



City of Cambridge

Executive Department

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City Manager

CMA 2025 #76
IN CITY COUNCIL
April 7, 2025

To the Honorable, the City Council:

Please find attached a presentation on the Cambridge Public Schools' long term facilities condition assessment, which Interim Superintendent David Murphy presented to the School Committee at their April 1, 2025 meeting. As you may be aware, in 2022, the school department commissioned a comprehensive facilities assessment of 10 CPS facilities, excluding the buildings that were included in the most recent phase of school construction (CRLS, King/Putnam Street, King Open/Cambridge Street, Tobin/Darby Vassal). DLR group, an architectural and engineering firm with experience in school renovation and construction, conducted the assessment, evaluating each of the buildings for the overall condition of the building and building systems, educational adequacy, and building capacity. The assessment, analysis and potential recommendations of the study will be used to inform the strategic planning and long-range capital improvement planning for the Cambridge Public Schools. The report will be released later this month.

Yi-An Huang
City Manager



Facilities Condition Assessment, Capacity and Planning Analysis

Created for CPS by DLR Group

April 1, 2025





Agenda

- Intro + Purpose
- District Priorities
- Assessment Methodology
- Findings

Executive Summary

Overview

DLR Group collaborated with the City of Cambridge and Cambridge Public Schools (CPS) to assess and develop a global analysis for ten school buildings.

Goal

Contribute to a unified vision to guide future facilities and spending decisions, ensuring the best learning environments for CPS.

Important Distinction

What is DLR?	What is DLR not?
<p>An extremely valuable partner with a high level of expertise in the areas of K-12 planning and analysis.</p>	<p>The Cambridge Public Schools/City of Cambridge (responsible to the people of Cambridge).</p>
Why does this matter?	
<p>DLR has provided invaluable information and data points that the Cambridge Public Schools and City of Cambridge can and should incorporate into deliberations and decision-making in the months and years ahead. But CPS must establish its own objectives to ensure the appropriate questions guide discussions with an unyielding focus on the school district's singular mission in serving and creating opportunities for students.</p>	

Capital Improvements: Continuum of Projects: From Relatively Routine to Significant Consequence

Relatively Routine	Of Significant Consequence
<ul style="list-style-type: none"> ● Roofs ● HVAC (boilers, chillers, etc.) ● Windows ● Plumbing ● Electrical ● Alarms & Security 	<p>Future of 158 Spring Street (former KLo)</p> <p>Eventual new construction and/or major renovations</p>
<p>DLR Report Impact: The DLR report provides critical analysis through the lens of external experts helping to inform appropriate prioritization.</p>	<p>DLR Report Impact: The DLR report provide a capacity analysis reflective of facility’s future potential, but must be viewed in the context of community feedback along with consideration of the implications for the entire CPS organization before a strategy is pursued.</p>
<p>Common Theme Across this Continuum:</p> <ol style="list-style-type: none"> (1) Capital improvements of this magnitude represent substantial investment of public dollars that is subject to the city’s capacity to responsibly spend. (2) All decisions must be grounded in district-wide shared mission of improving opportunities for all students, with an emphasis on vulnerable populations. 	

Project Timeline

2022
Commissioned
long-term
facilities
assessment
(DLR Group)

2022-2024
DLR Group
conducted
in-depth analysis
of all CPS
facilities*

* except recent
construction

2024
Began sharing
findings with
community

2025
Draft report
issued;
multi-phase
rollout



Grounding Principles

- 1 Educational Practices.** The buildings were assessed for educational adequacy - how well they enable education and support student and teacher engagement.
- 2 Sustainability + Building Performance.** Sustainability and building performance are major priorities, with a goal for educational buildings to reach Net Zero Emissions by 2035.
- 3 District Operations.** Building utilization, number of sections per grade and ability to provide for special education and/or MLLs were assessed and considered. These are key factors to serving students, families, faculty, and community most effectively.
- 4 Enrollment.** Demographic and Enrollment drivers are directly connected to the future of CPS. Future plans need to consider these forecasts to prevent over- and under-building which could negatively impact overall district performance and financial viability.
- 5 Community.** Consistent with CPS goals to provide equitable education opportunities, community socio-economic data and school diversity data was included in the analysis of where investments are needed.

