or be a key organizing principle of a single discipline.
2. Provide a key tool for understanding or investigating more complex ideas and solving problems.
3. Relate to the interests and life experiences of students or be connected to societal or personal concerns that require scientific or technological knowledge.
4. Be teachable and learnable over multiple grades at increasing levels of depth and sophistication. That is, the idea can be made accessible to younger students but is broad enough to sustain continued investigation over years.



FOUNDATION FOR CORE ACADEMICS 2050

Engineering Design



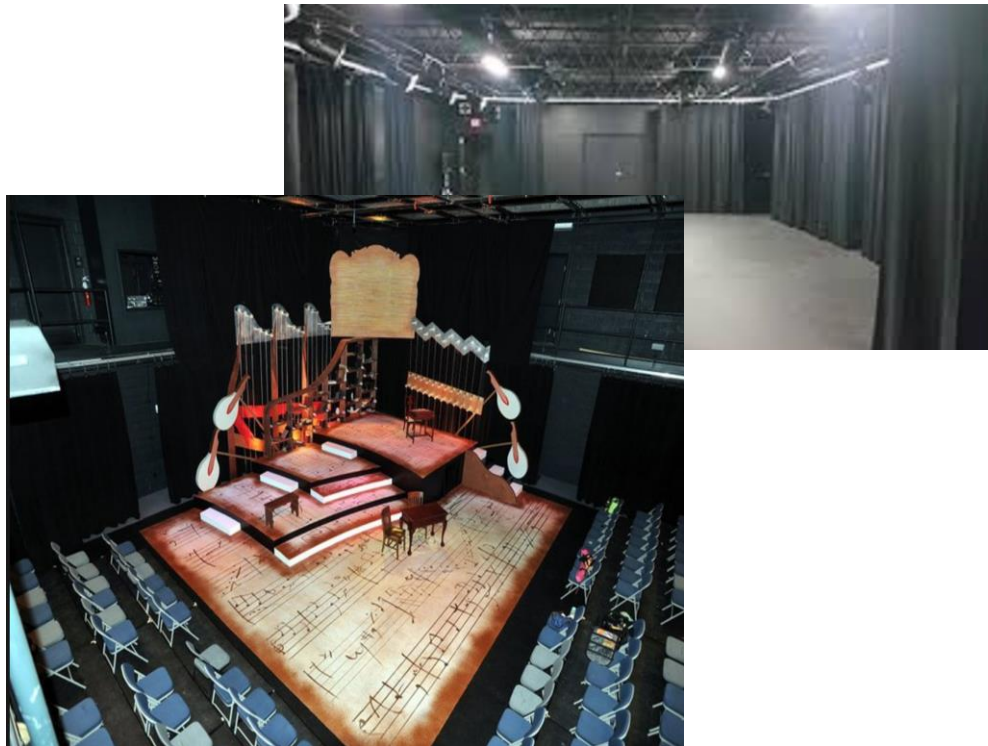
Scientific Inquiry





FLOOR 1: PERFORMANCE TECHNOLOGY STUDIO

- Drama Classroom
- Black Box Theater
- Technical Theater and Music





FLOOR 2: Z SPACE LAB

To be replicated at Wilson once space is freed to do so when students are moved to KMS





FLOOR 2: VIDEO PRODUCTION AND BROADCASTING

- Part of the VAP schedule of the future --to parallel the video production program at Wilson currently in existence
- Situated in the library area/Commons space to create a full Media Center
- Media Center is hub of communications in the building
- Serves the VAP and the library program



FLOOR 2: TECHNOLOGY EDUCATION/TECH LITERACY LAB

- Replicates the current shop/engineering lab at WMS
- Autocad and design computing
- Coding and computer science
- Traditional woodworking and tool use



FLOOR 2: ADAPTIVE PE/FITNESS CENTER

- Fitness programming already in existence at KMS
- Parallel program planned for WMS in coming years once space is available
- Original research conducted using KMS and WMS as a site to determine impact of fitness programming on academics and student functioning
- Space required in order to cycle students through at times conducive to supporting peak academic functioning





FLOOR 3: PLANETARIUM

- Grades 5 and 8 currently use or try to create planetarium experiences for students every year at both middle schools.
- The specific space could not be replicated at WMS, but the KMS facility would allow any grade level PK-12 to visit for use in curriculum across the system.
- Back up plan: Given the new focus on waves--ocean and sound in the new STEM frameworks, consideration is still being given to creation of a geology/seismology Earth/Plate Tectonics lab



EARTH/SPACE STANDARDS PK-10

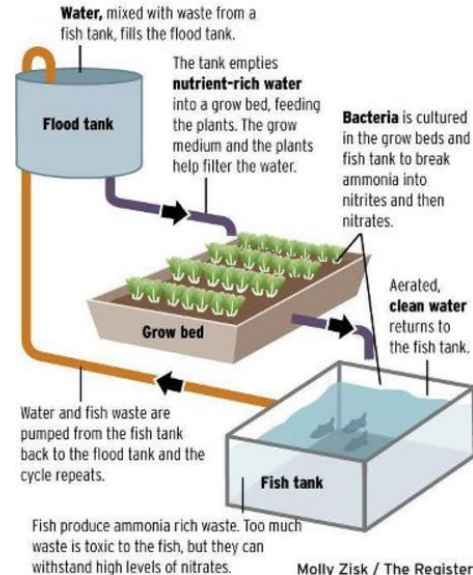
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 20%; text-align: center;"> </div> <div style="width: 60%; text-align: center;"> Earth Space Science Progression INCREASINGLY SOPHISTICATED SCIENCE </div> <div style="width: 20%; text-align: center;"> </div> </div>				
	Pre-K-2	3-5	6-8	9-10
ESS1.A The universe and its stars	Patterns of movement of the Sun, Moon, and stars as seen from Earth can be observed, described, and predicted.	Stars range greatly in their distance from Earth and this can explain their relative brightness.	N/A	Solar activity creates the elements through nuclear fusion. Astronomical evidence for the Big Bang theory comes from multiple sources.
ESS1.B Earth and the solar system		N/A	The solar system is part of the Milky Way, which is one of many billions of galaxies.	
ESS1.C The history of planet Earth	N/A	The Earth's orbit and rotation, and the orbit of the Moon around the Earth, cause observable patterns.	The solar system contains many varied objects held together by gravity. Solar system models explain and predict eclipses, lunar phases, and seasons.	<u>Kepler's</u> laws describe common features of the motions of orbiting objects. Changes in Earth's tilt and orbit result in cycles of climate changes such as ice ages.
		Patterns in rock formations and fossils indicate changes in landscapes over time.	Rock strata and the fossil record can be used as evidence to organize the relative occurrence of major historical events in Earth's history.	Past plate motions and plate tectonics explain why continental rocks are so much older than rocks of the ocean floor.



