

September 14, 2023

Lexington High School Project School Building Committee Meeting #4 October 12, 2023 2:00 PM



1. Call to Order & Intro
2. Previous Topics & Meeting Minutes
3. Designer Team Introductions
4. Schedule / Timeline
5. Sustainability Project Targets and Goals
6. Public Meeting Update
7. Lessons Learned
8. Upcoming Meetings
9. Website
10. Other Topics not Reasonably Anticipated
48 hours prior to the meeting.
11. Public Comment
12. Adjourn

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Previous Meeting Minutes

- Meeting minutes approval from 9/14/2023

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A photograph showing the exterior of Lexington High School. The building features a red brick wall on the left and a white modern section with large glass windows on the right. A "WELCOME TO LHS!" sign is visible in the window. Several students are sitting on concrete benches in front of the school. The foreground is partially obscured by green foliage.

SMMA

Lexington High School

Setting the benchmark for future projects in the Commonwealth, and across the country, for innovative design, efficiency, sustainability, and positive impact for the community.



Lorraine Finnegan
PIC | PM, AIA



Rosemary Park
PM | Educational Planner, AIA



Matthew Rice
Architect, AIA, ALEP



Brian Black
Architect, AIA



Erin Prestileo
Civil Engineer, PE



Martine Dion
Sustainability, FAIA



Andy Oldeman
Mechanical Engineer, PE



Phil Poinelli
Educational Planner, FAIA,
ALEP



Michael Dowhan
Landscape Architect, RLA



David Stephen
Educational Visioning, AIA



Rebecca Rahmlow
Sustainability, AIA



24

Communities



29

Total MSBA Schools

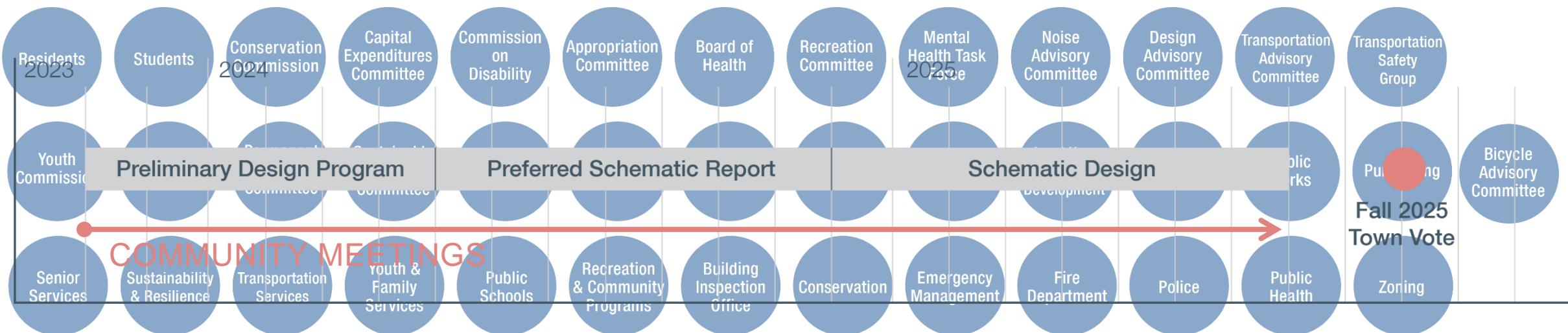


17

MSBA High Schools



Community Engagement |SMMA



Farmers Market



Patriot's Day



Porchfest



Summer Concerts



Discovery Day

LEXINGTON PUBLIC SCHOOLS

LPS Website Project Updates MSBA Process School Building Committee FAQs **The Forum** Stay Informed

Project Updates



LEXINGTON HIGH SCHOOL

9/6/23

New LHS Community Forum

[Read More](#)

Search

LHS Project The Musket Select a Language

The Forum

a Knowledge Hub for the Lexington High School Project

Collections

Search

- Most Recent
- Sustainability in Schools**
- Programming
- Engineering**
- Next-Generation Education Planning**
- Site and Landscape
- Experiential Graphics
- Technology
- Career Technical Education (CTE)
- Wellness Integration
- Community Spaces
- Athletic Spaces



Meet: Martine Dion, Director of Sustainability

INTERVIEW

MORE INFO



Achieving Net Zero: The Future of School Design

INSIGHT



Getting Our Schools to Net Zero

NEWS



Drive: The Surprising Truth About What Motivates Us
Global Achievement Gap
Rewired: How Technology is Changing Our Brains
Brain Rules: 12 Principles for Surviving at Work, Home, and School
The Smartest Kids in the World: How They Get So Good - and Why Other Countries Are Catching Up

INSIGHT

An Education Planner's Suggested Reading

Stay informed on all project updates.

SIGN UP



Future-Forward Visioning

INSIGHT

Resources

- Lexington High School
- TED Ed
- A4LE Videos
- Equity in Ed Podcast
- ACE Mentor Program
- Future Ed Documentaries
- PBS Learning Media
- NPR Education

The Team

- Town of Lexington
- MSBA
- OPM
- SMMA
- Construction

 Search    

The Forum a Knowledge Hub for the Lexington High School Project LHS Project The Musket Select a Language

Collections 

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 Programming

 Engineering

 Next-Generation Education

Site and Lands

Experiential G

Technology

Career Techni

Education (CT)

Wellness Integ

Community Sp

Athletic Space

[Learn More](#)

Better Learning Podcast: We're Building a Team to Change Education

July 12, 2023
https://www.a4le.org/A4LE/Resources/Resource_Center/BLP/2023/Change_Education.aspx



In this very special episode, Host Kevin Stoller chats with Jolene Levin. Jolene is the Executive Director of the brand new education-oriented nonprofit, The SecondClassFoundation. This organization was founded around the idea of changing the ways we view and talk about education online, in print, and... [read more](#)

 00:10:21 / 00:17:13

46 Likes  Share 

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Lexington
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4:49

surveymonkey.com/r/LH

LEXINGTON HIGH SCHOOL

EGD at Lexington High School: Student Survey

Where do I come in? Environmental graphics are a visual way to celebrate what you are passionate about in the new Lexington High School. We want to hear from students about what matters to you.

You are invited to participate in the following survey, which should take only 15 minutes of your time. Tell us what aspirations you have for the new school. We are interested in what inspires you—in school, or in life. We can't wait to hear from you!

1. What grade are you in?

9th
 10th
 11th

Understanding Future Generations |SMMA





Go to www.menti.com and use the code 58 74 04

What strikes you? Is anything missing?

Collaboration, communication, and creativity are very important.