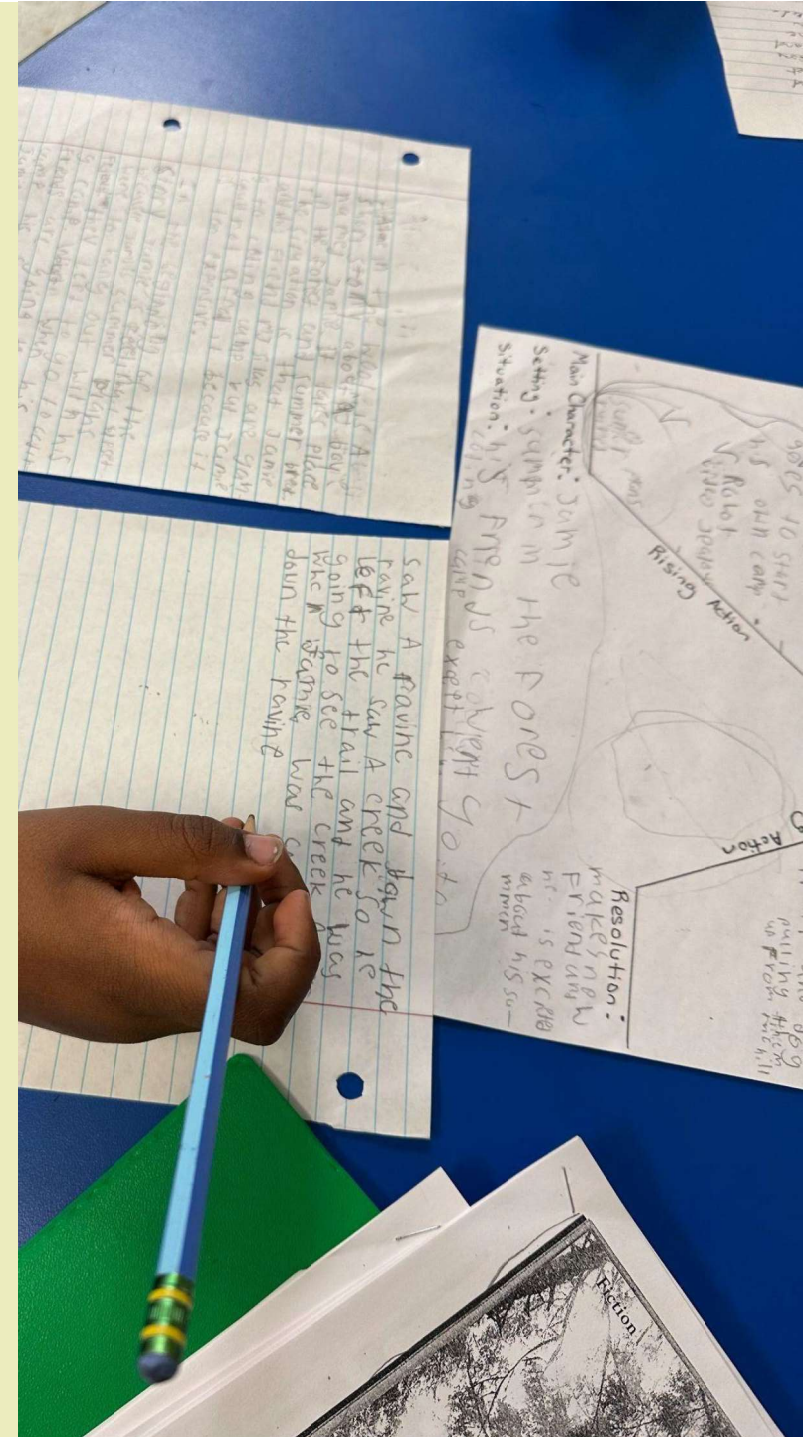
Analysis Priorities

- **Improve Educational Adequacy.** Ensure spaces that enable quality education consistent with recently built schools.
- **Improve Facility Condition.** ADA accessibility, ensuring functionality of all systems.
- **Meet Climate/Carbon Goals.** Improved energy efficiency and electrification, reduce GHG emissions.
- **Improve Site Amenities.** More access to play and parking.
- **Improve Capacity + Programs.** Optimize operations by:
 - Achieving at least 3 strands per grade
 - Identifying locations that best serve existing student population
 - Identifying locations for programs in need of expansion
 - Identifying ways to provide better facilities
- **Utilize Equity + Diversity Metrics.** Investments for historically underserved student populations.



Analysis Methodology

- 10 buildings evaluated for **Facilities Conditions, Educational Adequacy, + Building Capacity.**
- Assessments used scoring rubrics based on **research, standards, + expert input.**
- Developed **sustainability index** for each building.



Facilities Condition Rubric

FCA ASSESSMENT CRITERIA				
CONDITION			PRIORITY	
Excellent	A	No visible defects, new or near new condition, may still be under warranty if applicable	Currently Critical (Immediate)	1 Requiring immediate action including a cited safety hazard and areas of accelerated deteriorating, returning a building component to normal operation.
Good	B	Good condition, but no longer new, may be slightly defective or deteriorated, but is overall functional	Potentially Critical	2 Requiring action in the next year including components experiencing intermittent operations, potential life safety issues, and rapid deterioration, returning a building component to normal operation.
Adequate	C	Moderately deteriorated or defective, but has not exceeded useful life	Necessary - Not Yet Critical	3 Requiring appropriate attention to preclude predictable deterioration, potential downtime, additional damage, and higher cost to remediation if deferred further
