The Start of a Conversation:

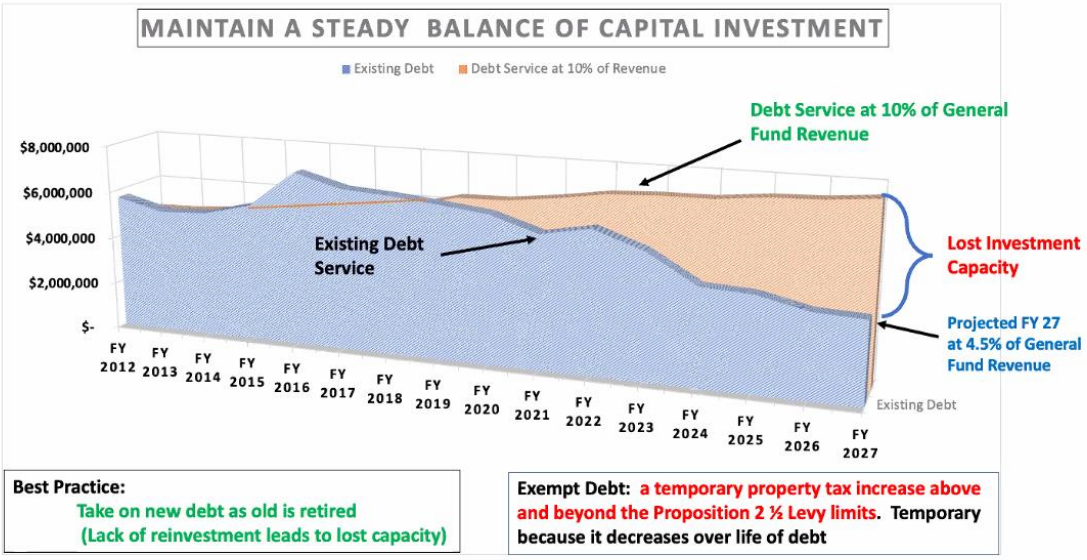
Big Picture Financial Planning and Modeling for a New School Building

Challenges and Pressures Planning in a New Environment

- Highly Inflationary Environment (8.2% Inflation vs. Fed Target of 2%)
- Changing Interest Rate Environment (Accommodative to Restrictive)
- Impact on Options, Costs and Taxes (Higher Costs and Smaller Options)
    - Planned Enrollment and Grade Configuration
    - Educational Program and Space Needs
    - Acceptable Tax Impact
- The Art of the Possible (What Are the Planning "Guard Rails" and Sources of Project Funding?)
- Eliminate Options that are Not Feasible

Challenges and Pressures
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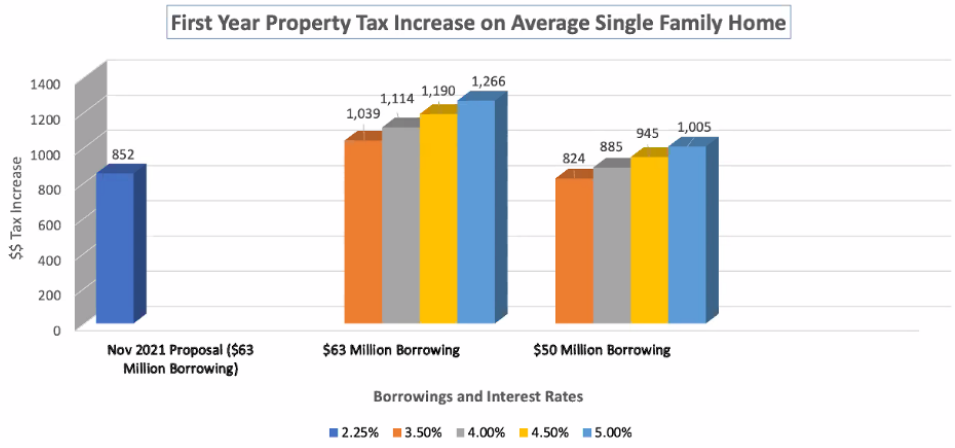
Best Practice:
Take on new debt as old is retired
(Lack of reinvestment leads to lost capacity)

Exempt Debt: a temporary property tax increase above and beyond the Proposition 2 ½ Levy limits. Temporary because it decreases over life of debt