Social emotional learning is well described. Inquiry-based learning should be a focus

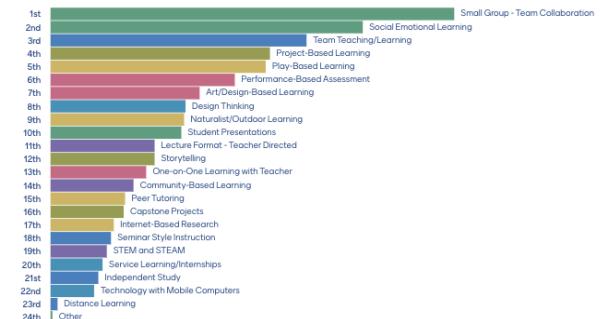
We don't mention the cultivation of reading skills.

Shows value of whole student

it is a great list! Would "inclusivity" be

Go to www.menti.com and use the code 26 91 47

What modes of teaching and learning do you use most frequently?





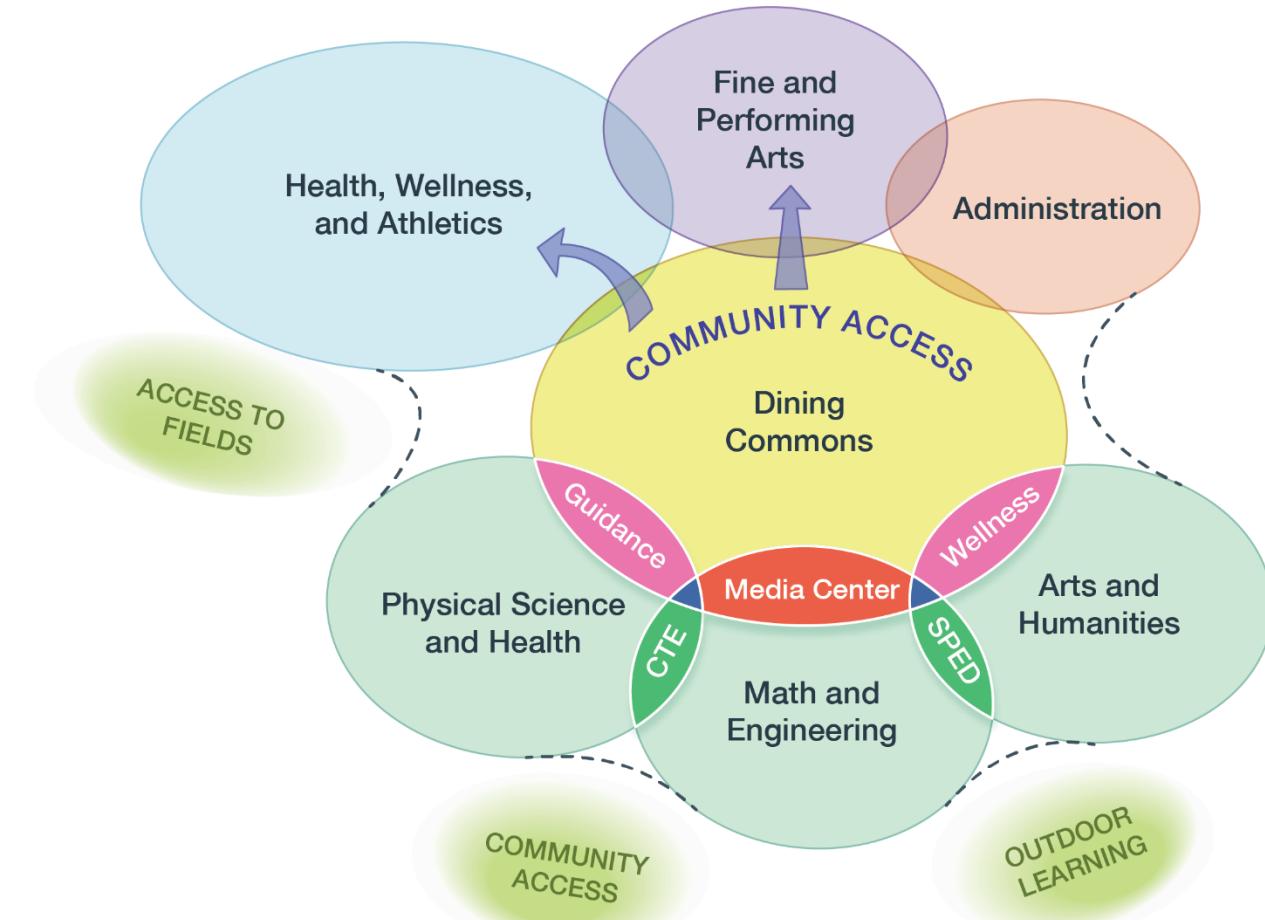
Communication Tools

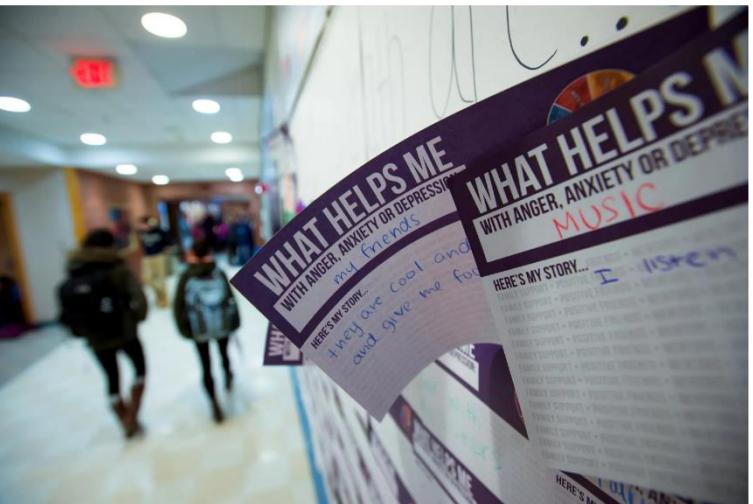
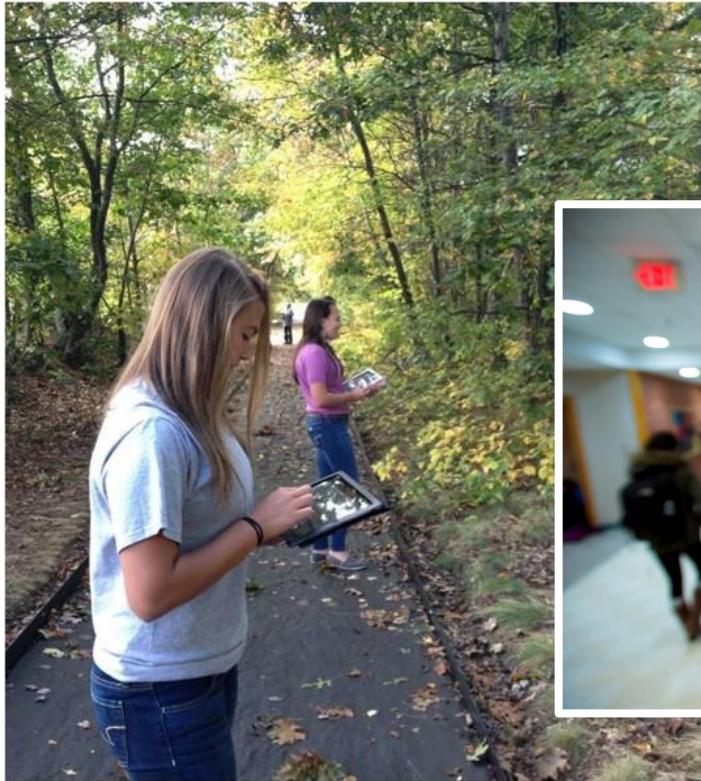


