

Lexington High School Building Project Update

School Building Committee
November 13, 2024

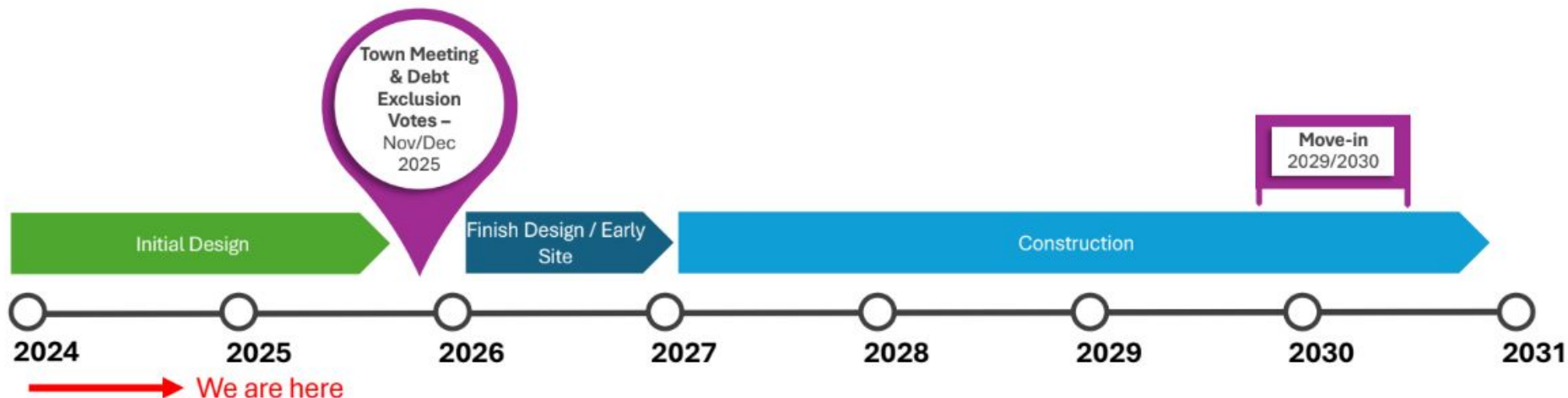


Overview

1. Timeline and Planning Process
2. LHS Existing Conditions
3. The MSBA's Role & Expectations
4. Narrowing Design Options from 6 to 1
5. Responses to Community Concerns
 - a. Lowering the Cost
 - b. Keeping Our Fields
 - c. Building A New Field House
 - d. Including Central Office in LHS
 - e. Enrollment/Design Concerns



Project Timeline/ Anticipated Overall Project Timeline



All dates after local vote in November / December 2025 are subject to change based upon the selected option.

Construction duration is shown to provide a potential range. Final duration will be determined toward the end of initial design.

Move-in date will be determined after an option is selected. Anticipated move-in currently shown in the range of 2029 to 2030

01 LPS Master Planning Committee, 2018

The School Committee crafted a charge to form a Master Planning Committee, initially aimed at tackling the space requirements of elementary schools.



02 LPS Master Plan & Compendium, 2020-2021

The MPC crafted a clear yet adaptable Master Plan and Compendium poised to address the ebb and flow of enrollment. After extensive analysis, they identified LHS as the most pressing school construction need.



03 Statement of Interest (2019, 2020, 2021)

For three consecutive years, we presented our Statements of Intent (detailed grant applications) to the MSBA, ultimately earning our invitation into the Capital Pipeline.



04 MSBA Invitation, March 2022

At long last, in March of 2022, we received confirmation that the MSBA would partner with us. Depending on the scope of the project, the effective reimbursement rate hovers around 25%, equating to a quarter for every dollar spent.



05 Article 97 Working Group, 2022

The Town Manager created an Article 97 Working Group. Article 97 of the MA Constitution protects certain publicly owned lands used for conservation or recreation purposes. Selling, transferring, or converting Article 97 lands to a different use requires a 2/3 vote of the Town Meeting and the State Legislature.