Marginal	D	Defective or deteriorated in need of replacement; exceeded useful life	Recommended	4 Representing a sensible improvement to the existing conditions (not required for the most basic function of the facility; however, will improve overall usability and/or reduce long-term maintenance costs).
Poor	E	Critically damaged or in need of immediate repair; well past useful life	Does Not Meet Current Code but "Grandfathered"	5 No action required at this time, but should substantial work be undertaken correction would be required

Educational Adequacy Rubric

- A Community Resource
- Stimulating Architecture: High Performance Schools Invoke a Sense of Pride in the Community
- Safe and Secure Supervision and Security
- Innovative Learning Environments that Connect
- Flexibility
- Adaptability
- Thermally, Visually and Acoustically Comfortable
- Energy Efficient, Sustainable, and Resilient
- Easy to Maintain and Operate
- Healthy Learning Environments

EAQ ASSESSMENT CRITERIA	
4	Functions excellently
3	Functions well/good enough condition to support educational needs
2	exists; baseline functionality; doesn't support educational needs
1	exists; does not function/needs to be replaced
0	does not exist, but is needed
N/A	Not Applicable; not required

Capacity Analysis Rubric

The capacity for each room was calculated based on its use at the time of the site visit. Special Education classrooms are not included in capacity calculations. The factors used for these calculations can be referenced below:

Capacity Generating Rooms	Max Students per room	SF/Student	Recommended Room Size (SF)
Preschool	18	60	1200
JK/Kindergarten	20	60	1200
1st-5th Homeroom	25	37	925
6th-8th Humanities & Math	25	37	925
6th-8th Science	25	50	1250
1st-8th SEI	18	50	900

Category	Range
Ideal	91-104%
Acceptable	85-90% or 105-114%
Not Ideal	<84% or >115%

Evaluation Criteria

PURPOSE: Identify projects of “highest need” through a scoring system.
Evaluation criteria included:

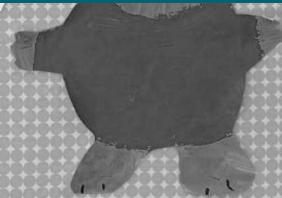
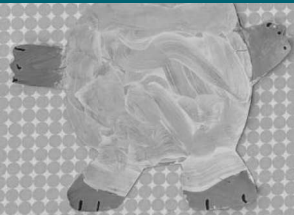
- **Educational Adequacy Assessment score (EAQ):** How well does the building support the CPS educational criteria for 21st century schools? Scores based on walkthroughs in August 2022.
- **Building Accessibility (ADA):** Current configuration and ADA access into and throughout building.
- **Play and Parking Availability/Area (Site Play & Pkg):** Based on site size and availability of play areas (SF) and quantity of parking spaces per CPS parking registration.
- **Facilities Conditions Assessment Score Total (FCA):** Current building conditions, scores based on walkthroughs in August 2022.
- **Envelope score (Roof + Exterior Walls) (FCA|ENV):** FCA Scores for condition of roof and exterior walls based on walk throughs in August 2022.
- **HVAC (Heating, Ventilation & Air Conditioning) Systems score (FCA|HVAC):** FCA Scores for condition of HVAC systems based on walk throughs in August 2022.
- **Greenhouse Gas Emissions (Sustainability|GHG):** Annual GHG emissions rating based on utility data tracked by the City.
- **Energy Use Intensity (Sustainability|EUI):** Annual amount of energy used per square foot. Rating based on utility data tracked by the City.
- **Current Building Capacity (Capacity|Existing):** Enrollment capacity based on current room designations/usage at time of visit. (August 2022). 400+ Students is desirable.
- **Current Student Enrollment (Enrollment|Existing + Utilization):** Enrollment numbers for SY2022-2023 compared to building capacity. 90% and above utilization is optimal.
- **Site Expansion Potential (Expansion|Potential):** Potential for building additions/new construction with increased capacity based on site size as well as access to site play fields.
- **Low Income Percentage (Low \$):** Percentage of low-income student population per school based on SY2021-22 CPS data.
- **Poverty Percentage (Poverty):** Percentage of population living at or below the poverty line based on US Census Bureau ACS 5-year data (2015-2019) for Census Block Group at school building location.
- **People of Color (POC):** Percentage of population of people of color per school based on SY2021-22 CPS data.

Findings

I built
a straw house.

"little pigs
little PIGS
LET ME
IN!"

built a
brick house.



Rubric Findings

The Evaluation Rubric led to a facility high-need ranking from 1-10 of the evaluated sites. The complete ranking list is as follows:

Fletcher Maynard Academy
Kennedy-Longfellow School (Spring Street)
Cambridgeport School

Haggerty School
Longfellow Building
Amigos School JK-8
Graham & Parks School
Morse School

Peabody School/Rindge Avenue Upper School
Baldwin School

The buildings with the most need are also some of the lowest scoring in EAQ and FCA. These were also located in places with the highest low-income percentage, poverty percentage, and percentage of communities of color.

FCA & EAQ Assessment Summary

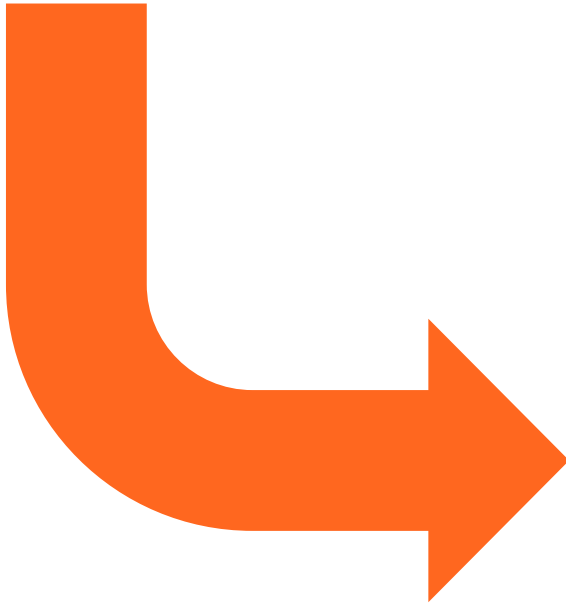
School Building	FCA Score	EAQ Score	Capacity	Utilization	Sustainability Index Score
Amigos School JK-8	C 3	2.06	421	101%	2.17
Baldwin School	C 3	2.44	350	95%	2.22
Cambridgeport School	D 3	2.32	258	87%	2.83
Fletcher Maynard Academy	C- 3	2.14	242	78%	2.78
Graham & Parks School	C 3	2.72	369	85%	3.72
Haggerty School	C 2+	2.63	239	74%	2.28
Kennedy-Longfellow School	C- 2+	2.43	460	69%	2.50
Longfellow Building	D 2+	2.25	380	90%	2.61
Morse School	C 3	2.78	301	85%	2.28
Peabody School	B- 3	2.91	602	95%	3.28
District Average	C- 2+	2.47	362	86%	2.67