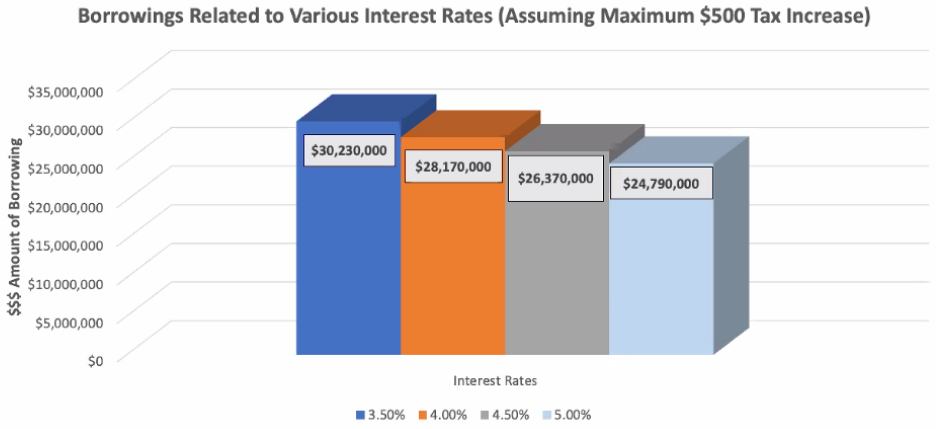
Cost Considerations of Exempt Debt Borrowing

- Incremental Residential Property Tax on Exempt Debt Borrowing is Directly Attributable to :
  - Dollar Amount of Borrowing (e.g., construction costs and space needs)
  - Interest Rate at Time of Borrowing
  - Term of Loan (20 year vs. 30 year)
  - Method of Amortization (Level Payment vs. Level Principal)
- Given a five-year time horizon to school opening, each of these should be estimated, modeled, and evaluated.

Analysis of Tax Impact From Various Borrowing Amounts With Different Interest Rates



Borrowings Related to Various Interest Rates Assuming a Maximum $500 Tax Increase



Analysis of Tax Impact From Various Borrowing Amounts With Different Interest Rates

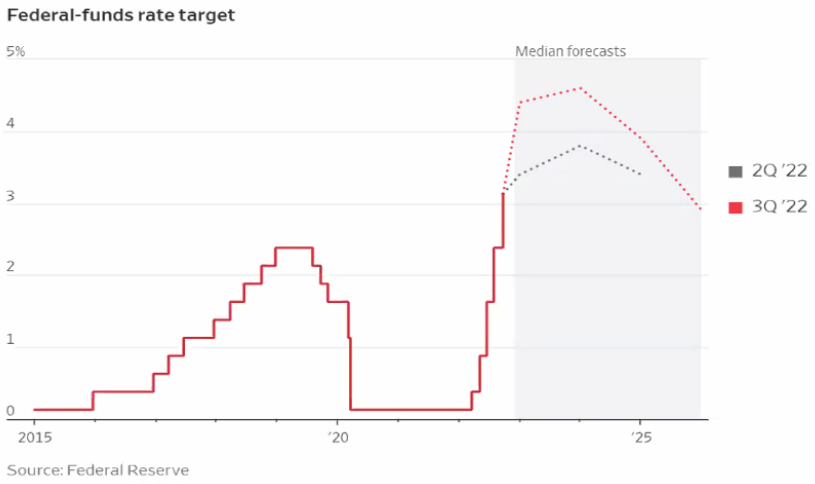
	Interest Rate and Borrowing Amount	Bond Sale Date	Total Taxpayer Cost	Total Interest Paid	1st Yr. Property Tax Levy Increase	Current Taxes	New Taxes	$$$ Increase	% Incr
$63 Million Borrowing –	2.25% on $63.0 Million Loan	Jan-22	$ 84,971,250	$ 21,971,250	$ 3,517,500	$ 12,297	$ 13,150	$ 852	6.93%
	3.5% on $63.0 Million Loan	After Sept-22	$ 97,177,500	$ 34,177,500	$ 4,305,000	$ 12,555	$ 13,594	$ 1,039	8.27%
	4.0% on $63.0 Million Loan	After Sept-22	$ 102,060,000	$ 39,060,000	$ 4,620,000	$ 12,555	$ 13,669	$ 1,114	8.88%
