Possible Options to Address the Enrollment Challenge at Ottoson[1]

Option	Educational Impact & Viability	Estimated Costs Building	Need (MC) Modular Classrooms for what years?	Estimated Incremental Costs Staff[2] (ISC)	Rough Time Estimate	Longevity of Solution	Total Estimated Cost (building, MC, staff Costs)
Build additional new middle school on open land (approx. 500 students)	• Instead of one large middle school, provides for two under-1,000 student schools that many educators prefer to large middle schools for students of this age. • State-of-art facility for technology and science classrooms. • Ottoson enrollment within design capacity at completion of project. Students at both schools could feel the environment has a more personal feel with smaller enrollments.	$40-50 M + land costs[3] (approx. 80,000sf needed)	17/18 (8) 18/19 (10) 19/20 (10) 20/21 (14) In ( ) is estimated # needed on site. Assume $250,000 per non-stacked classroom plus monthly rental	1.5x	4-5 years	50+ years	$40-50M + Land costs + ISC + Modular classroom costs

[1] These are only estimates of time and cost and in order to have better estimates, we need to pay an architect to plan it out.
[2] If x=the number of staff needed to service the enrollment increase within Ottoson
[3] Cost was calculated using $400/square foot and building 60,000 square feet.

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	Challenges: • MSBA funding support not likely in the timeframe needed for the project to be completed. • Maintenance of comparable educational experience and curriculum in separate middle schools. • Orchestra, band and chorus, which are currently composed of students in grades 6-8, would need to be reconfigured to either have programs at each school (higher staffing costs) or offer programs after school at one of the schools (students at one school would need to travel). • After-school programs may differ with potentially less programming at both middle schools – or programs offered at only one of the schools, such as athletic or drama programs, which would pose transportation issues for the		costs for term of the lease; more if classrooms stacked.				

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	students travelling to the other school. • Cost of building new school higher as compared to other options. • Securing land for the building challenging given limited inventory. • Operational costs will increase.						

Option	Educational Impact & Viability	Estimated Costs Building	Need (MC) Modular Classrooms for what years?	Estimated Incremental Costs Staff[4] (ISC)	Rough Time Estimate	Longevity of Solution	Total Estimated Cost (building, MC, staff Costs)
8th grade building or wing at AHS	• 8th grade students would have access to high school level courses. • Students in grades 6 & 7 would have adequate educational space at the existing building, which will have an enrollment consistent with design capacity. • Without grade levels split between two buildings, curriculum consistency maintained within grade-level disciplines. • After school programs unique to 8th grade could be developed. Challenges: • MSBA would need to agree to an expanded high school project for reimbursement. • 8th grade students would not be able to move to the high school by at earliest September 2022, assuming a 5 yr. high school project. The middle school	$30–40M – MSBA reimbursement for eligible costs, if extension of high school project approved. Cost savings from a new building due to core space	17/18 18/19 19/20 20/21 21/22 Assume $250,000 per non-stacked classroom plus monthly rental costs for term of the lease; more if classrooms stacked.	1.25x	5-6 yrs.	50+ years	$30–40M (reduced by % of MSBA support) + Site costs + ISC + Modular classroom costs

[4] If x=the number of staff needed to service the enrollment increase within Ottoson

	enrollment is forecasted to be around 1,400 students prior to 2022, which will require 16-20 modular classrooms on site at Ottoson. • In order for 8th grade students to take high school level courses, such as honors geometry, the schedule would need to be the same as that of the high school. • Music program for chorus, band and orchestra would need to be reconfigured or offered only after school, most likely at Ottoson. • After-school programs would change. Programs that are currently offered to students in grades 6-8 would need to be reconfigured or offered only at Ottoson, causing 8th grade students to travel after school to OMS.	overlap with high school.					

Option	Educational Impact & Viability	Estimated Costs Building	Need Modular Classrooms for what years?	Estimated Incremental Costs Staff (ISC)	Rough Timeline Estimate	Longevity of Solution	Total Estimated Cost
Single middle school grade at Gibbs	• Could develop a schedule based on the needs of the particular grade. • Maintains curricular consistency and educational experience at grade levels. • Renovated school could be available in 2-3 yrs. • Ottoson enrollment within design capacity within 2-3 yrs. Students at both schools could feel the environment has a more personal feel with smaller enrollments. Minimizes the use of modular classrooms. • No change 6th grade busing costs. Challenges: • 6th gr. students taking 7th grade math could not be integrated into 7th grade	14.5M-22.7M (related to extent of renovation for 69,000 sf space; includes soft costs) Assuming 63,600 sf @$275/sf, then $17.5 million[5] + 20% soft costs	17/18 18/19 (may be needed)	1.5x	2-3 years	30-50 years Maintains building and land for future needs of the town.	$14.5M-22.7M + ISC + Modular classroom costs for 1-2 yrs.