Involve Stakeholders



Make Informed Decisions





Today's students:

- Environmental justice
- Equity and inclusion
- Authenticity matters
- Mental and emotional well-being is crucial

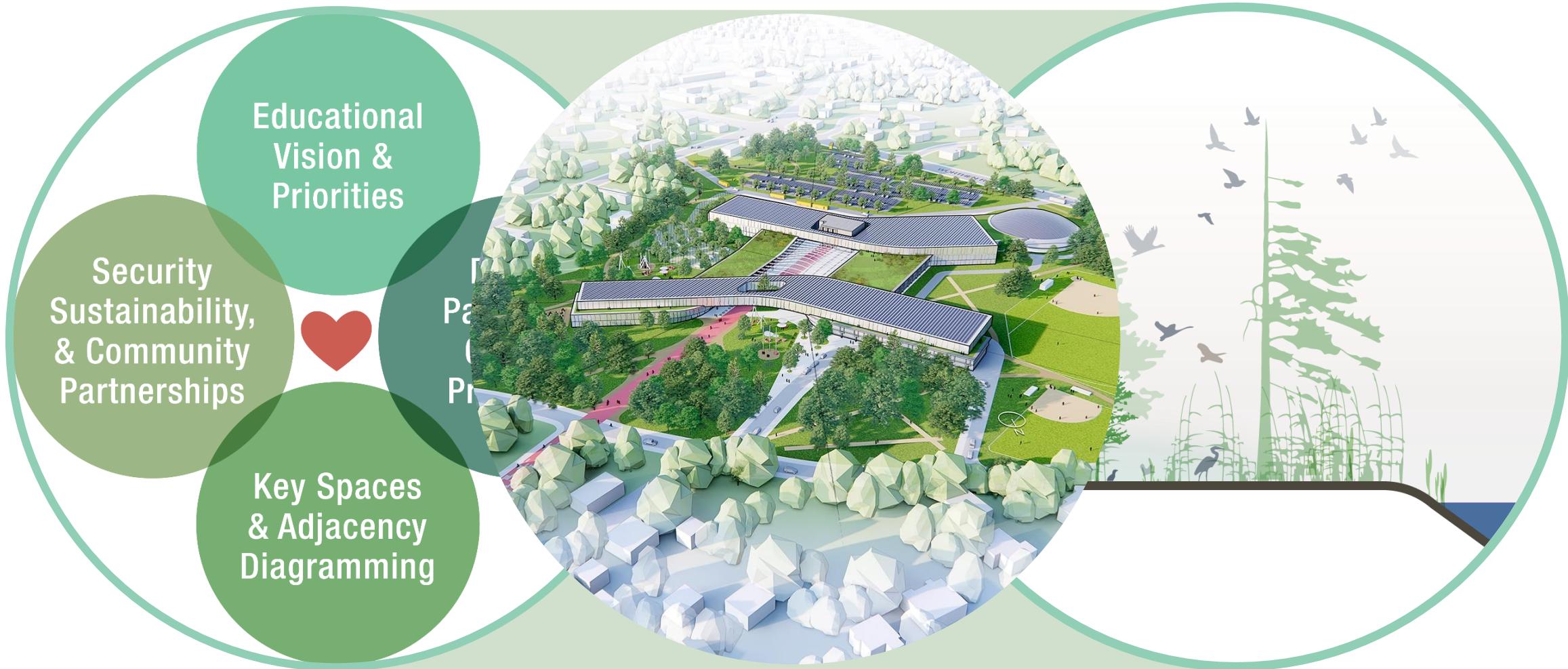
Advocates for all.



What does this mean for the educational plan and program?

Future Ready Schools

- Peer-to-peer and small group spaces
- Differentiated learning spaces
- Flexible and adaptive spaces for social and emotional learning
- LABBB programs
- Dedicated spaces for educators