FLOOR 4: AQUAPONICS LAB / WORKING GREENHOUSE

- Connected to current engineering, biology, physics and chemistry standards
- Can be replicated at Wilson, just as it is at NHS.
- Opens to a rooftop garden area (which allows KMS to have a garden program like the one already at WMS)

How aquaponics works



	Pre-K-2	3-5	6-8	9-10
LS2.A Interdependent relationships in ecosystems	Plants and animals depend on their surroundings to get what they need.	Some animals eat plants for food and other animals eat the animals that eat plants, while decomposers restore some materials back to the soil. These relationships among organisms in an ecosystem are represented by food webs.	Organisms and populations are dependent on their environmental interactions both with other living things and with nonliving factors, any of which can limit their growth. Organisms compete for resources within ecosystems; typical interaction patterns include competitive, predatory, parasitic, and symbiotic relationships.	Ecosystems have carrying capacities resulting from biotic and abiotic factors. The fundamental tension between resource availability and organism populations affects genetic diversity within populations and biodiversity within ecosystems.
LS2.B Cycles of matter and energy transfer in ecosystems	[Content found in LS1.C, LS2.A, and ESS3.A]	Matter cycles between the air, water, and soil and among organisms as they live and die.	The matter that make up the organisms in an ecosystem are cycled repeatedly between the living and nonliving parts of the ecosystem. Food webs model the transfer of energy as well as matter among producers, consumers, and decomposers within an ecosystem. The Sun provides the energy for most ecosystems on Earth.	Photosynthesis captures energy in sunlight and stores it in chemical bonds of matter. Most organisms rely on cellular respiration to release energy in these bonds to power life processes. About 90% of available energy is lost from one trophic level to the next, resulting in fewer organisms at higher levels. At each link in an ecosystem, elements are combined in different ways and matter and energy are conserved. Photosynthesis, cellular respiration and decomposition are key components of the global carbon cycle.

BIOLOGY/CHEMICAL/PHYSICAL SCIENCE

	Pre-K-2	3-5	6-8	9-10
LS2.C Ecosystem dynamics, functioning, and resilience	N/A	When the environment changes some organisms survive and reproduce, some move to new locations, some new organisms move into the transformed environment, and some die.	Ecosystems are dynamic; their characteristics vary over time. Changes to any component of an ecosystem can lead to shifts in all of its populations. The completeness or integrity of an ecosystem's biodiversity is often used as a measure of its health.	If a biological or physical disturbance to an ecosystem occurs, including one induced by human activity, the ecosystem may return to its more or less original state or become a very different ecosystem, depending on the complex interactions within the ecosystem. The ability of an ecosystem to both resist and recover from change is a measure of its overall health.
LS3.A Inheritance of traits	Young organisms are very much, but not exactly, like their parents and also resemble other organisms of the same kind.	Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops. Variations of a trait exist in a group of similar organisms.	Organisms reproduce, either sexually or asexually, and parents transfer their genetic information to offspring. An individual's traits are largely the result of proteins, which are coded for by genes. Genes are located in the chromosomes of cells.	Nearly every cell in an organism contains an identical set of genetic information on DNA but the genes expressed by cells can differ. In sexual reproduction, genetic material in chromosomes of DNA is passed from parents to offspring during meiosis and fertilization.
LS3.B Variation of traits			In sexual reproduction, each parent randomly contributes half of its offspring's genetic information, resulting in variation between parent and offspring. Genetic information can be altered because of mutations, which may result in beneficial, negative, or no change to traits of an organism.	The variation and distribution of traits in a population depend on genetic and environmental factors. Sources of genetic variation include gene shuffling and crossing over during meiosis, recombination of alleles during sexual reproduction, and mutations. Mutations can be caused by environmental factors or errors in DNA replication, or from errors that occur during meiosis. Only mutations that occur in gametes can be passed on to offspring.



TECHNOLOGY DEVICES

- 1:1 grades 5-8
 - Desired device: Chromebook
- Refresh Teachers' laptops
 - Desired device: Mac Airs (100)
- TV Studio
 - 6 high end devices for editing/high end multimedia capabilities
- Blackbox Theater
 - 6 devices for sound/editing/light capabilities
- Tech Ed Lab
 - 12 devices for engineering/design (as at WMS now)
- Z space project lab
 - 12 devices with Z-space virtual software

Budget Statement for Preferred Schematic - Expenditures

As reported on the school district's most recent three end of year information, please updated to the 3 latest fiscal year periods and complete the fields below.												
Category	2013-2014 FY2014		2014-2015 FY2015		2015-2016 FY2016		Change from Previous Year		Post-Construction Budget FY21		New Facility vs. Current	
	Staff (FTE)	Budget	Staff (FTE)	Budget	Staff	Budget	Staff (FTE)	Budget	Staff	Budget	Staff (FTE)	Budget
Salaries												
Administration												
Admin. Secretary	2.00	89,345	2.00	95,227	2.00	97,936	0.00	2,709	2.00	105,281	0.00	7,345
Assistant Principal	1.00	105,383	1.00	110,561	1.00	111,667	0.00	1,106	1.00	120,042	0.00	8,375
Business Office	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Curriculum Director/Coord.	1.00	111,071	1.00	117,222	1.00	124,110	0.00	6,888	1.00	133,418	0.00	9,308
Custodians/Maintenance Staff	5.00	211,649	5.00	227,580	5.20	242,106	0.20	14,526	7.20	360,264	2.00	118,158
Executive Secretary	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Facilities Manager	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Guidance	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Adjustment Counselor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Guidance Counselors	2.00	118,246	2.00	127,756	2.00	137,550	0.00	9,794	2.00	147,866	0.00	10,316
Guidance Director	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Legal	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Nurse	1.00	66,068	1.00	70,009	1.00	70,709	0.00	700	1.00	76,012	0.00	5,303
Other	1.00	58,530	1.20	81,917	1.20	85,290	0.00	3,373	1.20	91,687	0.00	6,397
Principal	1.00	122,579	1.00	127,532	1.00	131,102	0.00	3,570	1.00	140,935	0.00	9,833
Special Education Admin	0.50	38,051	0.50	39,706	0.50	40,103	0.00	397	0.50	43,111	0.00	3,008
Superintendent/Asst. Superintendent	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Transportation	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Treasurer	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Total Administration	14.50	920,922	14.70	997,510	14.90	1,040,573	0.20	43,063	16.90	1,218,616	2.00	178,044
Instruction - Teaching Services												
Arts	2.00	138,692	2.00	146,891	2.00	150,872	0.00	3,981	2.00	172,220	0.00	21,348
Business	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Communications	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Coping Instructor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Culinary Arts	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
ELL	1.00	84,813	1.50	111,720	1.50	113,853	0.00	2,133	1.50	129,963	0.00	16,110
English Language	3.00	227,241	3.50	241,762	3.50	251,118	0.00	9,356	3.50	286,651	0.00	35,533
Family Consumer Services	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Foreign Language	3.00	228,152	3.50	271,700	3.50	283,189	0.00	11,489	3.50	323,260	0.00	40,071
Health Services	1.00	81,141	1.00	84,712	1.00	85,559	0.00	847	1.00	97,666	0.00	12,107
History & Social Science	4.00	247,000	4.00	257,742	4.00	255,919	0.00	(1,823)	4.00	292,132	0.00	36,213
Instructional Assistant/Paraprofessionals	10.00	228,949	11.00	267,076	9.00	225,443	-2.00	(41,633)	9.00	257,343	0.00	31,900
Library/Media	1.00	61,037	1.00	66,414	1.00	80,624	0.00	14,210	1.00	92,032	0.00	11,408
Mathematics	3.70	238,570	3.65	258,469	3.50	267,009	-0.15	8,540	3.50	304,791	0.00	37,782
MCAS	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Music	2.00	129,103	2.00	136,801	2.00	146,863	0.00	10,062	2.00	167,644	0.00	20,781
Other	15.00	1,057,889	16.00	1,169,525	16.00	1,224,946	0.00	55,421	20.00	1,658,276	4.00	433,330
Physical Education	3.00	188,655	3.00	216,113	3.00	232,947	0.00	16,834	3.00	265,909	0.00	32,962
Reading	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
School Adjustment Counselor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Science												
Biology	3.50	222,613	3.00	200,547	3.00	220,431	0.00	19,884	3.00	251,622	0.00	31,191
Botany	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Chemistry	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Geology	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Physics	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Special Education	6.30	424,439	6.60	448,796	7.60	495,734	1.00	46,938	7.60	565,880	0.00	70,146
Substitute Teachers	0.00	128,979	0.00	78,833	0.00	109,649	0.00	30,816	0.00	125,164	0.00	15,515
Technology	1.00	68,485	1.00	77,013	1.00	77,783	0.00	770	1.00	88,789	0.00	11,006
Vocational Tech.	1.00	81,141	1.00	84,712	1.00	85,559	0.00	847	1.00	97,666	0.00	12,107
Total Instruction - Teaching Services	60.50	3,836,899	63.75	4,118,826	62.60	4,307,498	-1.15	188,672	66.60	5,177,009	4.00	869,511
Total Salaries Administration & Instruction	75.00	4,757,821	78.45	5,116,336	77.50	5,348,071	-0.95	231,735	83.50	6,395,625	6.00	1,047,554
Employee Benefits												
All employee-related fringe (health insurance, retirement etc)		807,801		961,668		1,068,520		106,852		1,292,909		224,389
Materials & Services												
Materials												
Audio-Visual Materials		-		-		-		-		-		-
Culinary Arts Materials		-		-		-		-		-		-