	4.5% on $63.0 Million Loan	After Sept-22	$ 106,942,500	$ 43,942,500	$ 4,935,000	$ 12,555	$ 13,745	$ 1,190	9.48%
	5.0% on $63.0 Million Loan	After Sept-22	$ 111,825,000	$ 48,825,000	$ 5,250,000	$ 12,555	$ 13,821	$ 1,266	10.09%
$50 Million Borrowing	3.5% on $50.0 Million Loan	After Sept-22	$ 77,125,000	$ 27,125,000	$ 3,416,667	$ 12,555	$ 13,379	$ 824	6.57%
	4.0% on $50.0 Million Loan	After Sept-22	$ 81,000,000	$ 31,000,000	$ 3,666,667	$ 12,555	$ 13,440	$ 885	7.05%
	4.5% on $50.0 Million Loan	After Sept-22	$ 84,875,000	$ 34,875,000	$ 3,916,667	$ 12,555	$ 13,500	$ 945	7.53%
	5.0% on $50.0 Million Loan	After Sept-22	$ 88,750,000	$ 38,750,000	$ 4,166,667	$ 12,555	$ 13,560	$ 1,005	8.01%
Maximum Tax Increase of $500 per Household	2.25% on $37.0 Million Loan	Jan-22	$ 49,903,750	$ 12,903,750	$ 2,065,833	$ 12,555	$ 13,054	$ 499	3.97%
	3.5% on $30.23 Million Loan	After Sept-22	$ 46,629,775	$ 16,399,775	$ 2,065,717	$ 12,555	$ 13,054	$ 499	3.97%
	4.0% on $28.17 Million Loan	After Sept-22	$ 45,635,400	$ 17,465,400	$ 2,065,800	$ 12,555	$ 13,054	$ 499	3.97%
	4.5% on $26.37 Million Loan	After Sept-22	$ 44,763,075	$ 18,393,075	$ 2,065,650	$ 12,555	$ 13,054	$ 499	3.97%
	5.0% on $24.79 Million Loan	After Sept-22	$ 44,002,250	$ 19,212,250	$ 2,065,833	$ 12,555	$ 13,054	$ 499	3.97%

