

Arlington High School
MSBA Project Benchmarks - DRAFT

		MSBA Project Benchmarks						
		Arlington HS	Waltham HS (Vocational Included)**	Belmont HS (Upper Middle Included)	Saugus HS-MS (Upper Middle Included)	Somerville HS (Vocational Included)		
	Phase	Module 4, Schematic Design	Module 4, Schematic Design	Module 5, Funding the Project	Module 6, Detailed Design	Module 7, Construction		
Base Info	Project Type	New Construction (Phased/Occupied)	New Construction (Unoccupied)	Addition/Renovation (Occupied)	New Construction (Unoccupied)	Addition/Renovation (Occupied)		
Base	Date Approved by District	Targeting: Spring, 2019	TBD	Fall, 2018 Summer, 2017		Fall, 2016		
	Design Enrollment	1,755	1,830	2,215	1,360	1,590		
	Total Construction Cost	\$238,072,994	Unknown	\$237,594,715	\$127,885,357	\$199,191,461		
Jata	Total Project Cost	\$308,278,341	\$381,292,924	\$295,824,264	\$160,860,953	\$255,997,997		
Raw [Total Gross Sq. Ft.	415,400	429,638 (64,870 vocational)	445,100	271,320	373,373 (64,950 vocational)		
Stage Raw Data	Total Gross Sq. Ft. of Non- Educational Program Space	53,575	Unknown	12,532	0	2,400		
PSR	Construction Cost Per Sq. Ft.	\$573	Unknown	\$534	\$471	\$533		
	Project Cost Per Pupil	\$175,657	\$208,357	\$133,555	\$118,280	\$161,005		
ted ion*	Total Project Cost Escalated to AHS Schedule	\$308,278,341	\$381,292,924***	\$339,581,507	\$188,852,407	\$291,282,294		
PSR Adjusted For Escalation*	Construction Cost Per Sq. Ft.	\$573	Unknown	\$585	\$533	\$597		
PSR For E	Project Cost Per Pupil	\$175,657	\$208,356	\$153,310	\$138,862	\$183,196		
	MSBA Citation	http://www.massschoolbuildings.or g/sites/default/files/edit- contentfiles/About Us/Board Meeti ngs/2018_Board/8_29_18/Arlington %20H5%20P5%20Memo Final.pdf	http://www.massschoolbuilding s.org/sites/default/files/edit- contentfiles/About Us/Board M eetings/2018 Board/8 29 18/W altham%20FSA%20Extension%20 of%20Time%20Memo Final.pdf	http://www.massschoolbuilding s.org/sites/default/files/edit- contentfiles/About Us/Board M eetings/2018 Board/6 27 18/B elmont%20PS%20Memo Final.p df	http://www.massschoolbuildings.or g/sites/default/files/edit- contentfiles/About Us/Board Meeti ngs/2017_Board/2_15_17/Saugus% 20PSR%20BoD%20Memo Final.pdf	http://www.massschoolbuilding s.org/sites/default/files/edit- contentfiles/About Us/Board M eetings/2016 Board/7 20 16/S omerville PS Memo Final.pdf		

^{*}The Total Project Costs have been escalated to the AHS midpoint of construction. We are using the industry standard of 4% annual escalation.

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^{**}Waltham Process Notes: Waltham began the feasibility study process in 2016 and produced estimates for two sites that ranged from \$283 million to \$300 million. Neither of these town-owned sites were feasible, and in June 2018 the town council voted to use eminent domain to buy property for a new school. The shown Waltham Total Project Cost have been approved by the Waltham SBC in preparation for the 12/14/18 PSR Submission (Citation from 12/3/18 Meeting Minutes: https://drive.google.com/file/d/18i8GaBMYgmIADOwOvzOOHrYLoZQEORq-/view)

^{***}Waltham's budget has not been escalated as the construction midpoint is projected to be 4 months ahead of AHS.