Budget Statement for Preferred Schematic - Expenditures

Category	2013-2014 FY2014		2014-2015 FY2015		2015-2016 FY2016		Change from Previous Year		Post-Construction Budget FY21		New Facility vs. Current	
	Staff (FTE)	Budget	Staff (FTE)	Budget	Staff	Budget	Staff (FTE)	Budget	Staff	Budget	Staff (FTE)	Budget
General Office Supplies		27,731		20,680		17,384		(3,296)		20,861		3,477
Information technology		155,311		84,400		-		(84,400)		-		-
Hardware		-		-		-		-		-		-
Software		-		-		-		-		-		-
Library Materials		-		-		-		-		-		-
Non info-tech equipment		43,024		45,054		24,981		(20,073)		29,977		4,996
Testing Materials & Supplies		-		-		-		-		-		-
Textbooks		8,899		37,141		8,105		(29,036)		9,726		1,621
Vocational Program Materials		-		-		-		-		-		-
Total Materials		234,965		187,275		50,470		(136,805)		60,564		10,094
Services												
Athletics		-		-		-		-		-		-
Attendance		-		-		-		-		-		-
Food Service		157,147		163,695		172,311		8,616		261,803		89,492
Health Services		-		-		-		-		-		-
Other Student Activities		-		-		-		-		-		-
Psychological Services		-		-		-		-		-		-
School Security		-		-		-		-		-		-
Student Transportation		235,004		247,373		265,999		18,626		404,149		138,150
Total Services		392,152		411,069		438,311		8,616		665,952		227,642
Total Material & Services		627,117		598,344		488,781		(128,189)		726,516		237,736
Facility Costs & Capital Improvements												
Facility Costs												
Custodial Supplies		13,984		15,538		16,530		992		26,366		9,835
Electricity		102,529		88,751		75,731		(13,020)		160,000		84,269
Heating Oil		-		-		-		-		-		-
Maintenance												
Building Security Maintenance		2,500		2,500		2,800		300		4,466		1,666
Elevator		-		-		-		-		-		-
Equipment Maintenance		-		-		-		-		-		-
Exterminating		-		-		-		-		-		-
Facility Maintenance		-		-		-		-		-		-
Fire Alarm		2,689		2,830		2,979		149		4,751		1,772
Fire Extinguisher Inspection		-		-		-		-		-		-
Generator		-		-		-		-		-		-
HVAC Maintenance		5,120		5,066		5,447		382		8,688		3,241
Other		20,858		21,307		22,428		1,121		35,772		13,344
Site Maintenance (Grounds)		-		-		-		-		-		-
Technology		-		-		-		-		-		-
Trash Removal		-		-		-		-		-		-
Natural Gas		51,443		60,318		39,348		(20,970)		30,000		(9,348)
Snow Removal		-		-		-		-		-		-
Telephone		8,698		9,156		9,537		382		15,212		5,675
Water/Sewer		-		-		-		-		-		-
Total Facility Costs		207,821		205,465		174,800		(30,665)		285,255		110,455
Capital Improvements												
Capital Improvements		63,083		211,112		13,294		(197,818)		25,000		11,706
Total Facility Costs & Capital Improvements		270,904		416,577		188,094		(228,483)		310,255		122,161
Debt Service												
Short-term		-		-		-		-		-		-
Long-term		-		-		-		-		-		-
Total Debt Service		-		-		-		-		-		-
Total Budget & Staff	75.00	6,463,643	78.45	7,092,925	77.50	7,093,465	-0.95	(18,086)	84	8,725,305	6	1,631,841