10

Living Building
Challenge



25+

Passive House
Institute



25+

NZE/NZER
Schools

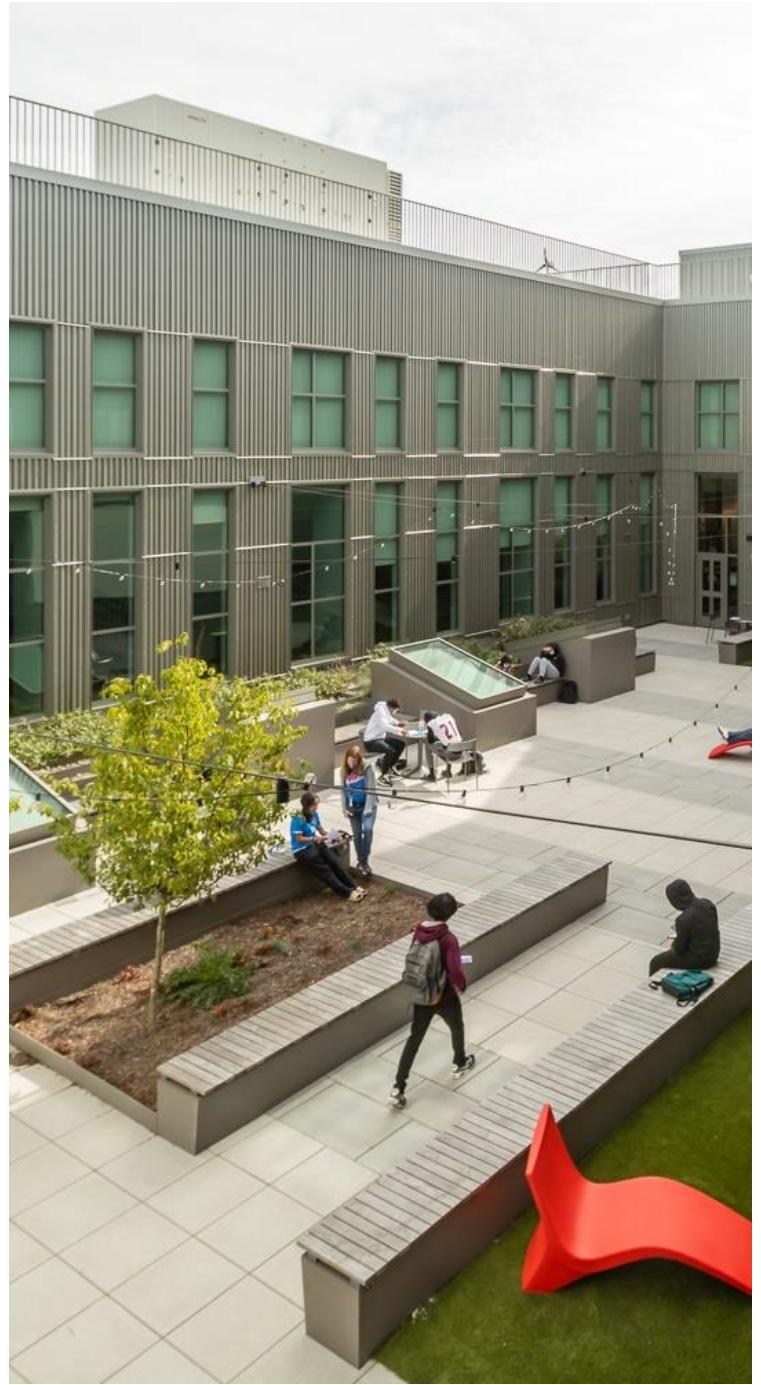
400+

LEED Certified
Projects



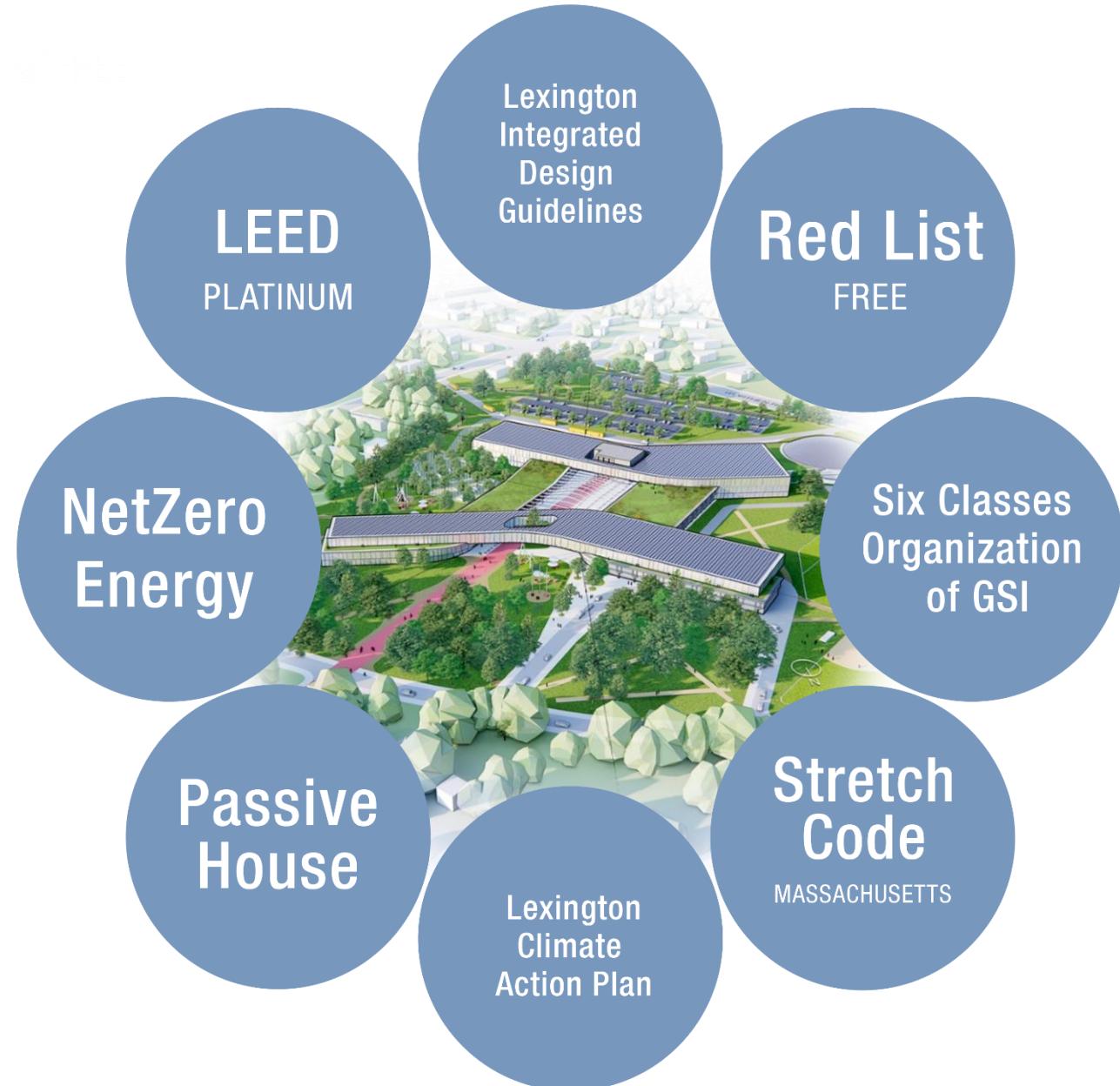
30+ PLATINUM

95+ GOLD





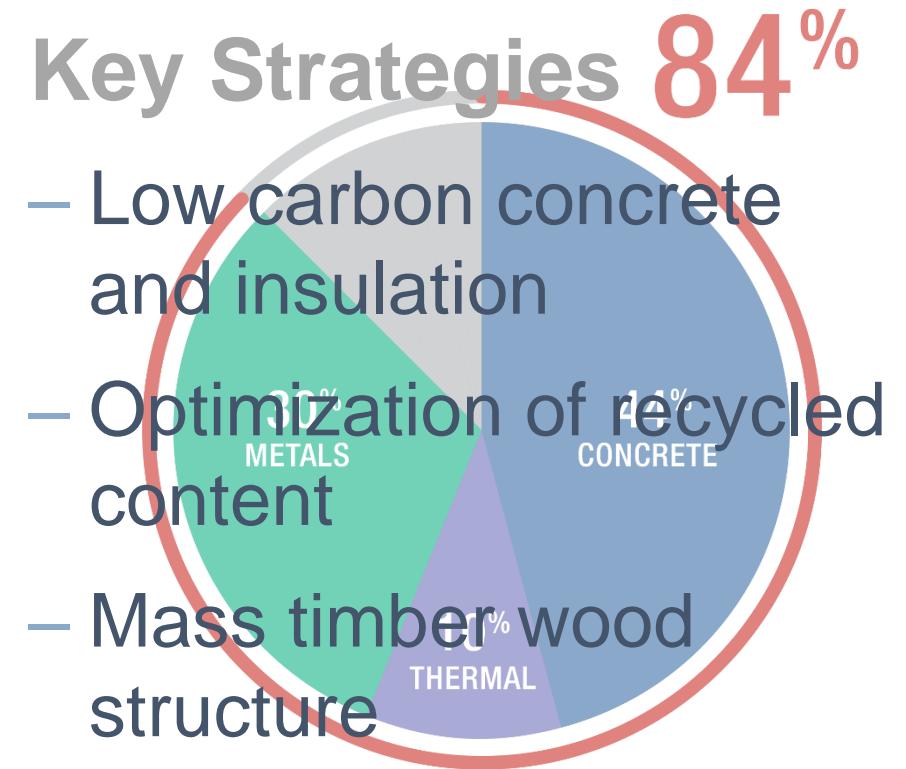
A Climate Resilient Lexington High School |SMMA