Arlington High School

MSBA Project Benchmarks (cont.) - DRAFT

Comparison of MSBA Space Summary / Total Project Budget Forms

Proposed Space Summary	Arlington HS	Belmont HS-MS	Saugus HS-MS	Somerville HS	
(Based on PSR Submission)	area totals (GFA)	area totals (GFA)	area totals (GFA)	area totals (GFA)	
Core Academic Spaces	87,680	111,280	76,390	69,155	
Special Education	31,560	24,310	13,680	19,959	
Art & Music	15,200	16,150	13,250	11,120	
Auditorium/Drama	12,440	14,200	10,400	10,800	
Vocations & Technology	19,200	19,400	9,100	64,950	
Health & Physical Education	37,208	54,642	28,150	39,829	
Library Learning Commons	12,550				
Media Center		13,744	8,400	7,500	
Dinning & Food Service	13,708	16,698	11,540	12,035	
Medical	1,510	2,140	1,320	1,310	
Administration & Guidance	6,158	8,200	6,005	11,035	
Custodial & Maintenance	2,942	4,347	2,645	2,818	
Other / Non-Programmed Spaces	53,537	12,532	0	2,400	
Total Building Gross Floor Area (GFA)	415,292	445,100	271,320	402,128	

Total Project Budget (Based on PSR Submission)	Arlington HS	Belmont HS-MS	Saugus HS-MS	Somerville HS
Feasibility Study Agreement Subtotal	\$2,000,000	\$1,750,000	\$1,850,000	\$1,975,000
Administration Subtotal	\$8,132,555	\$8,767,000	\$4,895,026	\$10,415,356
Architectural/Engineering Subtotal	\$21,166,934	\$20,800,000	\$11,739,816	\$21,482,008
Existing Building Demolition	\$3,136,000	\$1,836,375	\$1,313,375	\$7,406,640
In-Bldg. Hazardous Material Abatement	\$3,318,100	\$6,580,000	\$3,486,650	\$0
Asbestos Cont'g Floor Mat'l Abatement	\$780,000	\$520,000	\$360,000	\$0
Building Sitework	\$8,111,665	Unknown	\$9,135,484	\$8,661,233
Construction Budget	\$238,072,994	\$236,647,607	\$127,685,356	\$197,820,084
Misc. Project Costs Subtotal	\$800,000	\$2,740,000	\$375,000	\$3,255,200
Furnishings & Equipment	\$11,056,500	\$7,088,000	\$3,263,200	\$5,096,000
Swing Space / Modular / Phasing	\$0*	\$1,000,000	\$0	\$2,355,200
Design Enrollment	1,755	2,215	1,360	1,590
Total Building Gross Square Feet (GSF)	415,200	445,100	294,586	369,496
MSBA Reimbursement Rate	49.72%	\$40.66%	57.72%	77.44%
Total Project Budget (excluding contingencies)	\$282,824,166	\$278,959,189	\$152,091,198	\$240,793,649
Scope Items Excluded or Otherwise Ineligible	\$98,038,794	\$92,629,827	\$39,128,388	\$83,218,254
Construction Contingency	\$16,969,450	\$14,200,000	\$7,661,121	\$11,869,205
Owner's Contingency	\$8,484,725	\$2,000,000	\$968,234	\$1,688,943
Total Project Budget	\$308,278,341	\$295,159,189	\$160,720,553	\$254,351,796
Construction Cost Per Square Foot	\$573	\$534	\$471	\$533
Total Project Cost Escalated to AHS Schedule	\$308,278,341	\$339,581,507	\$188,852,407	\$291,282,294
Const. Cost Per Sq. Ft. Escalated to AHS Schedule	\$573	\$585	\$533	\$597
Project Cost Per Pupil Escalated to AHS Schedule	\$175,657	\$153,310	\$138,862	\$183,196

Other / Non-Program Spaces	Area Totals (GFA)		
Arlington HS*	53,537		
Comptroller	1,350		
Facilities Department	5,475		
IT Network and Offices	4,725		
Payroll	2,325		
Community Education	2,700		
School District Offices	13,380		
LABBB	6,810		
Menotomy Preschool	16,810		
Belmont HS-MS	12,532		
Technology Workroom	900		
Technology Offices	150		
Technology Director Office	400		
Technology Conference Room	200		
Equity Academic Center	850		
Metco Office	150		
BEA Office	150		
Food Service Director	150		
Nurse's Office/ Waiting	150		
Pool Pump Room	7,447		
Locker Room / Pool	1,620		
School Store	125		
Resource Officer	120		
Storage for Emergency Center	120		
Saugus MS-MS	0		
N/A			
Somerville HS	2,400		
School Storage	300		
Sommerville City Cable	1,000		
Health Suite	1,100		

*PLEASE NOTE: Since the PSR submission, The Arlington HS Building Committee has decided, with direction from the Superintendent's Office and the Town Manager's office, to exclude the Comptroller, Facilities Department and IT Department from the AHS Building Project. This will lower the project's "Other/Non-Program Space" to 42,025 GFA.