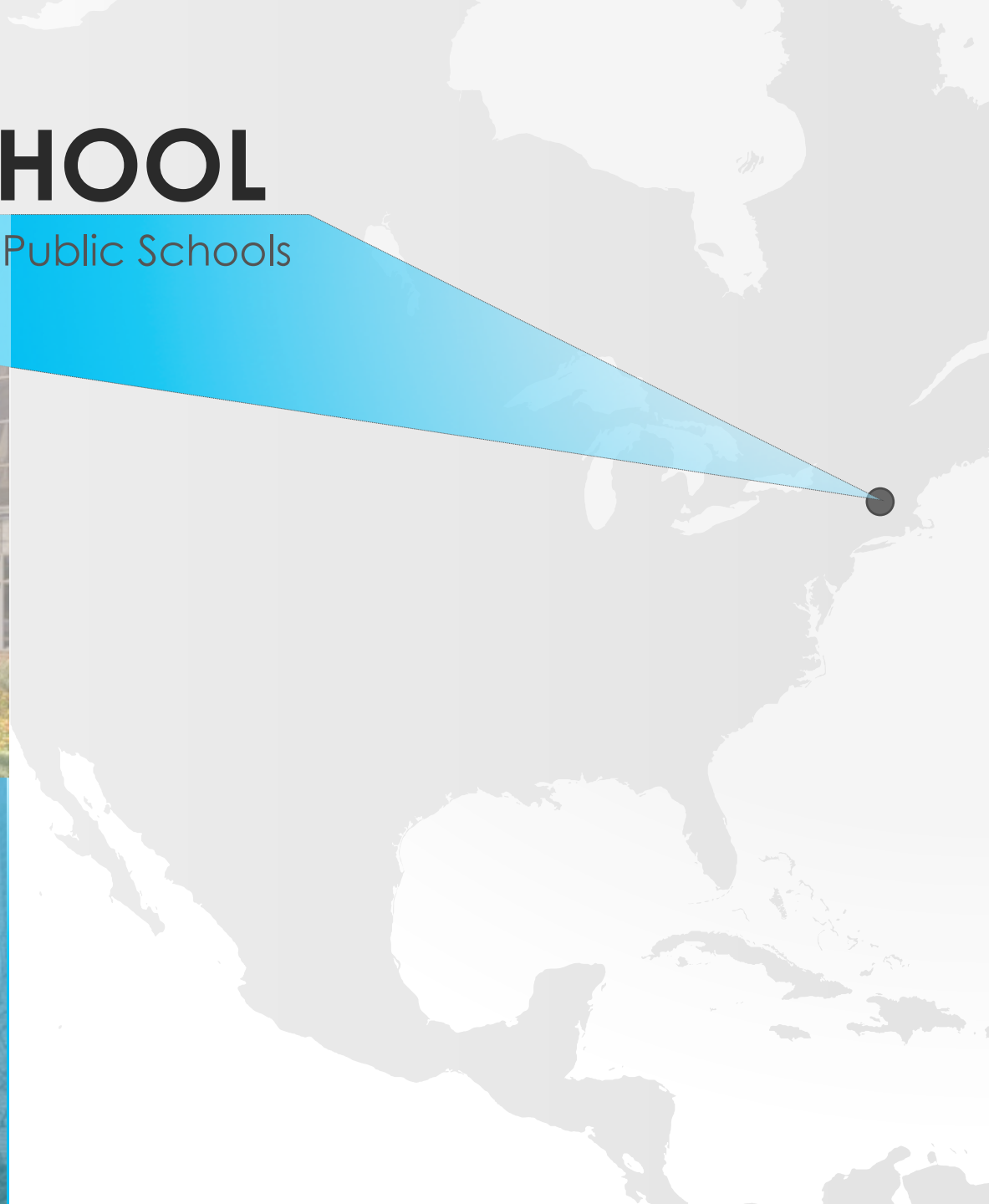
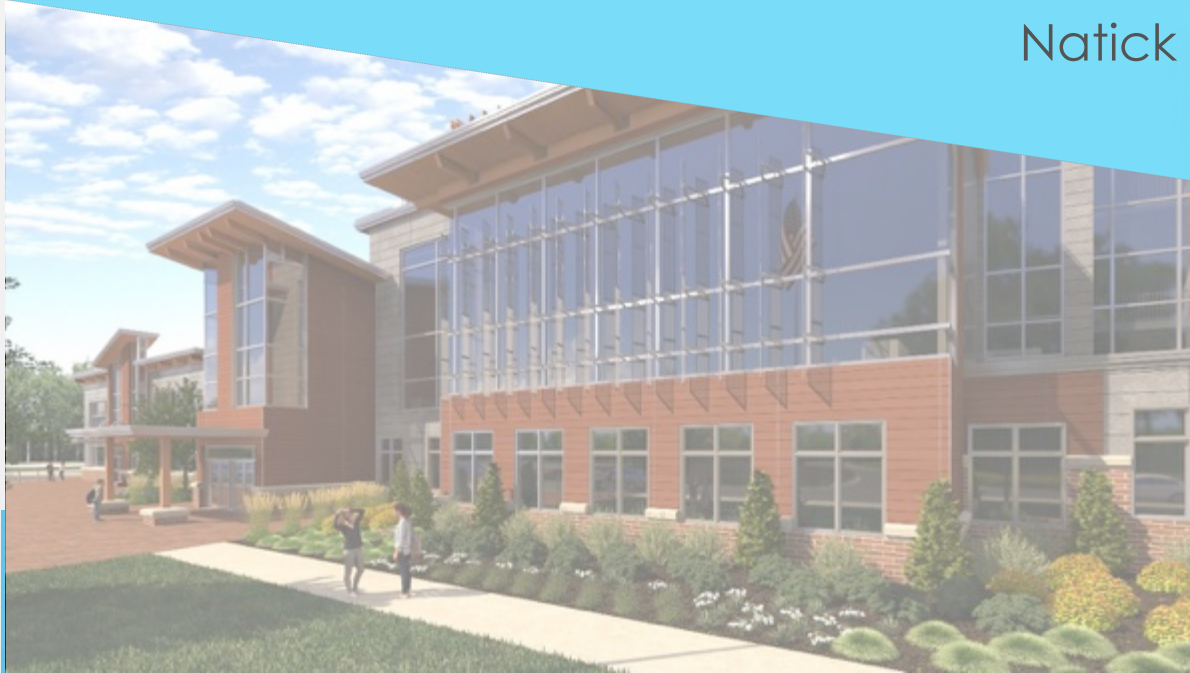
Budget Statement for Preferred Schematic - Revenue

As reported on the school district’s most recent three End of Year Pupil and Financial Reports schedule 1, please update to the 3 latest fiscal year periods and report sources of revenue in the fields below.