The LHS Project: Our Planning Journey to Date



One-Year Feasibility Study, 2023 06

As required by the MSBA, the Town entered a one-year Feasibility Study in 2023. The study explores massing concepts, site locations, renovations, add/renos, new builds, and other options to arrive at the best school design for Lexington.



School Building Committee, 2023 07

The MSBA also requires a School Building Committee, comprising Town staff and community members. The MSBA appoints the SBC and tasks them with shepherding the MSBA process along.



The Project Team, June 2023 08

The next step in the process is to select a Project Team (Designer and Owner's Project Manager) to oversee the Feasibility Study process. This selection was made in partnership with the MSBA. We chose SMMA and Dore + Whittier.



The Educational Plan, 2023-2024 09

The School Committee officially approves the Ed Plan. LPS wrote an educational plan in 2023 and worked with SMMA on a comprehensive space study and refinements in 2024.



Preferred Schematic Design, November 2024 10

Through a sequence of presentations, discussions, and decisions, the SBC methodically narrows the design possibilities to a singular, favored schematic. Thereafter, SMMA begins the creative design process.



Lexington High School Existing Conditions



Existing Conditions



- 75-year old outdated building with deteriorating conditions
- LHS lacks full ADA compliance
- At risk of system failure, with an estimated \$250-300M needed to address
- Building is not energy efficient and increasingly more costly to operate
- Classrooms are 26% smaller than recommended
- Inadequate science labs, performing arts, spaces, large core spaces (cafeteria, gymnasium)
- To learn more about LHS Existing Conditions, [please click here](#)



- Significantly overcrowded (core spaces built for 1,850 students, and currently over planned operating capacity by approx. 600 students)
- In addition to the inadequate classrooms and large core spaces, we are significantly below the space required to properly educate students with disabilities

The MSBA's Role & Expectations



MSBA Roles & Expectations

What is the MSBA, and how is it funded?

- A quasi-independent government authority created in 2004
- 7-member Board of Directors, chaired by the State Treasurer
- MSBA Mission: Partner with districts to create affordable, sustainable, and energy-efficient schools across MA
- One penny of the State's 6.25% sales tax on every dollar



What does the MSBA expect of us?

- Lexington was fortunate to be invited into the [MSBA capital pipeline](#) in March 2023, solidifying our partnership and the MSBA's multi-million dollar contribution to a new or renovated high school.
- In order to receive funding, we need to adhere to MSBA guidelines for square footage, stick to timelines, follow the process outlined in the [MSBA's 9 Modules](#), and understand that our decisions are subject to their approval.

The Lexington School Building Committee

In partnership with the MSBA, Lexington has created a forum, a body, and a process for community input and feedback—the School Building Committee (SBC).

The SBC is an [appointed body](#) required by the MSBA. Membership includes individuals in our community with various roles representing different interests.

To receive funding, the MSBA has tasked the SBC with shepherding their prescribed process for a high school capital project.

- MCPPO-Certified Public Facilities Project Manager
- Select Board Member
- Town Manager
- Superintendent of Schools
- School Committee Member
- Director of Public Facilities
- School Principal
- Assistant Town Manager for Finance
- Architect/Permanent Building Committee Chair
- Community Member with Architect/Engineering/Construction Experience
- Sustainable Lexington Member
- Two School Community Representatives
- Three Liaisons from the Appropriation, Capital Expenditures and Recreation Committees

School Building Committee's Charge:

The MSBA expects us to deliver the most **cost-effective and educationally appropriate** preferred solution.



How did
Lexington get
invited into the
MSBA's capital
pipeline?

It's A Highly
Competitive
Process

15%

- Only 15% of applicants who submit a Statement of Interest (SOI) are invited into the MSBA's capital pipeline.
- Some districts have submitted SOIs every year for a decade, and still haven't received an invitation to partner with the MSBA.
- Lexington submitted three SOIs and received an invitation into the Eligibility Period; we then were able to demonstrate our readiness to partner with the MSBA.
- Our partnership with the MSBA is like getting a \$100M check in the mail

Narrowing the Design Options



7 → || → 19 →

18 → 5 → 6 →

2 → |

Lots of Community Engagement in Developing
Schemes—Now It's Time to Narrow the Design Options