Common Districtwide Issues

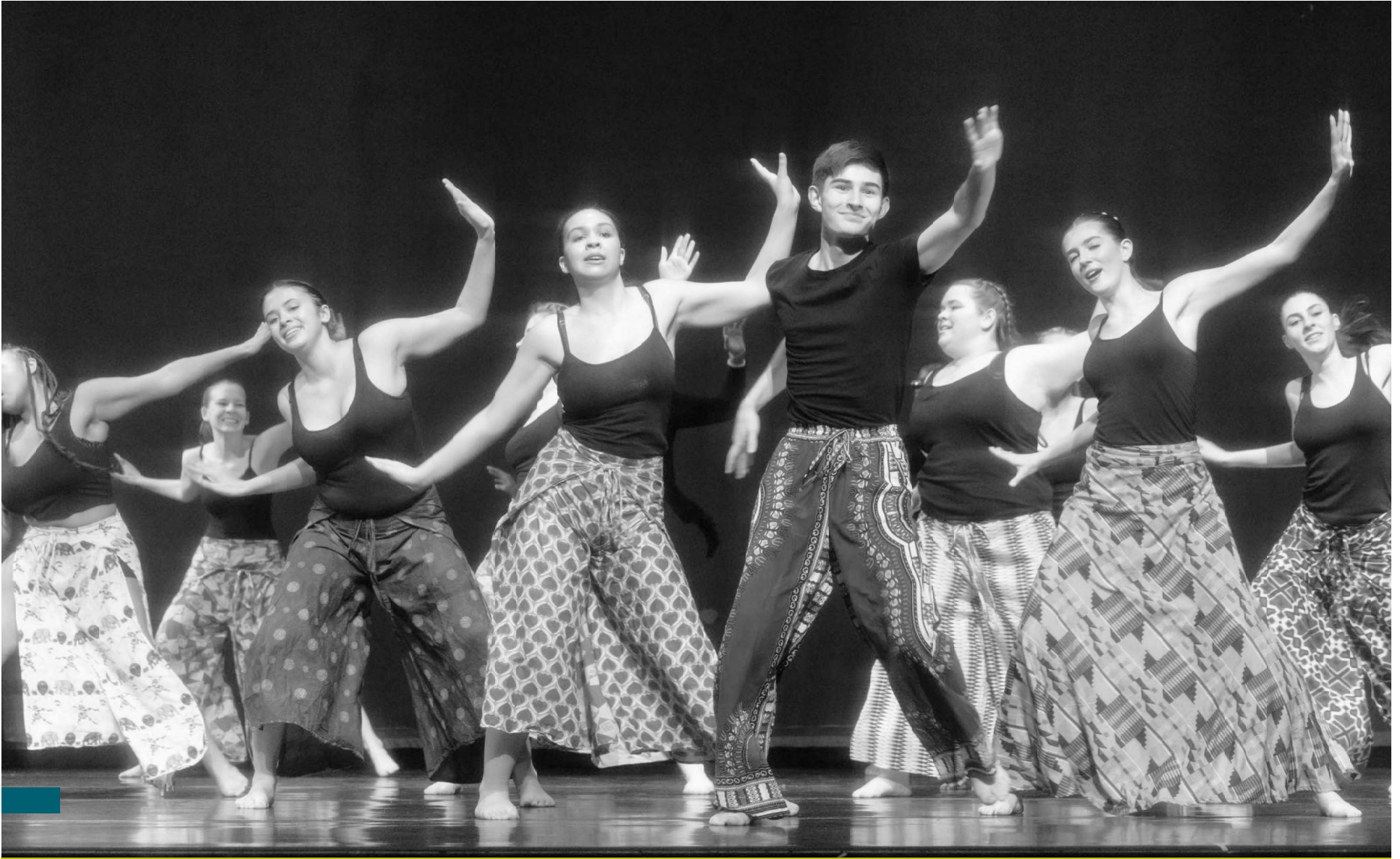
- **ADA Accessibility.**
- **MEP Systems.** HVAC, plumbing a major issue in most buildings. All in need of repair within 5 years. Area for major investment.
- **Support Spaces.** More student + staff
- **Lack of Breakout/Extended Learning Spaces.** Mostly due to age of buildings. Should be interspersed throughout learning areas.
- **Public Spaces / Access.** CPS schools are community assets, and secure access to public spaces is important.
- **Furniture.** Replacement needed in all buildings. Current furniture does not offer variety of seating options or student movement.
- **Daylight/Glare.** Many spaces did not have windows and daylight, or spaces with windows had issues with glare.