	FY14 End of Year Financial Report								FY15 End of Year Financial Report								FY16 End of Year Financial Report						
	Regular Day	Special Education	C74 Occupation al Day	Adult Education	Other Programs	Un-distributed	Total		Regular Day	Special Education	C74 Occupation al Day	Adult Education	Other Programs	Un-distributed	Total		Regular Day	Special Education	C74 Occupation al Day	Adult Education	Other Programs	Un-distributed	Total
A. Revenue from Local Sources																							
Assessments received by Regional Schools	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
E&D Fund Appropriations	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Tuition from Individuals	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Tuition from Other Districts in Comm.	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Tuition from Districts in Other States	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Previous Year Unexpended Encumbrances (Carry Forward)	-	-	-	-	-	71,142	71,142		-	-	-	-	-	79,173	79,173		-	-	-	-	-	-	-
Transportation Fees	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Earnings on Investments	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Rental of School Facilities	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Other Revenue	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Medical Care and Assistance	-	176,561	-	-	-	-	176,561		-	297,685	-	-	-	-	297,685		-	229,092	-	-	-	-	229,092
Non Revenue Receipts	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Total Revenue From Local Sources	-	176,561	-	-	-	71,142	247,703		-	297,685	-	-	-	79,173	376,858		-	229,092	-	-	-	-	229,092
B. Revenue from State Aid																							
School Aid (Chapter 70)	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-
Mass School Building Authority - Construction Aid	-	-	-	-	-	8,312,752	8,312,752		-	-	-	-	-	8,681,240	8,681,240		-	-	-	-	-	8,816,665	8,816,665
Pupil Transportation (Ch. 71, 71A,71B,74)	-	-	-	-	-	1,137,340	1,137,340		-	-	-	-	-	1,104,713	1,104,713		-	-	-	-	-	-	-
Charter Tuition Reimbursements & Charter Facilities Aid	-	26,610	-	-	-	27,674	27,674		-	-	-	-	-	85,632	85,632		-	-	-	-	-	117,293	117,293
Circuit Breaker	-	-	-	-	-	40,543	67,153		-	-	-	-	-	37,367	37,367		-	-	-	-	-	31,244	31,244
Foundation Reserve	-	-	-	-	-	2,018,254	2,018,254		-	-	-	-	-	1,976,562	1,976,562		-	-	-	-	-	2,359,292	2,359,292
Total Revenue From State Aid	-	26,610	-	-	-	11,536,563	11,563,173		-	-	-	-	-	11,885,514	11,885,514		-	-	-	-	-	11,324,494	11,324,494
C. Revenue from Federal Grants																							
ESE Administered Grants	215,697	1,130,240	-	-	-	70,202	1,416,139		296,808	1,145,027	-	-	-	83,469	1,525,304		321,990	1,217,237	-	-	-	80,781	1,620,008
Direct Federal Grants	110,974	-	-	-	-	-	110,974		-	-	-	-	140,165	-	140,165		-	-	-	-	109,749	-	109,749
Total Revenue Federal Grants	326,671	1,130,240	-	-	-	70,202	1,527,113		296,808	1,145,027	-	-	140,165	83,469	1,665,469		321,990	1,217,237	-	-	109,749	80,781	1,729,757
D. Revenue from State Grants																							
ESE Administered Grants	-	-	-	-	-	524,799	524,799		-	-	-	-	-	462,045	462,045		-	-	-	-	-	505,269	505,269
Other State Grants	116,190	-	-	-	-	-	116,190		-	-	-	-	111,180	-	111,180		-	-	-	-	139,713	-	139,713
Total Revenue From State Grants	116,190	-	-	-	-	524,799	640,989		-	-	-	-	111,180	462,045	573,225		-	-	-	-	139,713	505,269	644,982
E. Revenue - Revolving & Special Funds																							
School Lunch Receipts	-	-	-	-	-	1,450,391	1,450,391		-	-	-	-	-	1,621,280	1,621,280		-	-	-	-	-	1,593,959	1,593,959
Athletic Receipts	-	-	-	-	-	342,059	342,059		-	-	-	-	-	281,118	281,118		-	-	-	-	-	404,985	404,985
Tuition Receipts - School Choice	201,750	31,402	-	-	-	-	233,152		200,300	45,300	-	-	-	-	245,600		194,450	112,192	-	-	-	-	306,642
Tuition Receipts - Other	500,995	52,372	-	-	-	-	553,367		560,855	74,861	-	-	-	-	635,716		649,381	59,334	-	-	-	-	708,715
Other Local Receipts	-	-	-	-	-	2,593,904	2,593,904		-	-	-	-	-	2,791,606	2,791,606		-	-	-	-	-	3,255,408	3,255,408
Private Grants	300,881	-	-	-	-	-	300,881		172,177	-	-	-	-	-	172,177		177,040	-	-	-	-	-	177,040
Total Revenue Revolving & Special Funds	1,003,626	83,774	-	-	-	4,386,354	5,473,754		933,332	120,161	-	-	-	4,694,004	5,747,497		1,020,871	171,526	-	-	-	5,254,352	6,446,749
Total Revenue All Sources	1,446,487	1,417,185	-	-	-	16,589,060	19,452,732		1,230,140	1,562,873	-	-	251,345	17,204,205	20,248,563		1,342,861	1,617,855	-	-	249,462	17,164,896	20,375,074

KENNEDY MIDDLE SCHOOL

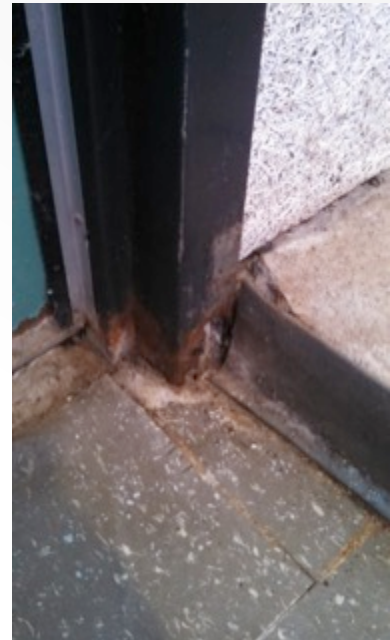
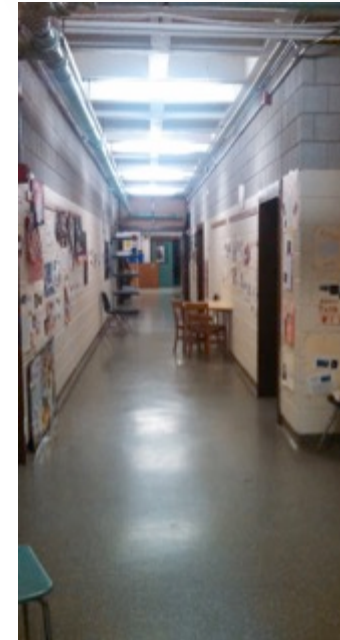
Natick Public Schools



CHALLENGES AT THE KENNEDY MIDDLE SCHOOL

Currently experiencing severe overcrowding at the middle school level

- In February 2021 when a potential Kennedy could open, our middle schools will be overcrowded by 290 students
- Building infrastructure including mechanical, electrical, and plumbing systems have reached the end of their useful life
- Extraordinary capital funds in the last five years are being expended to address maintenance costs of the tired facility
- Kennedy Middle School does not provide an environment equal to Wilson Middle School. Dated science labs, no project based learning labs, poor indoor air environment.



NATICK MIDDLE SCHOOLS

Since 2012, the Natick School Committee studied the deficiencies of the aging Kennedy Middle School & the rising student enrollment affecting both **Wilson Middle & Kennedy Middle Schools**

Natick Schools Master Study

May, 2012

Natick Public Schools Master Plan prepared for Kennedy Middle, Memorial & Johnson Elementary Schools.

SOI #2

April, 2014

Natick submits Statement of Interest #2 to the MSBA.

SOI #3

April 10, 2015

Natick submits Statement of Interest #3 to the MSBA.

2012

2013

2014

2015

2016

SOI #1

April, 2013

Natick submits Statement of Interest #1 to the MSBA.