Somerville High School
Embodied Carbon

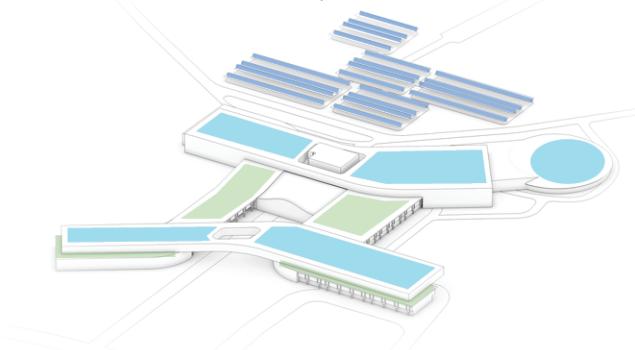
Building Enclosure & Structure
Building Interior



Waltham High School
Embodied Carbon

LEXINGTON HS

391,000 sf

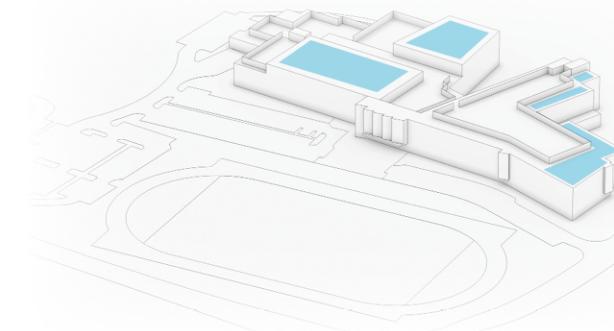


LEED Platinum

Operational Carbon Reduction	40 %
Incremental Costs	<1% GOAL
Payback	<10 YEARS
EUI with PV%	0 (100% PV)
EUI (kBtu/sf)	25 or better

WAKEFIELD MEMORIAL HS

260,000 sf



LEED Silver

Operational Carbon Reduction	43.4 %
Incremental Costs	<1.8%
Payback	4.4 YEARS
EUI with PV%	10 (60% PV)
EUI (kBtu/sf)	25.5