INTEREST RATES

- What is the appropriate interest rate to use in planning a debt borrowing 2 - 3 years away?

- Any new 30-year exempt-debt borrowing can not be refinanced during first ten years after issuance. **(Rate is locked for first ten years)**

Federal Reserve Presidents DOT PLOT - Sept 21, 2022, Fed Meeting



Shift in Fed Fund Rate Target -

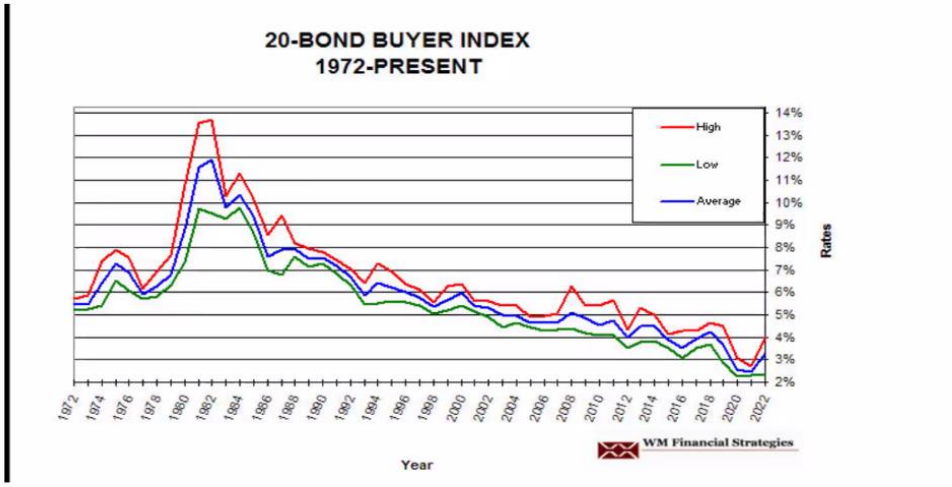
Higher,

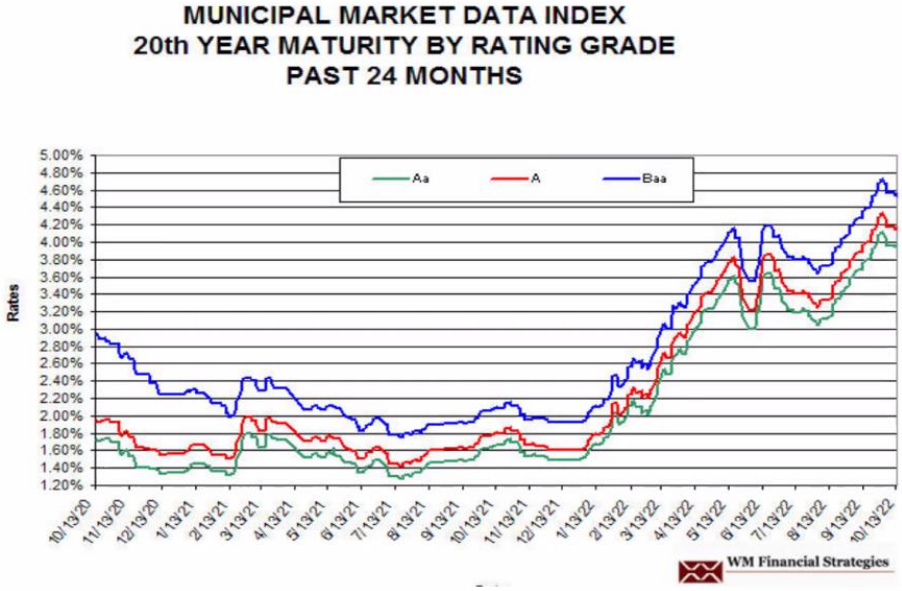
Faster,

Longer

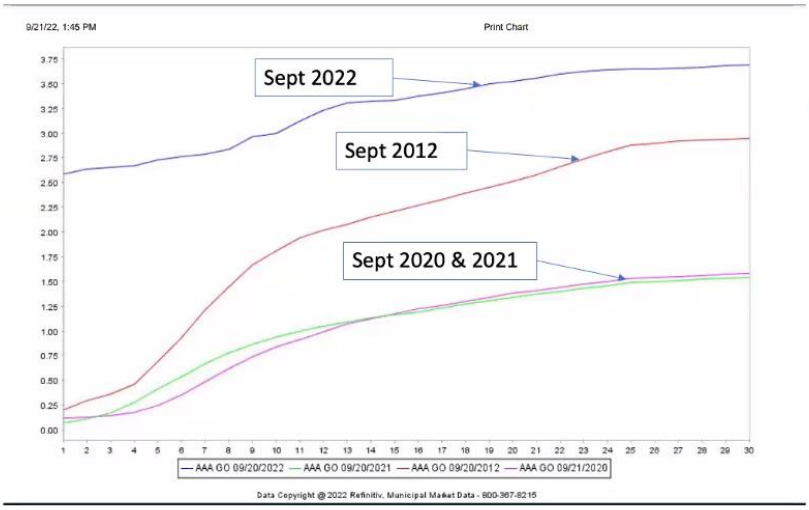
50 Year Low for Interest Rates Occurred in 2020 and 2021

This period marked the end to a 40 -year trend of declining interest rates.





Reoffer Yields on AAA Rated GO Municipal Debt 2022, 2021 and 2020 compared to 2012 (ten years ago)



Interest Rates on Recent Bond Offerings:

Westwood AAA 30 Year Bond
(July 14th – before Fed increases) **3.79%**

Nantucket Aaa 20 Year Bond
(Sept 29th) **3.86%**

Hilltop Securities – Municipal Debt Adviser on Sept 21, 2022:

*"Just to give you an idea of the movement in rates in the last year, we took bids on a **30-year AA-** bond this week and the net rate was **4.25%**.*

This time last year 30-year debt was selling at under 2.0%."