MSBA Invitation

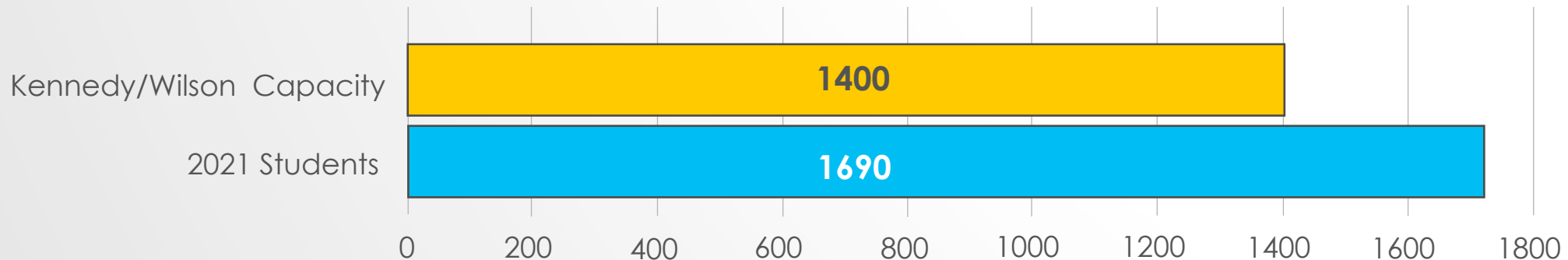
May 25, 2016

MSBA Board of Directors voted to issue an invitation to enter into the Eligibility Period

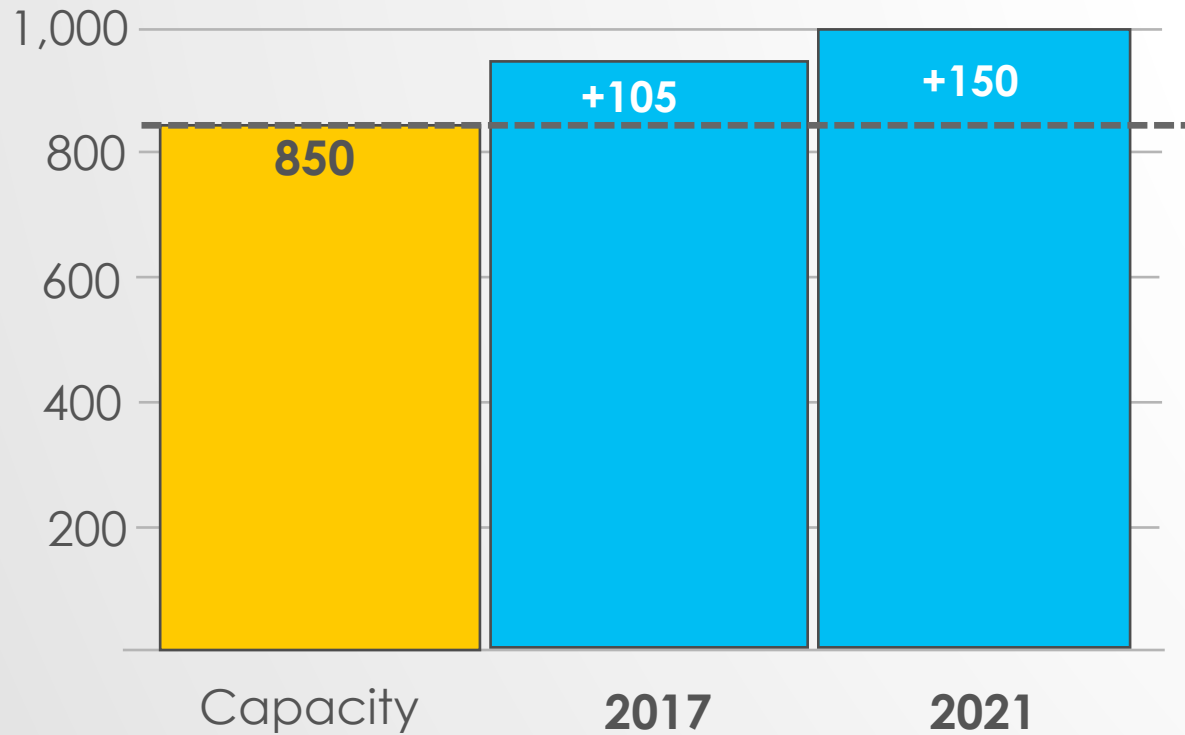


NATICK MIDDLE SCHOOLS

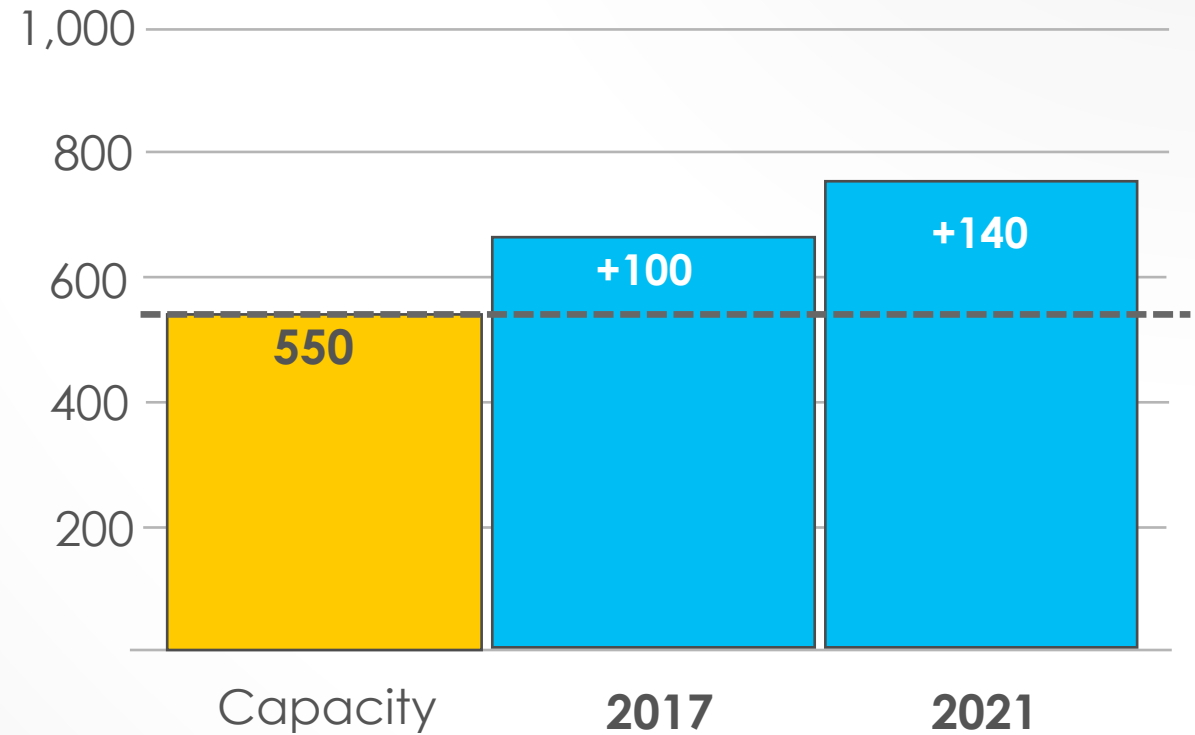
The Natick School Committee & Natick School Building Committee support construction of a new Kennedy Middle School to address the deficiencies of the aging KMS facility and to solve the severe overcrowding issues at both **Wilson Middle** and **Kennedy Middle** Schools



NATICK MIDDLE SCHOOL ENROLLMENT



Wilson Middle



Kennedy Middle

BENEFITS TO MIDDLE SCHOOL COMMUNITY

- Relieves severe overcrowding at Wilson & Kennedy Middle schools
- By lowering the student population to 850 at Wilson, space will become available so parity can be achieved at Wilson by implementing:
 - Space for Integrated Arts
 - 3d Studio Space
 - Adaptive PE/Fitness
 - Greenhouse
- Allows expansion of Special Education programs at each school