Footprint of the Future Addition and Renovation



Nexus of Education Phased in Place

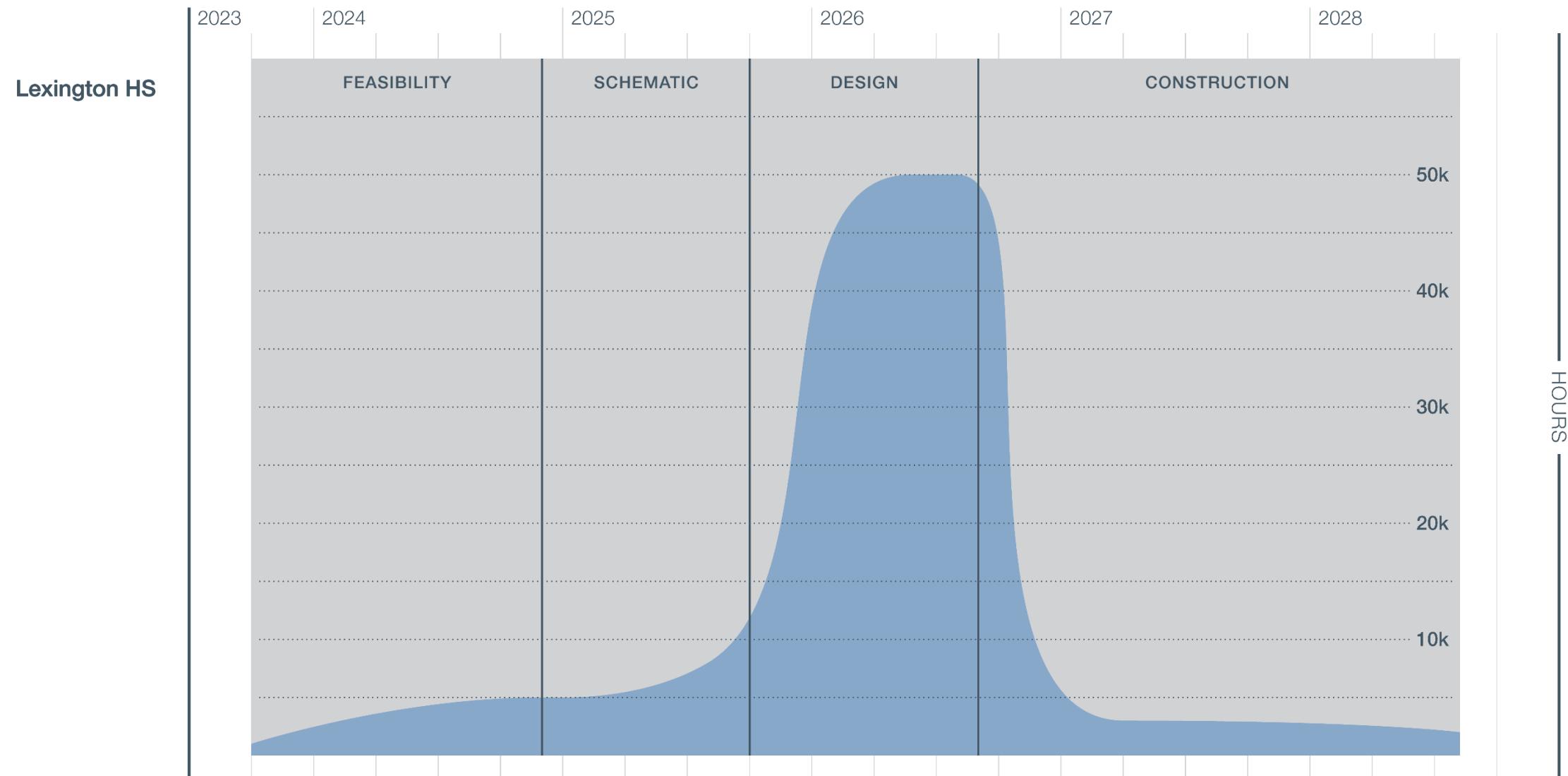


Campus Interlace New Construction

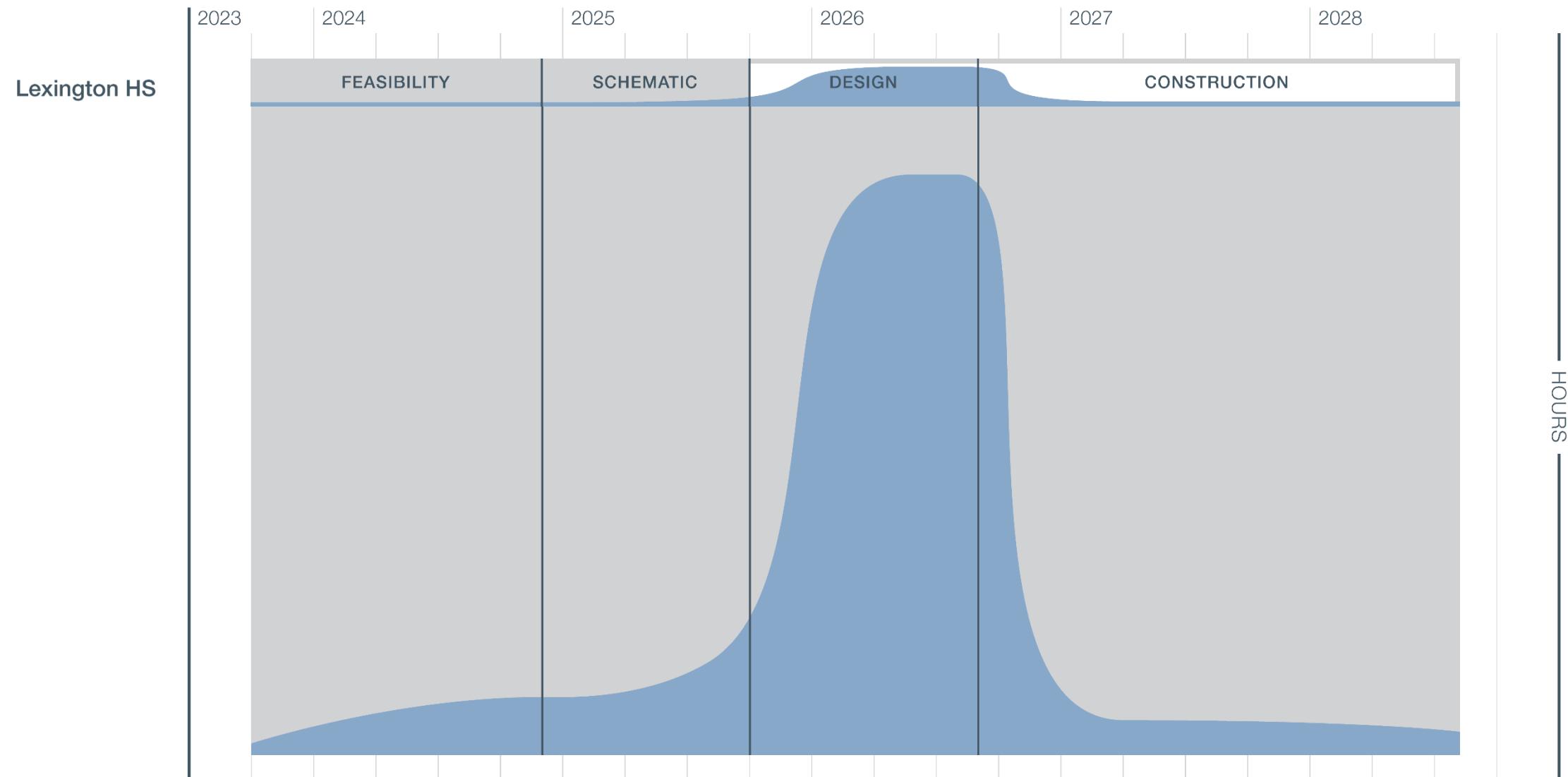




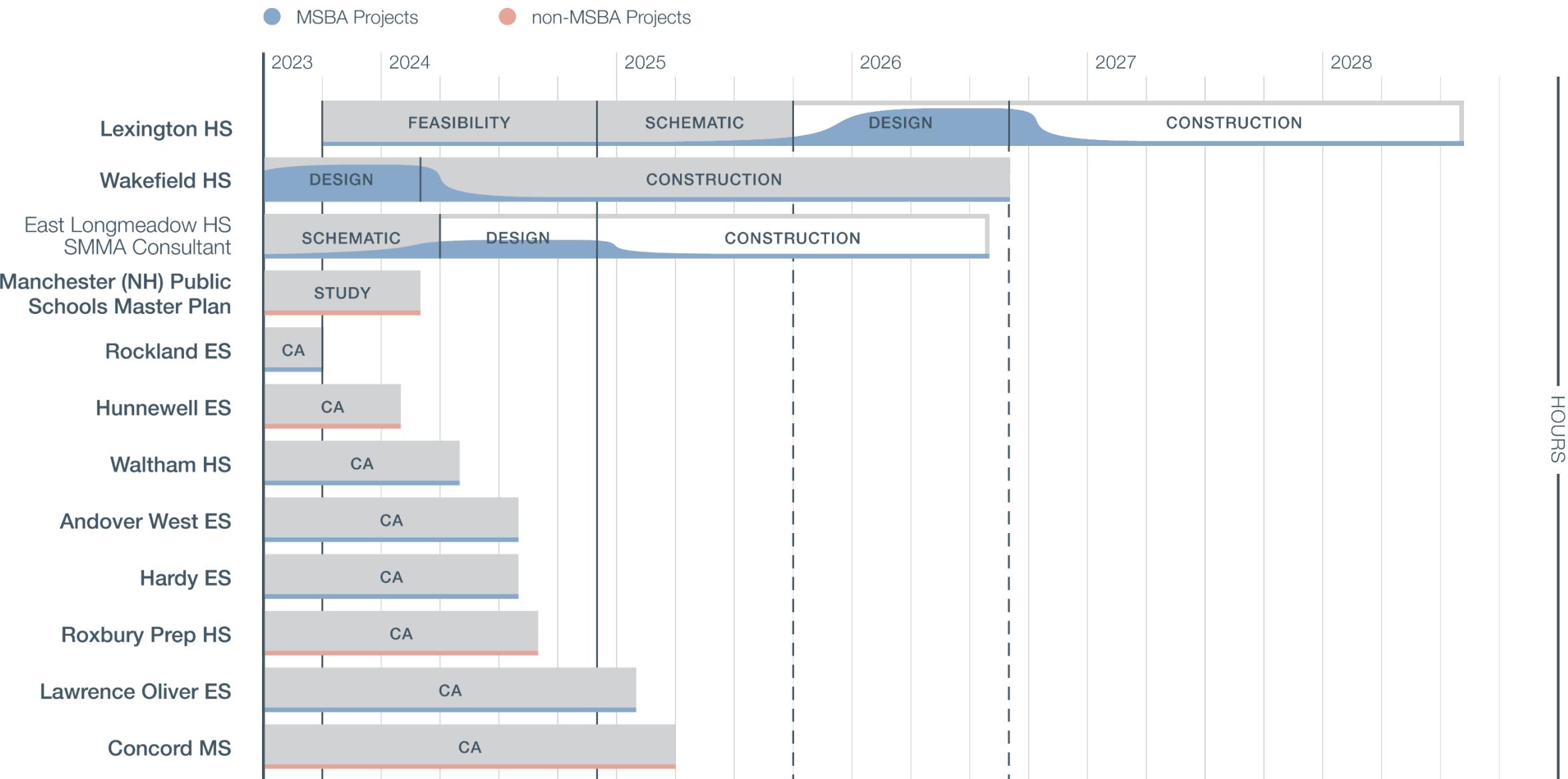
Workload: Level of Effort Timeline |SMMA