Historical 12 Year Yield for AAA 30 Year Municipal Bonds

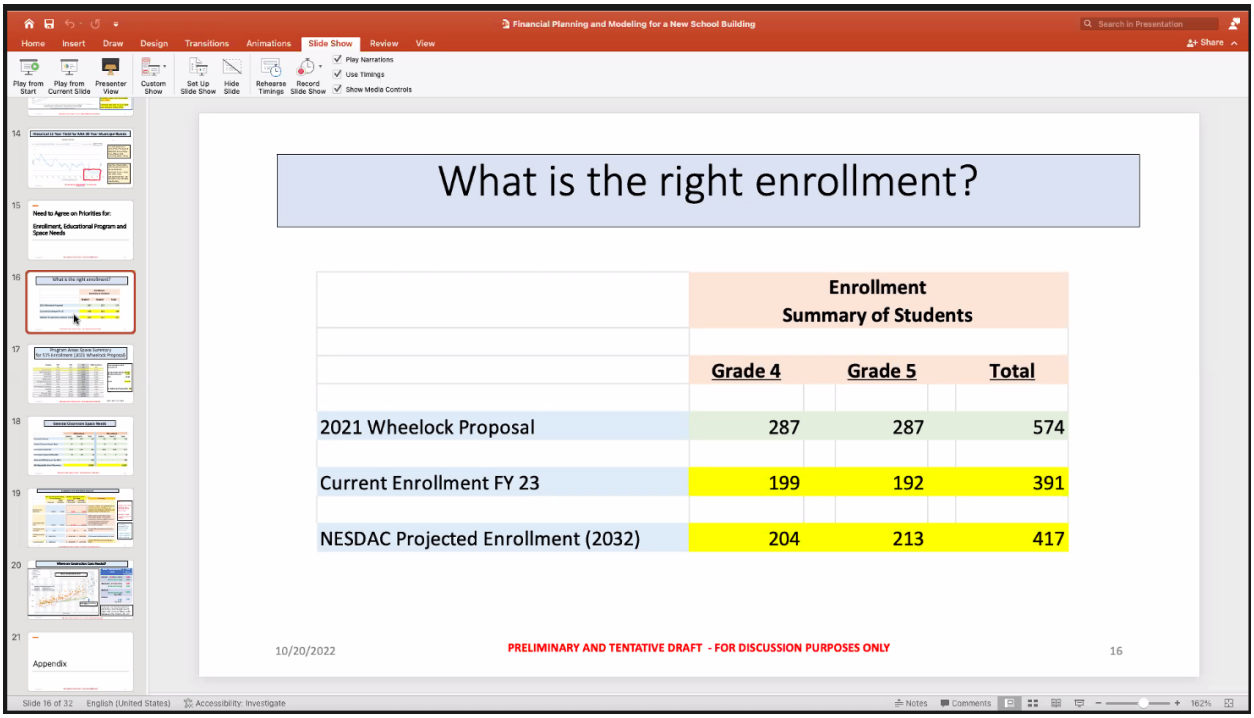


Historical Rates Over Past 12 Years for AAA 30 Municipal Bonds Range from 4.5% to 3.0%. (excluding 2019 – 2021)

Five Year Time Horizon Planning Assumption for AA rated 30 Year Municipal Bonds - range of 5.0% to 3.5%. (AA typically 35 bp – 50 bp higher rate than AAA rated bonds.)

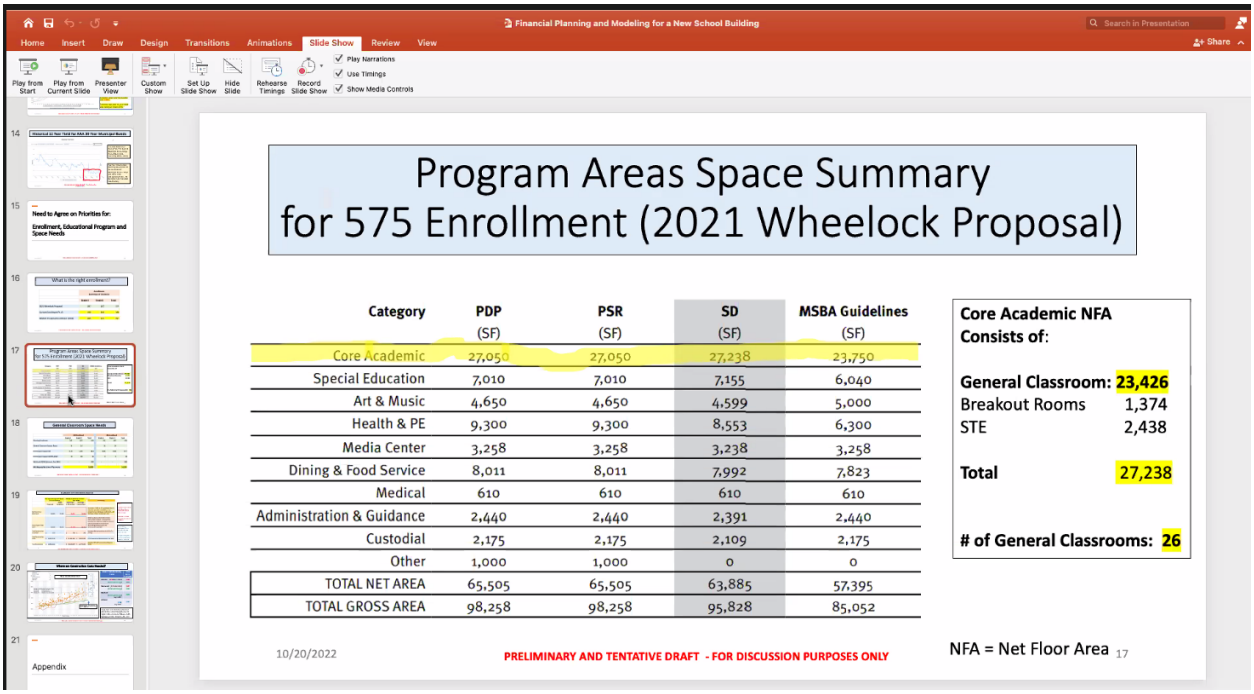
Need to Agree on Priorities for:

Enrollment, Educational Program and Space Needs



What is the right enrollment?