BENEFITS TO NATICK COMMUNITY

- Performing arts center
- Collaborative environment for teachers
- Video production & broadcasting studio
- Athletic & fitness center
- Integrated arts space
- Flexible project based learning labs
- Outdoor learning environments
- Lighted turf field & Basketball court



Brown Elementary School bus drop-off and pick-up

Bus Pick-up and Drop-off remains in front of both schools

Open green space shared between Brown Elementary & Kennedy Middle School preserves view corridor to Brown Elementary School

Main Entry to new school aligned with Mill Street for safety & security

4-story academic core centrally located on-site

New and existing trails enhanced throughout the campus

Existing Brown Elementary School playground

Performing Arts Center adjacent to Brown Elementary School for shared use

Existing Surrey Lane path

Parking evenly distributed throughout the campus

Emergency vehicle access provided around perimeter of new school

Middle School parent drop-off & pick-up separated from bus drop-off & pick-up



Kennedy Middle School
Design Development Exterior Perspective

FIRST FLOOR



SECOND FLOOR



THIRD FLOOR



FOURTH FLOOR





Kennedy Middle School
Design Development Exterior Perspective



Kennedy Middle School
Design Development Exterior Perspective



Kennedy Middle School
Design Development Exterior Perspective





Kennedy Middle School
Design Development Exterior Perspective

KENNEDY MIDDLE SCHOOL

- The MSBA is reserving \$37.3 million in funding for the Kennedy Middle School
- Renovations to bring the building up to current code would cost \$50-\$55 million and would not be reimbursable under the current program
- Comprehensive renovations and additions, which would not meet the approved Educational Program for Kennedy, would cost \$105- \$112 million and disrupt the learning environment for four years
- The Town of Natick has spent \$3.74 million on the study & design of Kennedy Middle School
- **The cost of a new school Kennedy Middle School continues to rise each year the project is delayed.**

TAX IMPACT

All KMS Costs Including Previous Approved Design Articles

Total Project Budget	\$109.56 Million
Town of Natick Portion	\$72.25 Million
MSBA Max Grant*	\$37.31 Million

Average Household Value	\$512,540
Maximum Tax Impact *	\$410/yr
Average Tax Impact*	\$308/yr

Average Impact over 20 years per \$100k Valuation* \$60/yr

*Based on borrowing for 20 years @ 4% interest rate

Current TM Article Only

Total Project Budget	\$105.83 Million
Town of Natick Portion	\$69.83 Million
MSBA Max Grant*	\$36.00 Million

Average Household Value	\$512,540
Maximum Tax Impact *	\$393/yr
Average Tax Impact*	\$295/yr

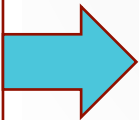
Average Impact Over 20 years per \$100k Valuation* \$57/yr

*Based on borrowing for 20 years @ 4% interest rate

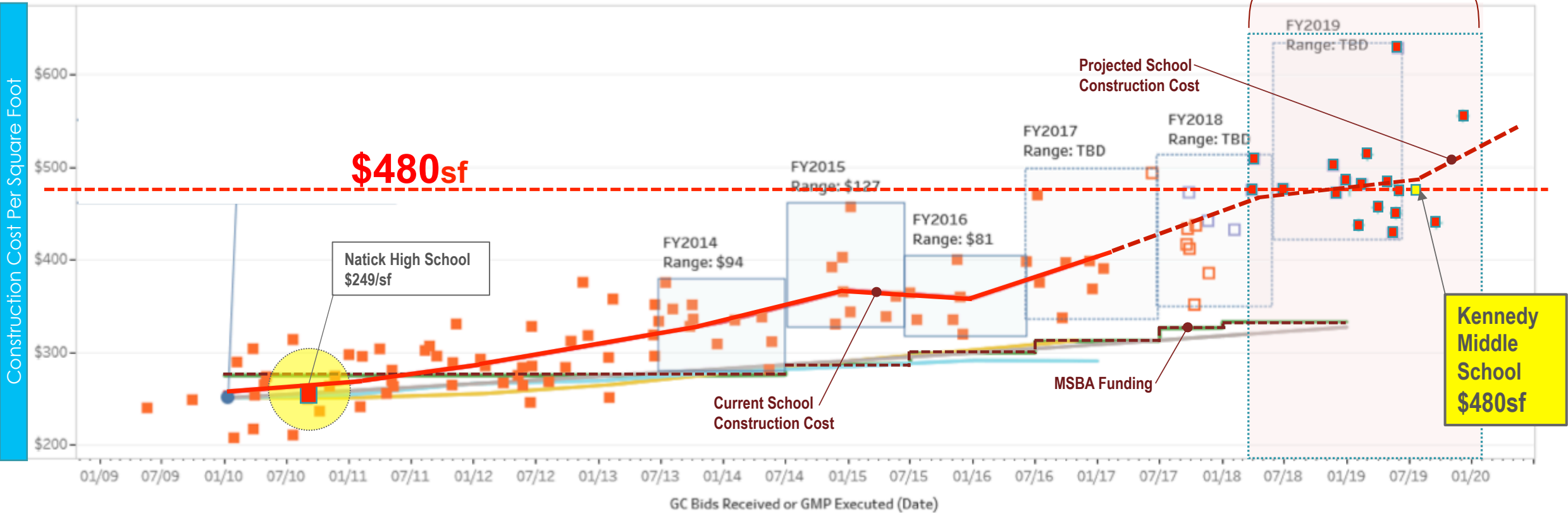
COST & AFFORDABILITY

MSBA SCHOOL CONSTRUCTION COSTS: 2009-2020

\$481 Lynn	\$426 Attleborough HS
\$502 Middleborough HS	\$629 Boston
\$513 Marlborough ES	\$472 Cape Cod
\$476 Saugus	\$475 Harvard Elem
\$428 Westport	\$450 Ipswich
\$481 Worcester	\$483 Lexington



**\$483sf
Average**



The information and data contained in this chart is based on the MSBA's review of construction cost estimates, contracts and other documentation provided by cities, towns, and regional school districts. This information and data is intended for informational purposes only. The data may have changed based on actual construction bids or contract amendments, for example, and the MSBA shall have no responsibility or duty to update any of the information. Please contact the Districts for the most current information. The MSBA hereby disclaims any and all liability and responsibility that may arise in connection with the information contained in this chart. (Updated December 2017)

COST & AFFORDABILITY

In today's dollars:

Wilson Middle School  \$81.0 MILLION
800 pupils

Kennedy Middle School  \$109.56 MILLION
1,000 pupils

Natick High School  \$150.4 MILLION
1,350 pupils

COST & AFFORDABILITY

Similar Total Project Costs

Abington Middle/High School	\$96.40 MILLION
Beverly Middle School	\$109.21 MILLION
Kennedy Middle School	\$109.56 MILLION
Saugus Middle/High School	\$160.72 MILLION
Lynn Middle Schools	\$188.5 MILLION

COST & AFFORDABILITY

To reduce cost, the New Kennedy School will have.....