Qualifiers and Disclaimers



- Four years have elapsed since the study was commissioned
- While the report is comprehensive, significant policy initiatives and structural changes to the district were not taken into account or incorporated into the report:
 - Implementation of the universal preschool program
 - Closure of the Kennedy Longfellow School
- Financial climate and context have changed considerably with greater uncertainty with respect to revenue capacity
- Ongoing substantial debt obligations stemming from the major construction projects (Tobin/DVUS, King/PAUS, King Open/CSUS)
- Multiple administration turnovers within city and district; evolving CPS/DHSP relationship
- Ongoing capital improvement investments necessitated by deteriorating facilities and/or funding opportunities



Questions?

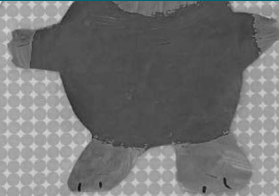
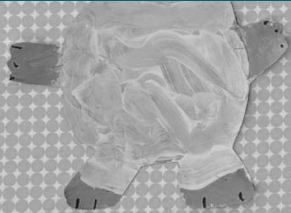
APPENDIX

School Summaries

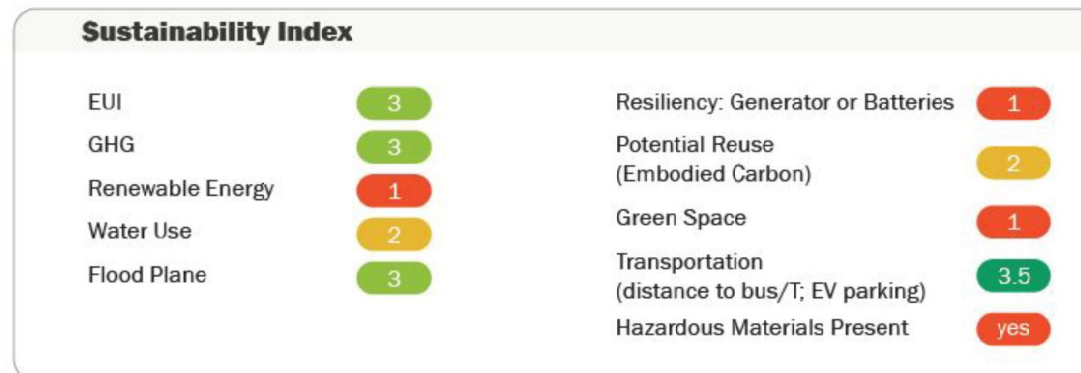
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Amigos School (Pre-K - 8)