PLEASE NOTE: This information has been taken directly from each project's PSR Submission. **These figures have not been escalated to the AHS schedule.** Waltham has not been included as their PSR, submitted on 12/14/18 is under review by the MSBA and has not yet been made public.

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^{*} The Arlington High School Phasing/Swing Space cost has been included in the overall cost per square foot as well as the Construction Contingency. The current plan does not require modular program spaces..



Escalation Calculation (as referenced on Benchmark Sheet "Total Project Cost Escalated to AHS Schedule") - DRAFT

	Construction Schedule		Compared to AHS	Total Construction	Escalation (4%)	to the midpoint of AHS construction	Total Escalated Construction	Total Escalated Cost with Soft Cost Factor	Total Escalated Cost Per Pupil	
	Start	End	Midpoint	Years	Cost		Schedule	Cost	(1.3)	
Arlington HS	7/1/2020	4/1/2025	11/15/2022						\$308,278,341	\$175,657
Newton North HS*	7/1/2007	8/1/2010	1/14/2009	13.8	\$166,000,000	\$6,640,000	\$91,853,333	\$285,585,365	\$371,260,975	\$200,682
Saugus HS-MS	7/1/2018	9/1/2020	8/1/2019	3.3	\$127,885,357	\$5,115,414	\$16,625,096	\$145,271,083	\$188,852,407	\$138,862
Belmont HS-MS	4/1/2019	7/1/2021	5/16/2020	2.4	\$237,594,715	\$9,503,789	\$22,967,489	\$261,216,544	\$339,581,507	\$153,310
Waltham HS**	1/1/2021	1/1/2024	7/2/2022	0.3	Unknown	Unknown	Unknown	Unknown	\$381,292,924	\$208,357
Somerville HS	6/1/2018	5/1/2021	11/15/2019	3.0	\$199,191,461	\$7,967,658	\$23,902,975	\$224,063,304	\$291,282,295	\$183,196
Wellesley HS	10/17/2009	12/1/2012	5/10/2011	11.5	\$115,000,000	\$4,600,000	\$52,900,000	\$180,543,244	\$234,706,218	\$158,585
Concord-Carlisle HS	7/1/2014	7/1/2016	7/1/2015	7.3	\$93,000,000	\$3,720,000	\$27,280,000	\$123,830,129	\$160,979,168	\$129,301
Natick HS	9/1/2010	9/1/2012	9/1/2011	11.2	\$73,510,500	\$2,940,420	\$32,834,690	\$114,057,219	\$148,274,384	\$115,749
Minuteman Reg. Voc. Tech. HS	6/19/2017	9/25/2019	8/7/2018	4.3	\$121,392,277	\$4,855,691	\$20,636,687	\$143,692,605	\$186,800,386	\$297,453
Thompson ES	3/11/2010	9/1/2013	12/6/2011	10.9	\$15,130,244	\$605,210	\$6,606,873	\$23,201,140	\$30,161,482	\$79,372
Gibbs MS	7/1/2017	8/1/2018	1/15/2018	4.8	\$19,000,000	\$760,000	\$3,673,333	\$22,935,786	\$29,816,522	\$59,633

PLEASE NOTE: The Total Project Costs have been escalated to the AHS midpoint of construction. We are using the industry standard of 4% annual escalation.

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^{*}Newton North construction schedule and construction cost is assumed from the following citations:

⁽http://archive.boston.com/news/education/k_12/articles/2010/08/31/197m_later_newton_north_to_open/) (https://doreandwhittier.com/newton-north-high-school.html)

^{**}Waltham construction timeline is assumed as a 36 month construction project starting on 7/1/2018 (4 months ahead of the Arlington High School Project). We have not escalated the Waltham budget as the construction midpoint is only 4 months ahead of Arlington's.