- A 4-story academic core reducing the overall building footprint

Advantage: smaller, compact building footprint means lower cost for excavation, footings, foundations, and slab

- Exterior composed predominately of prefabricated cementitious reinforced panels

Advantage: more economical than masonry products, reduced labor cost and time

- LEED Silver Certification; Energy Efficient Lighting and Insulation

Advantage: lower operating and maintenance cost compared to non-certified school; reduced heat loss (winter) and gain (spring and fall); reduced electric usage by daylighting and LED fixtures

- Very efficient layout reducing square footage

Advantage: KMS has the second lowest sf/student out of all Middle Schools (6) approved in the past two years while including a 500 seat auditorium

- Cost effective material selection

Advantage: selectively using less expensive materials while not sacrificing long term maintenance means lower material cost

CONTROLLING COSTS

August 2017

2 Independent Cost Estimates

PSR Project Budget \Longrightarrow \$109.5 Million

MSBA Maximum Grant \Longrightarrow \$34-\$38 Million

Town of Natick Portion \Longrightarrow \$73-\$77 Million

January 2018

2 Independent Cost Estimates

PSR Project Budget \Longrightarrow \$109.5 Million

MSBA Maximum Grant \Longrightarrow \$37.3 Million

Town of Natick Portion \Longrightarrow \$72.2 Million

QUESTIONS FROM FIN COMM

1a

Salary, benefits, pension, professional development costs associated with additional teachers, support staff (excluding custodial)

Administration	\$ 60,000
Teaching	\$ 869,500
Fringes	\$ 169,000
TOTAL	\$1,098,500

1b

Increase in maintenance costs (staff/supplies) of new KMS compared to existing KMS

Custodial Staff	\$ 118,000
Supplies/ Contracts	\$ 121,000
Fringes	\$ 21,500
TOTAL	\$ 260,500

QUESTIONS FROM FIN COMM

1c

Operating & Capital Expenses associated with Project Based Learning Labs

Planetarium	Building Cost	FF&E Cost	Technology Cost	Total Cost: Planetarium
	\$193,384.00	\$0.00	\$0.00	\$193,384.00

Aquaponics	Building Cost	FF&E Cost	Technology Cost	Total Cost: Aquaponics
	\$31,374.57	\$2,880.00	\$0.00	\$34,254.57

Greenhouse	Building Cost	FF&E Cost	Technology Cost	Total Cost: Greenhouse
	\$27,040.00	\$9,000.00	\$0.00	\$36,040.00

3D Studio Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: 3D Studio Lab
	\$52,200.00	\$31,400.00	\$65,000.00	\$148,600.00
	\$303,998.57	\$43,280.00	\$65,000.00	\$412,278.57

TOTAL COST TO
FIT OUT (4)
PBL'S

Sceince Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00

Sceince Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00

Sceince Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00

Sceince Lab	Building Cost	FF&E Cost	Technology Cost	Total Cost: Science Lab
	\$25,000.00	\$25,000.00	\$12,500.00	\$62,500.00
	\$100,000.00	\$100,000.00	\$50,000.00	\$250,000.00

TOTAL COST TO
FIT OUT (4)
SCIENCE LABS

- Natick Public Schools currently spends a minimum of \$20,000 per year for Planetarium experiences for Earth & Space Science standards
- The Aquaponics lab would require \$10K investment for first 3 years.
- The Greenhouse would not require additional operating or capital expenses
- The Planetarium would not require additional operating or capital expenses. Curriculum materials are typically included in the cost of the projector from most vendors

EACH Project Based Lab is
APPROXIMATELY
\$40,500
MORE THAN A TYPICAL
SCIENCE LAB

QUESTIONS FROM FIN COMM

1d.i

What expenditures will be required to achieve parity at WMS?

- Need to free up classroom space in current WMS in order to outfit:
 - Hydroponics kits/set up materials, \$10,000 (previously funded by NEF)
 - Adaptive PE/Fitness Center, \$25,000: cost of added fitness equipment to current fitness center at WMS.

Outdoor greenhouse kit, approx, \$5-7,000, to recreate greenhouse classroom.

1d.ii

What programmatic differences between KMS and WMS, if any?

Planetarium will not be recreated at WMS. The KMS lab would be a district and community resource.

QUESTIONS FROM FIN COMM

1d.iii

Impact, if any, of busing students from WMS to experience KMS amenities?

Frequency / Cost:

Frequency is still emerging with our new STEM curriculum but new curriculum has Earth/Space expectations at every grade level PK-12.

Cost: Forecasting two grade levels of students attending planetarium 2 x per month for 9 months cost = 30K per year.

Class Time Lost: 20 min to load/20 min travel to KMS x each visit
Currently we take classes to McAuliffe planetarium for 20K per grade level and we lose 5 days of instruction per school.

How will project affect School Committee policy to achieve programmatic parity?

1d.iv

KMS project allows us the space and opportunity to create more parity and meet our educational goals around STEM and project based learning in meaningful and application-oriented manner.

QUESTIONS FROM FIN COMM

3

What are the costs for the hydroponics, greenhouse, planetarium, adaptive PE, and turf field w lights?

Costs for Labs is answered in 1c above.

The Adaptive Fitness Center will cost approximately **\$55,000** more than if a similar space were outfitted for classrooms.

The Performance Studio will cost approximately **\$220,000** more than if a similar space were outfitted for classrooms

The synthetic turf field will cost approximately **\$1,260,000** with lighting.

The outdoor basketball court will cost approximately **\$120,000** with lighting.

QUESTIONS FROM FIN COMM

1e

What are the new capabilities / facilities to be included in KMS and what are their 5 year operating budgets?

Adaptive Fitness Center:

Performance Studio:

Turf Field w Lights:

Outdoor BB Court w Lights:

INCREMENTAL CAPITAL IF KMS NOT BUILT

Capital Repair	Cost for 5 years
Install Temporary Modular Units at KMS	\$455,000
Relocate Modulares to Memorial	\$600,000
Install security cameras	\$35,000
Replace carpets	\$45,000
Replace exterior doors	\$140,000
Replace univents	\$220,000
Replace HVAC	\$600,000
Install sprinkler system	\$850,000
Retile floors	\$635,000
Replace boilers	\$1,000,000
Replace exterior windows	\$1,000,000
Replace science and tech ed classes	\$1,500,000
Replace entire roof	\$900,000
Replace VCT floor tiles	\$600,000
TOTAL	\$8,580,000

INCREMENTAL OPERATING IF KMS NOT BUILT

- General Ed / Special Ed Teachers to staff the modulars which would be on par with the expected staff increases noted in the MSBA Budget worksheet.

- Specialists for art, music, PE/Fitness, health, technology & engineering classes

- Even if a new facility is not obtained, enrollment and redistribution of the middle school population is needed. Wilson is overcrowded and the students need teachers, increased nursing, admin and support staff.

2

- Hidden Cost: many teachers and staffers would be on carts, roving to free classrooms in order to serve more students. This reduces teacher preparedness and does result in lost teaching time due to transitions into and out of classes.

QUESTIONS FROM FIN COMM

4

What is the technology plan for KMS??

KMS Draft Technology Plan reviewed by Director of Technology Dennis Roche who will also cover:

- Items that would be bought if project were NOT approved
- Any items included outside KMS scope: (None)
- Any new devices (laptops, etc.) included:

QUESTIONS & COMMENTS?