LEXINGTON
PUBLIC SCHOOLS 14

Construction Alternative Summary | Costs are School Building + Central Office + Renovated Field House

	B. Renovation & Addition		C. New Construction – On Fields			D. New Construction – Phased in Place
Alternative	B.1 Quad	B.4 Figure Eight	C.1d Branch	C.2b Braid	C.5b Bloom	D.2 Weave
Project Cost <i>School + CO + FH</i>	\$699,000,000	\$701,000,000	\$646,000,000	\$645,000,000	\$648,000,000	\$720,000,000
*Total Cost with Grants & Rebates	\$559,000,000	\$561,000,000	\$506,000,000	\$505,000,000	508,000,000	\$580,000,000
Construction Duration	6 Years	6.25 Years	4.5 Years	4.5 Years	4.5 Years	6.5 Years
# of Phases	4 building + 1 site	5 building + 1 site	1 building + 1 site	1 building + 1 site	1 building + 1 site	4 building + 1 site
Building Location	Existing Footprint	Existing Footprint	Fields	Fields	Fields	Existing Footprint
Modular Max Required	32	42	0	0	0	48
Costs are School Building, Central Office & Renovated Field House Only NO Pool						

smma

*Estimated \$140M Grants & Rebates - **NOT** Final

10/16/2024

1

3 Rounds of Cost Estimates—Here's the Latest



LEXINGTON
PUBLIC SCHOOLS
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2 Design Options: Bloom & Weave

At the time of this recording, the School Building Committee has narrowed its choices to two options: “Bloom” and “Weave.” On **November 12th**, the SBC will choose one option, either **Bloom or Weave**, for the Preferred Schematic Design.

- Bloom - New Construction on Fields
- Weave - New Construction Phased-in-Place
- Renovation & Addition Options No Longer A Consideration

Bloom: Pros and Cons of New Construction on Fields



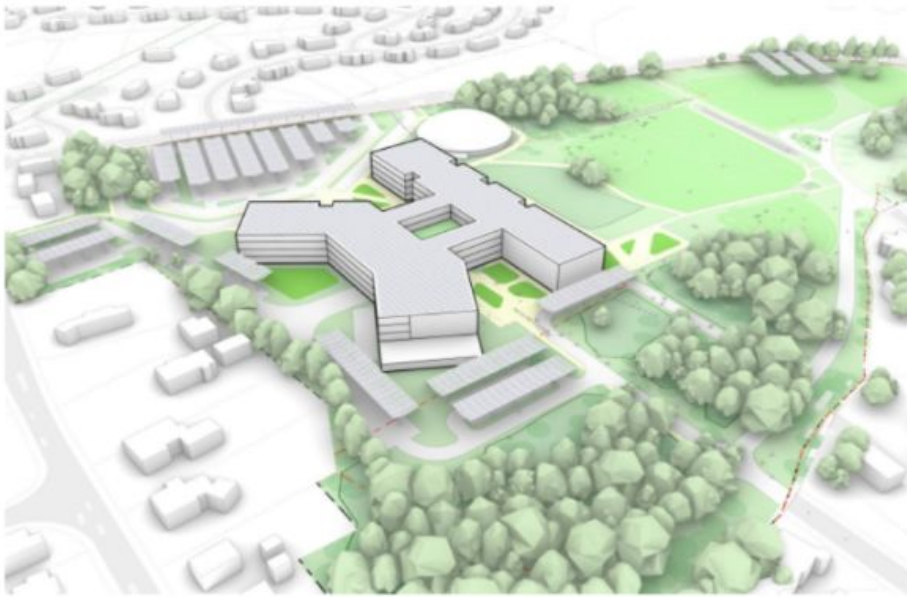
PROS

- [See the Recreation Committee's formal endorsement of the "Bloom" option.](#)
- One of the least expensive new construction options
- Shortest construction duration (4.5 years)
- Stays off Center Track, the playground, and C1, C2, and C7 playing fields.
- No modular units required
- Reconstructs and improves playing fields
- Level 1 program adjacencies
- Flexibility of program organization
- Good civic presence
- Visibility of main entry from Worthen Road
- Scaled down massing at adjacent playground