	Enrollment Summary of Students		
	Grade 4	**Grade 5**	**Total**
2021 Wheelock Proposal	287	287	574
Current Enrollment FY 23	199	192	391
NESDAC Projected Enrollment (2032)	204	213	417



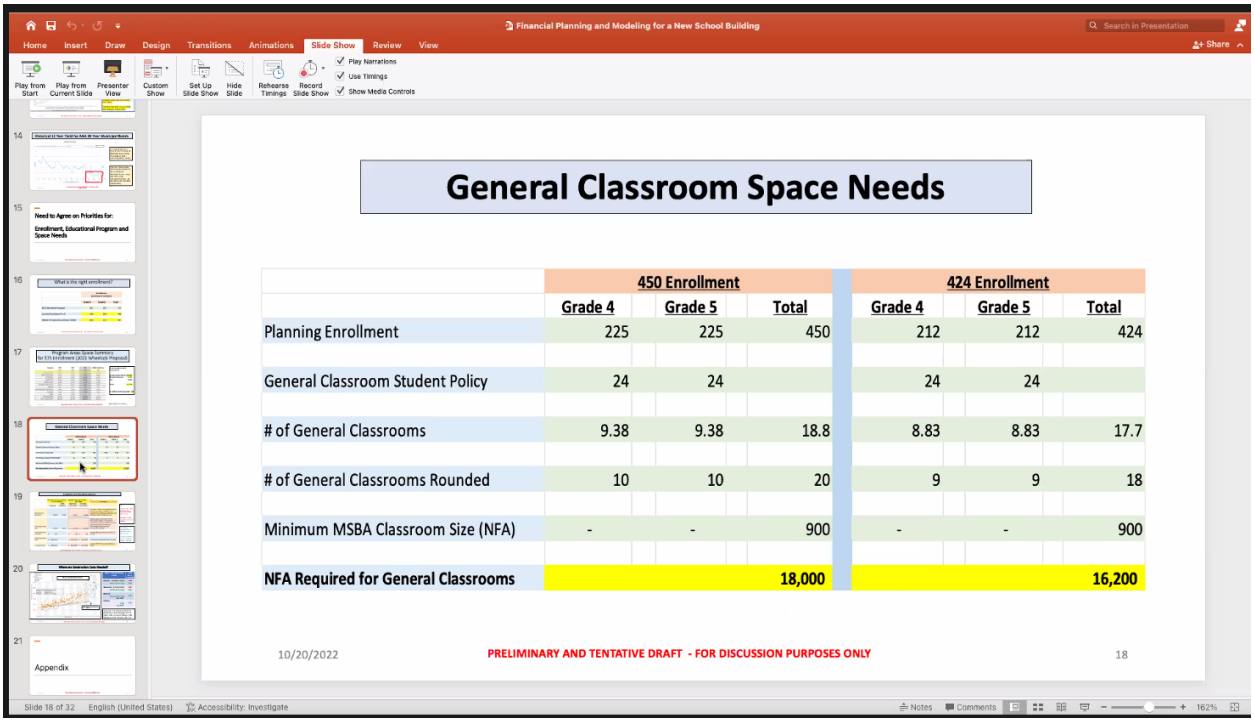
Program Areas Space Summary for 575 Enrollment (2021 Wheelock Proposal)

Category	PDP (SF)	PSR (SF)	SD (SF)	MSBA Guidelines (SF)
Core Academic	27,050	27,050	27,238	23,750
Special Education	7,010	7,010	7,155	6,040
Art & Music	4,650	4,650	4,599	5,000
Health & PE	9,300	9,300	8,553	6,300
Media Center	3,258	3,258	3,238	3,258
Dining & Food Service	8,011	8,011	7,992	7,823
Medical	610	610	610	610
Administration & Guidance	2,440	2,440	2,391	2,440
Custodial	2,175	2,175	2,109	2,175
Other	1,000	1,000	0	0
TOTAL NET AREA	65,505	65,505	63,885	57,395
TOTAL GROSS AREA	98,258	98,258	95,828	85,052