[5] Cost was calculated using $275/square foot and renovating 63,600 square feet (current leased space)

	classes. However, an advanced math class could be offered for only 6th grade students. • Orchestra, band and chorus, which are currently composed of students in grades 6-8, would need to be reconfigured or offered after school at one of the schools, most likely Ottoson, which would pose transportation issues for the students travelling to the other school. Offering a single grade orchestra, band and chorus programs would increase staffing costs. • Gibbs even with extensive renovation will likely require more maintenance than a new building.						
6-8 Middle school at Gibbs	• Renovated school could be available in 2-3 yrs. • Instead of one large middle school, provides for two under-1,000 student schools that many educators prefer to large middle schools for	14.5M-22.7M (related to extent of renovation for 69,000 sf space; includes soft costs)	17/18 18-19 (may be needed)	1.5x	2-3 years	30-50 years Maintains building and land for future needs of	$14.5M – 22.7M + ISC + Modular classroom costs for 1-2

	students of this age. • Ottoson enrollment within design capacity within 2-3 yrs. Students at both schools could feel the environment has a more personal feel with smaller enrollments. Minimizes the use of modular classrooms. Challenges: • Maintenance of consistent education experience and curriculum across two middle schools. • Orchestra, band and chorus, which are currently composed of students in grades 6-8, would need to be reconfigured to either have programs at each school (higher staffing costs) or offer programs after school at one of the schools (students at one school would need to	Assuming 63,600 sf @$275/sf, then $17.5 million[6] + 20% soft costs				the town.	yrs.

[6] Cost was calculated using $275/square foot and renovating 63,600 square feet (current leased space)

	travel). • After-school programs may differ with potentially less programming at both middle schools – or programs offered at only one of the schools, such as athletic or drama programs, which would pose transportation issues for the students travelling. • Gibbs, even with extensive renovation, will likely require more maintenance than a new building.						
Convert Gibbs to a 5-7 or 5/6 (would not hold all, but some)	• Renovated school could be available in 2-3 yrs. • Ottoson enrollment within design capacity within 2-3 yrs. Students at both schools could feel the environment has a more personal feel with smaller enrollments. Minimizes the use of modular classrooms. Challenges: • If 5/6 option, different educational experience for	14.5M-22.7M (related to extent of renovation for 69,000 sf space; includes soft costs) Assuming 63,600 sf @$275/sf, then $17.5 million[7] + 20% soft costs	17/18 18/19 (may be needed)	1.5x	2-3 years	30-50 years Maintains building and land for future needs of the town.	$14.5M – 22.7M + ISC + Modular classroom costs for 1-2 yrs.

[7] Cost was calculated using $275/square foot and renovating 63,600 square feet (current leased space)

	both 5th & 6th grade students from other students at that grade level. • If 5-7 option, different educational experience for 5th grade students from cohort at other elementary schools. Possibly also true for students in grades 6 & 7. • After-school programs may differ with potentially less programming at both middle schools – or programs offered at only one of the schools, such as athletic or drama programs, which would pose transportation issues for the students travelling. • Gibbs, even with extensive renovation, will likely require more maintenance than a new building.						

Option	Educational Impact & Viability	Estimated Costs Building	Need MC for what years?	Estimated Incremental Costs Staff	Rough Draft Timeline	Longevity of Solution	Total Estimated Costs
Addition to OMS on existing School Dept. controlled land.	• Increase in staffing costs related to enrollment growth, but not to duplication of services and programs at second middle school. • Maintains consistent educational experience and curriculum at each grade level. • Maintains coherency of after-school and music programs. Challenges: • Creates a middle school with an enrollment of approximately 1,400 students, which will be one of the largest middle schools in the Commonwealth. The challenge will be to create a "small school" feel within the complex in order for the size of the school not be	$15[8]-18M + Site costs	17/18 18/19 19/20	1x	3-4 years	50+ years	$15M-18M + Site costs + Modular classroom costs + Costs in the existing building triggered by size of the addition.