CONS

- Part of building on undeveloped land
- Construction close to existing school
- Large number of photovoltaic (PV) canopies between the building and Worthen Road

Weave: Pros and Cons of New Construction Phased-In-Place



PROS

- Reduces impact on fields vs. other new construction alternatives
- Flexibility of program organization
- Maintains current civic presence and relationship to Muzzey Street
- Potential for outdoor classrooms

CONS

- One of the most expensive options
- 48 modular units required at a cost of \$19M+
- The longest construction duration (6.5 years)
- Phased construction is more disruptive and time intensive than new construction

Factors in SBC's Decision-Making Process

1. **Construction Duration**—Construction duration ranges from 4.5 to 6.5 years, with “New Construction on the Fields” taking the least time and “New Construction Phased in Place” taking the most time at 6.5 years.
2. **Number of Phases**—One way we can measure the impact on student learning is the number of phases. The higher the number of phases, the more potential disruption to learning.
3. **Building Location**—The “New Construction on Fields” options clearly require building on the fields, whereas the “Renovation & Addition” and the “New Construction Phased in Place” options would require students to be relocated to modular buildings during the renovation/demolition of the existing buildings.
4. **Modular Max Required**—The range of required modular buildings is 0 to 48. Each modular building costs approximately \$400,000 for a temporary structure lasting approximately 10-15 years. We do not anticipate the need for modular buildings with the “New Construction on Fields” option. Conversely, the “New Construction Phased in Place” option would require 48 modular buildings, costing over \$19M.

Why Renovation & Addition are NOT an Option

1. The Renovation & Addition options were deemed unsuitable due to higher costs, longer construction durations, and associated student and staff impacts.
2. Tying a two-story renovation to a four-story addition would be challenging, and design issues with the existing structures with lower floor-to-floor “deck height,” requiring ramps from old to new structures. Further, the configuration of classrooms in the renovated areas was inadequate.
3. To learn more about Renovation & Addition challenges, please click the links to view the architects’ [presentation](#) (see slides 45-87) and [video recording](#) (see recording at the 00:14:00 to 01:00:00 mark) of the School Building Committee on September 3, 2024.
4. The Permanent Building Committee also explored the feasibility of “Add/Reno” options similar to the 2015 Master Plan concept referenced by community members. The PBC deemed these plans unfeasible, which informed the School Building Committee’s decision. Please click the [link](#) to view the recording of the Permanent Building Committee (PBC) meeting on September 12, 2024.

Community Questions

1. **Lowering the Cost**—Why is the project costing so much, and why wasn't it designed to a budget?
2. **Keeping Our Fields**—Why would we choose to cut town center fields in half when it would destroy one of our largest open spaces, permanently damage our recreation asset, and negatively impact traffic, noise, and light patterns?
3. **Building A New Field House**—Why don't current designs account for the rebuild of the LHS Field House, and what other budgetary compromises will be made to the overall LHS design to accommodate it?
4. **Including Central Office in LHS**—Why is Central Office being built into the LHS design plans?
5. **Enrollment/Design Concerns**—Why are we paying \$600M+ dollars for the same enrollment capacity?

1—Lower the Cost

Why is the project costing so much, and why wasn't it designed to a budget?

- LHS is **75 YEARS OLD** and in desperate need of upgrades. We have approximately \$250-\$300M in costs to upgrade the systems that are in danger of failure.
- The larger the building, the more it costs, and our high school is one of the five largest in MA. With the dramatic escalation in post-pandemic construction costs across the region, these cost estimates are in line with other school building projects.
- In terms of criticisms about budget, those familiar with the MSBA process understand that they want to protect their investment. Square footage equals dollars, and the MSBA has built in controls requiring districts to identify any area in excess of their recommended guidelines.
 - We have stayed at or under the MSBA guidelines in nearly every category except the additional 9,000 SF of space needed for special education given the size of our programs.
- We have taken many steps to lower the project costs; here are just a few:
 - Significantly reducing the amount of SF originally requested
 - Sized all classrooms at 850 SF instead of 950 SF
 - Eliminated the need for a \$22M parking structure
 - Identified the least expensive field house option
 - Avoided costly multi-million delays caused by a domino effect that happens when decisions are untimely
 - Implemented cost-avoidance strategies to generate more than \$1M annual expense reduction on electricity
 - Maximized grant and rebate opportunities
- Construction costs will continue to rise, escalation is a reality, and there is a hefty price tag associated with delays. The science labs we want to upgrade today will cost a lot more tomorrow. The extra square footage we need today will be more expensive tomorrow. We believe the time to act is now.