Core Academic NFA Consists of:

General Classroom:	**23,426**
Breakout Rooms	1,374
STE	2,438
Total	**27,238**
# of General Classrooms:	**26**

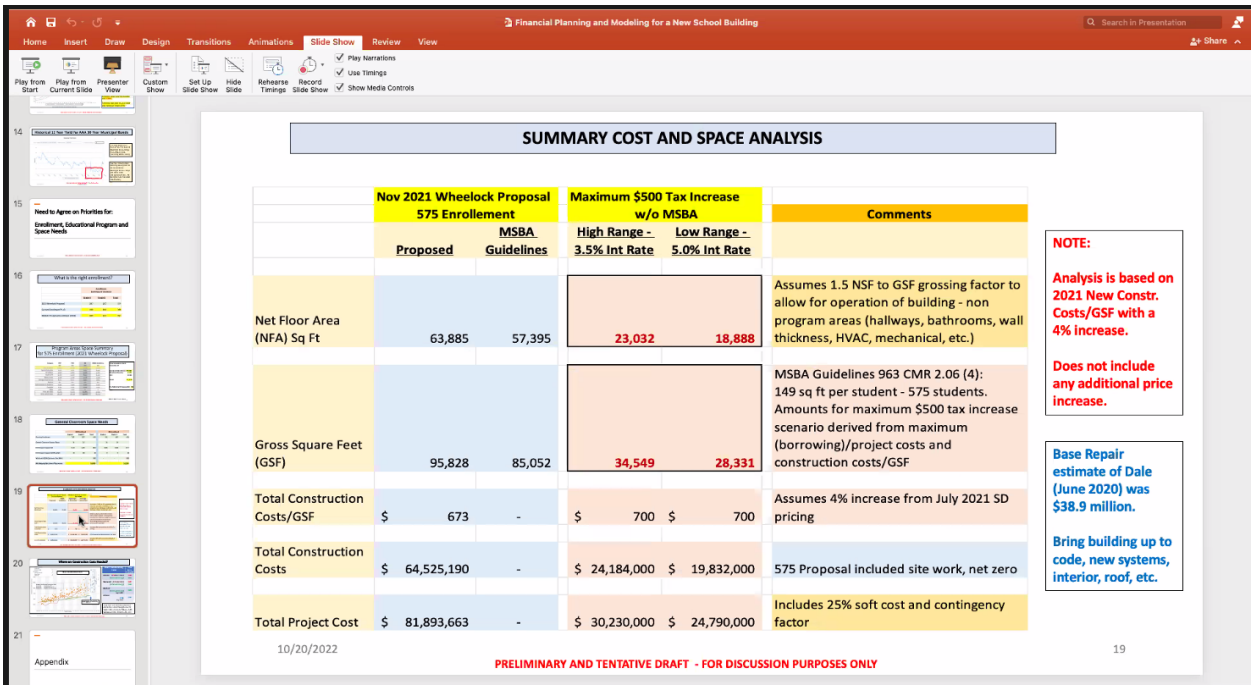
10/20/2022 PRELIMINARY AND TENTATIVE DRAFT - FOR DISCUSSION PURPOSES ONLY NFA = Net Floor Area 17



General Classroom Space Needs

	450 Enrollment			424 Enrollment		
	Grade 4	Grade 5	Total	Grade 4	Grade 5	Total
Planning Enrollment	225	225	450	212	212	424
General Classroom Student Policy	24	24		24	24	
# of General Classrooms	9.38	9.38	18.8	8.83	8.83	17.7
# of General Classrooms Rounded	10	10	20	9	9	18
Minimum MSBA Classroom Size (NFA)	-	-	900	-	-	900
NFA Required for General Classrooms			**18,000**			**16,200**

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SUMMARY COST AND SPACE ANALYSIS