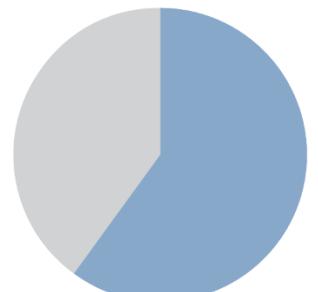
Workload: Level of Effort Timeline |SMMA



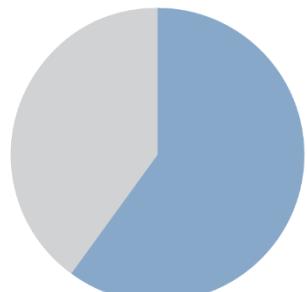
Workload: Level of Effort Timeline |SMMA



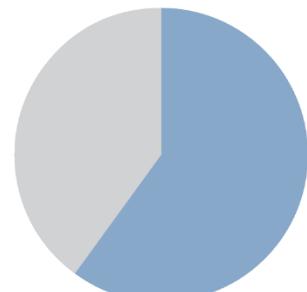
Workload | SMMA



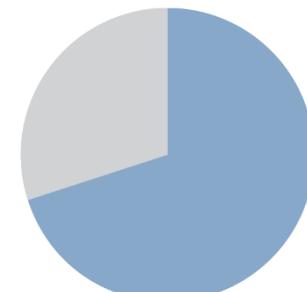
Lorraine Finnegan
PIC | PM, AIA



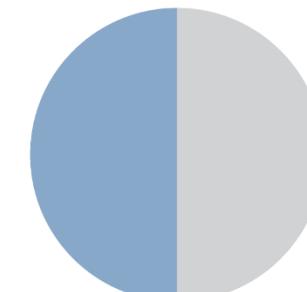
Rosemary Park
PM | Educational Planner, AIA



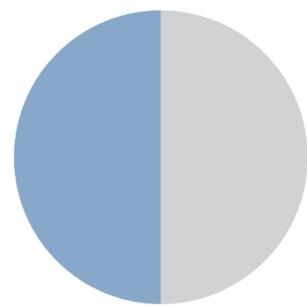
Matthew Rice
Architect, AIA, ALEP



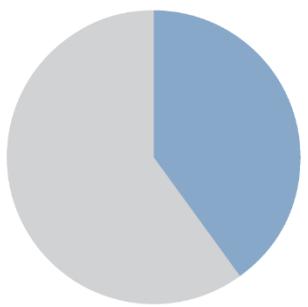
Brian Black
Architect, AIA



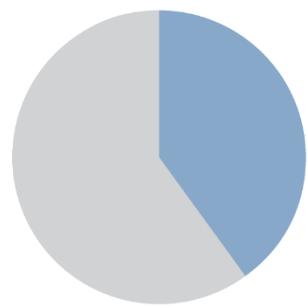
Erin Prestileo
Civil Engineer, PE



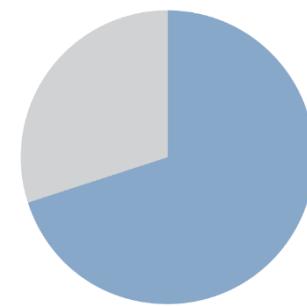
Michael Dowhan
Landscape Architect, RLA



Martine Dion
Sustainability, FAIA



Andy Oldeman
Mechanical Engineer, PE



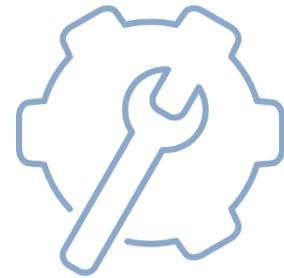
Phil Poinelli
Educational Planner, FAIA,
ALEP