2—Keep Our Fields

Why would we choose to cut town center fields in half, when it would destroy one of our largest open spaces, permanently damage our recreation asset, and negatively impact traffic, noise, and light patterns?

- LHS sits on a unique parcel of land adjacent to wetlands and recreational space. The site is not contiguous and is extremely small by any standard, with only 4.5 acres of unused space, excluding the knoll.
- We have worked extremely hard to protect the Town's investment in the Center Track and Field Complex. See the Recreation Committee [letter of support](#) for building on fields. Mitigation strategies include the following:
 1. New Athletic Fields for the Town—Plans are in place to demolish Old Harrington (a building in need of an immediate \$20M investment to replace failing systems) and turn the land into new and improved playing fields for Town use.
 2. Improved Fields for the Town—Agreement to make the athletic fields, including the practice football field, better than they are now; we hope to elevate practice fields to rectangular fields, add lighting, etc.
 3. Preserving the Town's Investments—Although it's been extremely challenging, we have managed to find ways to build a new high school without disrupting the Town's recent investments:
 - Agreement to not build on the Center Track.
 - Agreement to stay off the Center Playground.
 - Agreement to not disrupt the skate park.
 - Agreement to stay off three newly lit ballfields (C1, C2, C7).
 4. Traffic, Noise, and Light Mitigation—During the design process, the Project Team and engineers will continue to study and explore all options for reducing the impact of traffic, noise, and light patterns.
- In Lexington, there are no municipal and school sides—we are one Town. Land is scarce, history is plentiful, and the high school project will test our values. With kindness, patience, and mutual respect, we can deliver a high school project that improves our existing fields and is a source of pride for the community.

3—Build A New Field House

Why don't current designs account for the rebuild of the LHS Field House, and what other budgetary compromises will be made to the overall LHS design?

- Some community members want us to build a new, larger, and more expensive Field House. The current design options **DO** include the Field House renovation—just not the new extra large Field House that some want.
- As previously mentioned, the base project includes: (1) high school (440K SF), (2) the renovated field house (34,000 SF), and (3) the additional square footage for 12 classrooms/Central Office (20K SF)
- 5 Field House Options: (1) A \$27M renovated Field House (34,000 SF), (2) A \$41M add/reno Field House (48,000 SF), (3) A \$38M new small Field House (36,000 SF), (4) A \$60M new medium Field House (60,000 SF), and a new \$71M large Field House (72,000 SF).
- [The official recommendation of the LPS Administration](#) is for the least expensive option, the \$27M Field House with 34,000 SF, which is included in every design option.
- The SBC sought input from the Appropriation Committee, the Capital Expenditures Committee, the School Committee, the Select Board, and the Recreation Committee. There was some appetite for a new small field house, but no one in the Financial Summit expressed a desire for a larger one. Some indicated that building a larger Field House would bump other important Town capital projects.
- Given the views expressed by various Town boards and committees, we are staying focused on the base high school project which includes a renovated field house, the most fiscally responsible way to maintain and improve this athletic facility.

4—Including Central Office in LHS

Why are you including Central Office in LHS when it is a costly, unnecessary luxury?

- Relocating Central Office is not a “luxury,” it is a necessity for three reasons:
 1. Recreation/Schools need more playing fields
 2. Given the MBTA zoning bylaw changes and other unknowns, we may need more classroom spaces in the future.
 3. The Old Harrington building was rated an ‘F’ due to structural and mechanical failures, requiring approximately \$20M to renovate.
- To address the three issues above, we developed a creative, **cost-neutral plan**. The plan involves tearing down Old Harrington, and building new playing fields on the site. We will reallocate the \$20M in resources needed to address systems failures at Old Harrington to additional square footage at LHS. To learn more about these plans, please read [Central Office FAQs](#).
- If overcrowding becomes an issue, we can easily convert the 20,000 SF designated for Central Office to 12 classrooms. Central Office employees will be temporary occupants in the high school until such time as the space is needed to accommodate up to 288 students.