	Nov 2021 Wheelock Proposal 575 Enrollement		Maximum $500 Tax Increase w/o MSBA		Comments
	Proposed	MSBA Guidelines	High Range - 3.5% Int Rate	Low Range - 5.0% Int Rate	
Net Floor Area (NFA) Sq Ft	63,885	57,395	23,032	18,888	Assumes 1.5 NSF to GSF grossing factor to allow for operation of building - non program areas (hallways, bathrooms, wall thickness, HVAC, mechanical, etc.)
Gross Square Feet (GSF)	95,828	85,052	34,549	28,331	MSBA Guidelines 963 CMR 2.06 (4): 149 sq ft per student - 575 students. Amounts for maximum $500 tax increase scenario derived from maximum (borrowing)/project costs and construction costs/GSF
Total Construction Costs/GSF	$ 673	-	$ 700	$ 700	Assumes 4% increase from July 2021 SD pricing
Total Construction Costs	$ 64,525,190	-	$ 24,184,000	$ 19,832,000	575 Proposal included site work, net zero
Total Project Cost	$ 81,893,663	-	$ 30,230,000	$ 24,790,000	Includes 25% soft cost and contingency factor

NOTE:

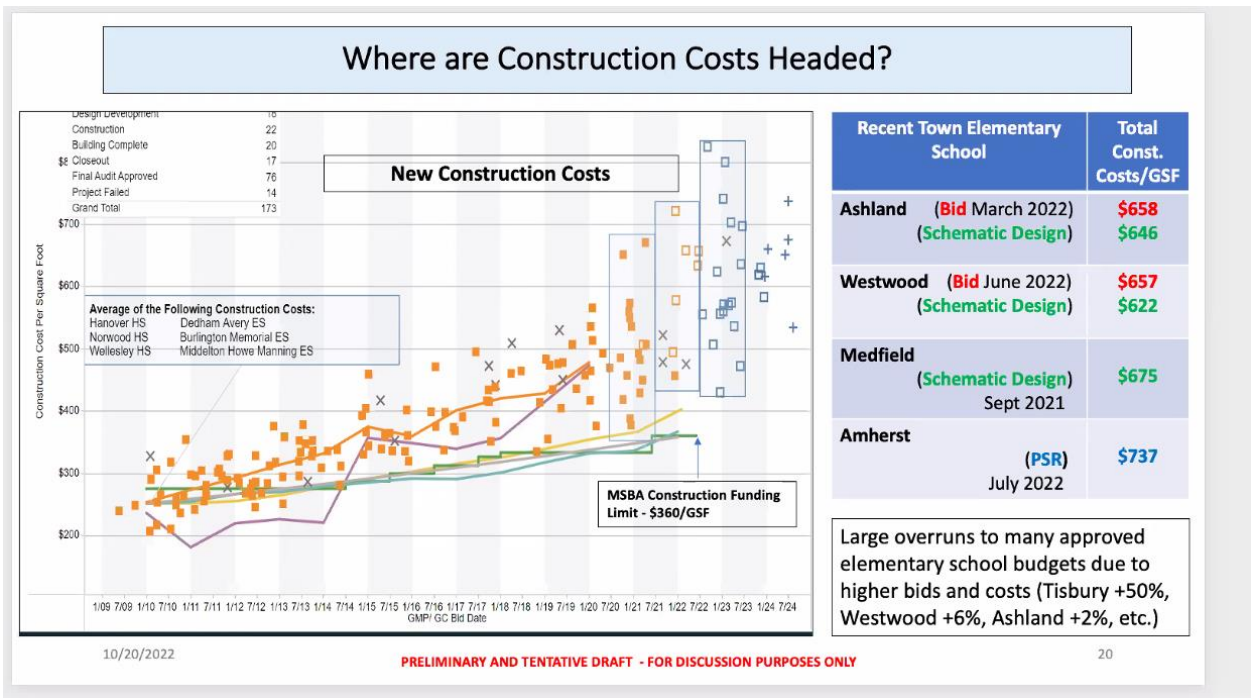
Analysis is based on 2021 New Constr. Costs/GSF with a 4% increase.

Does not include any additional price increase.

Base Repair estimate of Dale (June 2020) was $38.9 million.

Bring building up to code, new systems, interior, roof, etc.

10/20/2022 — PRELIMINARY AND TENTATIVE DRAFT - FOR DISCUSSION PURPOSES ONLY — 19



Where are Construction Costs Headed?

Recent Town Elementary School	Total Const. Costs/GSF
Ashland (Bid March 2022)	$658
(Schematic Design)	$646
Westwood (Bid June 2022)	$657
(Schematic Design)	$622
Medfield (Schematic Design) Sept 2021	$675
Amherst (PSR) July 2022	$737

Large overruns to many approved elementary school budgets due to higher bids and costs (Tisbury +50%, Westwood +6%, Ashland +2%, etc.)

10/20/2022 — PRELIMINARY AND TENTATIVE DRAFT - FOR DISCUSSION PURPOSES ONLY — 20