[8] Cost was calculated using $400/square foot for adding 27,000 square feet of classroom space (2 floors with 10 classrooms), first floor parking and soft costs of the project. This number does not include site costs, which could be substantial due to the terrain. Cost of building will increase if choose 32,400sf for total size of classroom floors, which would provide multipurpose space for PE.
Project on Crusher lot will incur TBD site costs above site costs for addition on soccer field. Both could be considerable given the terrain.

	overwhelming for students. However, in MA there is no correlation between size of school and performance on state assessments. • The outside area around Ottoson will be quite constrained and crowded during construction with modular classrooms occupying much of the upper parking lot. Staff parking will be limited on-site with more parking spots needed in surrounding neighborhoods and, possibly, the church parking lot (requires negotiation with the church). • Possible zoning waivers required (TBD)						
Addition to OMS on Crusher Lot	• Increase in staffing costs related to enrollment growth, but not to duplication of services and programs at second middle	$15M[9]-18M + Site costs	17/18 18/19 19/20	1x	3-4 years	50+ years	$15M-18M + Site costs +

[9] Cost was calculated using $400/square foot for adding 27,000 square feet of classroom space (2 floors with 10 classrooms), first floor parking and soft costs of the project. This number does not include site costs, which could be substantial due to the terrain. Cost of building will increase if choose 32,400sf for total size of classroom floors, which would provide multipurpose space for PE.
Project on Crusher lot will incur TBD site costs above site costs for addition on soccer field. Both could be considerable given the terrain.

	school. • Maintains consistent educational experience and curriculum at each grade level. • Maintains coherency of after-school and music programs. Challenges: • Creates a middle school with an enrollment of approximately 1,400 students, which will be one of the largest middle schools in the Commonwealth. The challenge will be to create a "small school" feel within the complex in order for the size of the school not be overwhelming for students. However, in MA there is no correlation between size of school and performance on state assessments. • While the area around Ottoson during construction could be constraining, it will not be as crowded a site that an addition built on the back soccer field will pose. Staff parking could be expanded						Modular classroom costs + Costs in the existing building triggered by size of the addition

	by putting asphalt on the soccer field, but additional parking options for staff will still need to be identified or created. Unique challenges: • Connectivity challenges to existing school could limit the effective use of common core spaces. • Home rule petition to the State Legislature to use the land may be necessary. • Topography of site will significantly add to the costs of an addition on this site. • Possible zoning waivers needed (TBD).						
Permanent modular classrooms at Ottoson	• Increase in staffing costs related to enrollment growth, but not to duplication of services and programs at second middle school. • Maintains consistent educational experience and curriculum at each grade level. • Maintains coherency of after-school and music programs. • Can be expanded as needed,	Individual classrooms in the range of $300,000-350,000, which may substantially increase in cost as was our experience with the Stratton	NA	1x	1 year	10-15 years	$6M-8.4M + Additional parking costs

	assuming proper foundation for stacking modular classrooms provided with initial classrooms. Challenges: • Creates a middle school with an enrollment of approximately 1,400 students, which will be one of the largest middle schools in the Commonwealth. The challenge will be to create a "small school" feel within the complex in order for the size of the school not be overwhelming for students. • Stacked modular classrooms situated on the upper parking lot may present air flow issues to 6th grade wing as number of classrooms increases. Locating the stacked modular classrooms on the back soccer field will have connectivity challenges with the existing building that will increase the cost of this option. • Additional parking spaces for staff will need to be identified or created. Bus turnaround will	project. Assuming 20 classrooms plus 20% soft costs, range $6M-8.4M					

	need to be reconfigured or moved to another entrance. 20 modular classrooms will require most of the upper parking lot. Unique challenges: • Useful life expectancy of modular classrooms is about 10-15 yrs. as compared to 50+ yrs. for permanent construction						

Middle School Timeline (Estimated Number of Modular Classrooms Needed)

The Ottoson needs the following additional classrooms in the given school years:

School Year	Number of additional classrooms needs	Total additional classrooms needed	Other space needed
16/17	2 – 8th grade ½ cluster	0 – getting rooms out of reconfiguration	More cafeteria space being created More nursing space is needed
17/18	8 – increase of 128 students	8	More gym space will be needed
18/19	2 – specialists	10	
19/20	0	10	
20/21	4 – specialists	14	
21/22	2 -	16	
22/23	1 -	17	
23/24	1	18	
24/25	0	18	

** Assume $200,000/non-stacked modular classroom

Questions/Concerns:

1. Is it possible to use room sharing as a short term fix to avoid using temporary modular classrooms in 17/18? 18/19?
2. The longer we wait, the more modular classrooms we will need and the more expensive any solution becomes. What can we do to reduce the timeline of any of these options? Can we solve this problem by the fall of 2018?
3. In order to use the Gibbs as a solution, the Town must notify the tenants by June 2016 of our intention not to renew their lease. The tenants will need to vacate the building by June30, 2017. Is it possible that we could be "shovel ready" at Gibbs by July 2017, and if not, how close to that date can we get?
4. Do we want to solve the middle school space needs by adding an addition at Ottoson, or do we want to build on another site?
5. What solution is the best use of time and money and will have the most use in the future?