5—Enrollment & Design Concerns

Why do the current designs supported by the SBC only support an increase in enrollment by exceeding space utilization guidelines of the MSBA (the situation we are in now)?

- The [MSBA's enrollment methodology](#) is overseen by a consultant who developed a data-driven approach based on a modified grade-to-grade cohort survival methodology.
- The MSBA issued Lexington's final student design enrollment of 2,395, taking into account the typical impact of zoning bylaw changes. However, Lexington's zoning bylaw changes are four times higher than those of other municipalities complying with the Multi-Family Zoning Requirement for MBTA communities.
- While we can't predict with certainty how many students the increased dwellings will yield, we are planning for the possibility. The LPS Master Plan takes into account what will happen with low, medium, or high enrollments. We are in the process of revisiting these planning strategies in light of the zoning bylaw changes. We are also mindful that a high school built for more than 3,000 students has its limitations.
- Since 2014, LPS has had an Enrollment Working Group to regularly analyze enrollment, and this effort continues today. Current projections indicate that we have reached our peak high school enrollment this year. We anticipate smaller cohorts in the lower grades, and high school enrollments are expected to decline.
- After we updated our enrollments for the year on October 1st, we submitted this [MSBA Enrollment Reconsideration Request](#) to see if the MSBA wants to increase our square footage. We do not know the implications of such a request, and we are awaiting a response from the MSBA.
- One of the criticisms we hear is that the high school's "design capacity is too small," therefore, the project should be phased or delayed—we respectfully disagree.

Final Thoughts

- LHS is one of the best high schools in the nation, and residents with and without children in schools benefit from our outstanding educational system.
- Our 75-year-old facilities are close to system failure and need urgent attention.
- LHS was built for 1,850 students; we are in desperate need of more space AND upgraded systems that are in danger of failure and not fully ADA-compliant
- Our high school is one of the five largest in MA, and with the dramatic escalation in construction costs across the region, these estimates are in line with other school building projects.
- We will continue doing everything possible to lower costs and maximize grants and rebates.

Next Steps

1. The MSBA will review the SBC's recommendation for a Preferred Schematic Design.
2. The Feasibility Study will conclude in December.
3. A 2/3s vote of Town Meeting Members in November 2025 is needed to authorize borrowing.
4. The Select Board will determine what goes on the ballot for Town voters to decide on debt exclusions after the 2025 Special Town Meeting.

LHS Project Resources

Community Videos

- ❖ [How is the School Building Committee engaging stakeholders in the process?](#)
- ❖ [What is the process for a new or renovated high school from start to finish?](#)
- ❖ [Why do we need a new high school and what is the difference between an “Ad/Reno” and a “New Construction on the Fields?”](#)
- ❖ [How do we create a healthy building for kids?](#)
- ❖ [How can we design a high school that produces the energy it uses?](#)
- ❖ [How does the integrated building design policy affect this project?](#)
- ❖ [What are your hopes for the new high school?](#)
- ❖ [What is an educational plan and why does it matter?](#)

HS Project Website and Reports

- ❖ <https://www.lhsproject.lexingtonma.org/>
- ❖ [Recreation Committee Endorses Bloom Design Option](#)
- ❖ [Stakeholder Engagement Letter](#)
- ❖ [LPS Field House & Pool Recommendation](#)
- ❖ [High Cost of Doing Nothing](#)
- ❖ [OPM's Presentation on Costs](#)
- ❖ [Cost Comparison to Other High School Projects](#)
- ❖ [SMMA Presentation on Pros and Cons of Options \(09-03-2024\)](#)
- ❖ [MSBA Enrollment Methodology and MSBA Enrollment Reconsideration](#)
- ❖ [Preliminary Design Program Submission](#)
- ❖ [LHS Monthly Reports](#)