Lexington High School



Other Projects



Building
Alliance
Management
of Public
Facilities
System

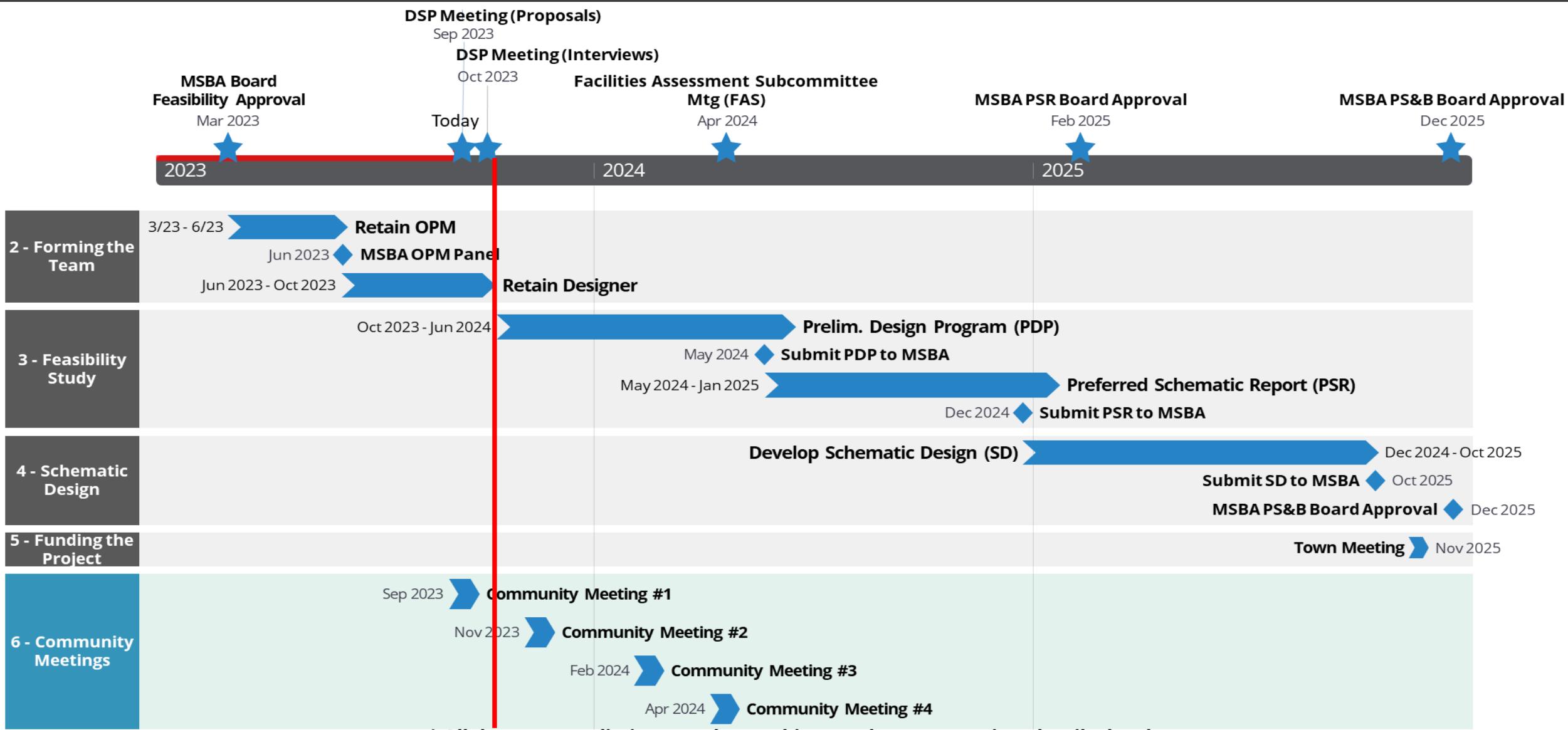




Facilities Team Collaboration

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Schedule / Timeline



* All dates are preliminary and are subject to change as project details develop

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Lexington Integrated Building Design & Construction Goals Checklist

Project Goals to Establish Early:

- 1) Resilience Level
- 2) Energy Use Target – EUI before renewables
- 3) Overall Energy Use – is Net Zero Energy the goal?
- 4) Battery Storage – what is the approach?
- 5) LEED Certification – LEED Silver is required by MSBA. Do we want to go beyond that?

PBC Recommendation - Resilience

- Level 2 minus Food Prep for Fieldhouse/Gym (plan for attaching portable generator for cooking)
- Level 3 for remainder of building
- Seven other important items identified – see list

PBC Recommendation - Energy

- Energy Target: EUI=25 kBtu/sf/yr or 30% better than 90.1-2019 whichever is lower
- NZE: Evaluate and present options. Priority is to maximize renewables.
- Battery Storage: Evaluate and present options. Likely required for solar.
- EV Charging ties into renewable and battery discussion

PBC Recommendation - LEED

- The building need not meet higher than LEED Silver, but from recent projects, and requirements in the updated IBDCP, it is very likely that the building would end up meeting a higher LEED level.
- Although the MSBA will require LEED Certification, the IDP Process requires that the School Committee and Selectboard confirm whether the project will be Certified or “Certifiable”. Is a formal vote required?

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Community Meeting



Artwork provided by Lexington Public Schools

Would you like to learn more about the
new Lexington High School building project?

Join us for a Community Forum
Thursday, September 14 at 6:30-8:30pm

Join us in person:
Cary Memorial Building
1605 Massachusetts Avenue
Lexington, MA

Or participate virtually via Zoom:
<https://tinyurl.com/2p9vvvj9>



Meeting will include a welcome and introductions by Dr. Julie Hackett,
project overview, preliminary schedule, next steps, and Q&A.



See project website: www.lhsproject.lexingtonma.org

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Lessons Learned

- Commissioning – Lesson Learned (LL) = Cx agents for mechanical and envelope should be involved as soon as possible. Per MSBA, Cx agents not assigned until DD. TOL may want to get their involvement earlier in process.
- Alternative Energy Credits / Rebates / Incentives – (LL) = Should have Energy Consultant / Tax attorney onboard early to clearly identify pathways to achieving credits, rebates, incentives. TOL will explore consultants and begin talks with Eversource re: MassSave program.
- Geothermal – (LL) = Manifold/pump/piping should not be an underground vault. Should be readily accessible for troubleshooting. TOL will consider when appropriate.
- Electric rooms / Data closets – (LL) = Typically E&TD rooms are not big enough and insufficient in quality. TOL will consider when appropriate.
- Solar – (LL) = Solar canopies should be designed in tandem with the building. TOL will incorporate with early design.
- Fire Control Equipment – (LL) For High School there should be a Fire Control Center (Room) not equipment jammed into main lobby. TOL will consider when appropriate.
- Chilled Beam – (LL) All CB should have drain pans and gravity drains (out of building). TOL will consider when appropriate.
- BMS – (LL) Any/all generators, solar, BESS, metering, fire, security, lighting, HVAC, CCTV, door systems need to be part of integration into the BMS. TOL will consider when appropriate.
- HVAC Operation / shakedown – (LL) HVAC Shakedown period – Working w/ controls sub, HVAC Eng monitor lots of data and resolve operational issues. Primary focus starts w/ comfort, then operations, then Energy usage. TOL to explore consultants for enhanced HVAC during design initially then during turnover and post occupancy.

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Upcoming Meetings

- SBC#5 – **November 30, 2023**. Designer Work plan and schedule review
- **Community Meeting #2 – November 2023**. Project Team intro, review MSBA Process
- SBC#6 – **December 21, 2023**. Designer update, timeline review
- SBC#7 – **January 18, 2024**
- SBC#8 – **February 15, 2024**
- **Community Meeting #3 – February 2023**. Designer updates, timeline review
- SBC#9 – **March 21, 2024**
- SBC#10 – **April 25, 2024**
- **Community Meeting #4 – April 2023**. Review preliminary options

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Website

[LPS Website](#)[Project Updates](#)[MSBA Process](#)[School Building Committee](#)[FAQs](#)[Stay Informed](#)

A New Vision for Lexington High School

Joy in learning; curiosity in life; and compassion in all we do.



Website



School Building Committee

Minutes

[View Minutes](#)

Agendas

[View Agendas](#)

Recordings

[View Recordings](#)

Presentation

[View Presentations](#)

Website

School Building Committee Meetings

This committee has been formed as part of the Massachusetts School Building Authority (MSBA) Eligibility Period. The SBC's purpose is generally to monitor the application process and to advise during the construction of an approved project.

September 28, 2022

[Meeting Agenda](#)

[Meeting Minutes](#)

[Meeting Recording](#)

November 14, 2022

[Meeting Agenda](#)

[Meeting Minutes](#)

[Meeting Recording](#)

February 13, 2023

[Meeting Agenda](#)

[Meeting Minutes](#)

[Meeting Recording](#)

March 23, 2023

[Meeting Agenda](#)

[Meeting Minutes](#)

[Meeting Recording](#)

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Cost Effective

Thoughtful

Collaborative

Detailed

Committed

Creative

Experienced

Proactive