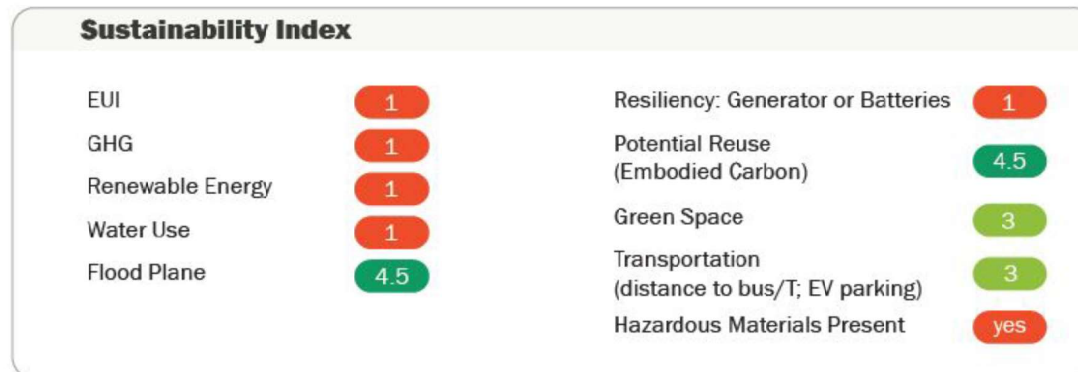
Amigos School (Pre-K - 8)

Summary

- Lowest EAQ score
- Convenient location
- Lacks green space
- Not fully ADA compliant
- Learning areas are at or below average
- Need more pull-out, public, and support spaces
- Needs more storage



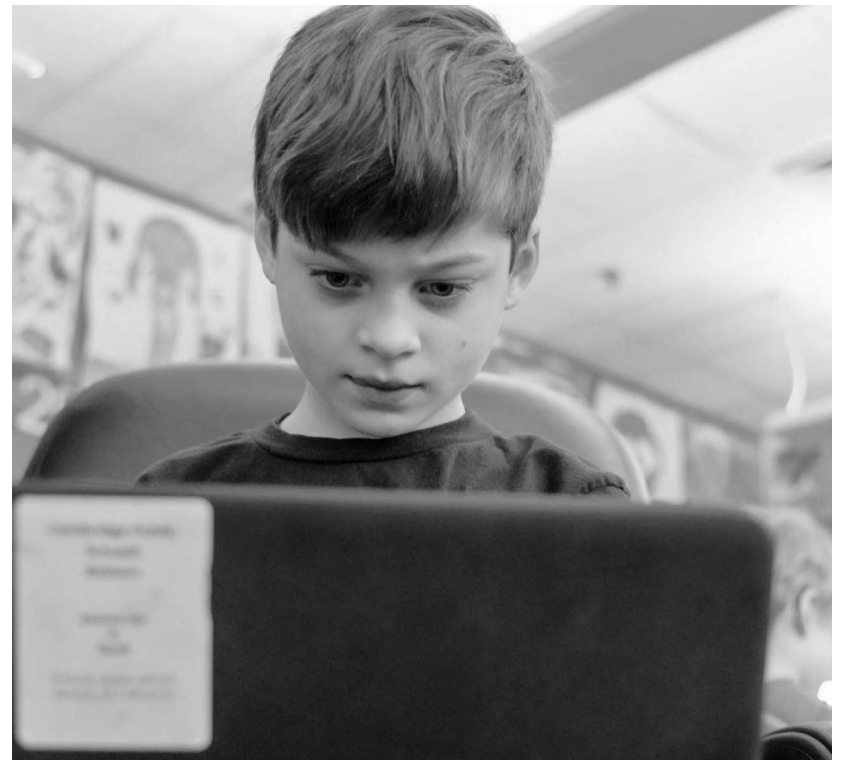
Baldwin School (Pre-K - 5)



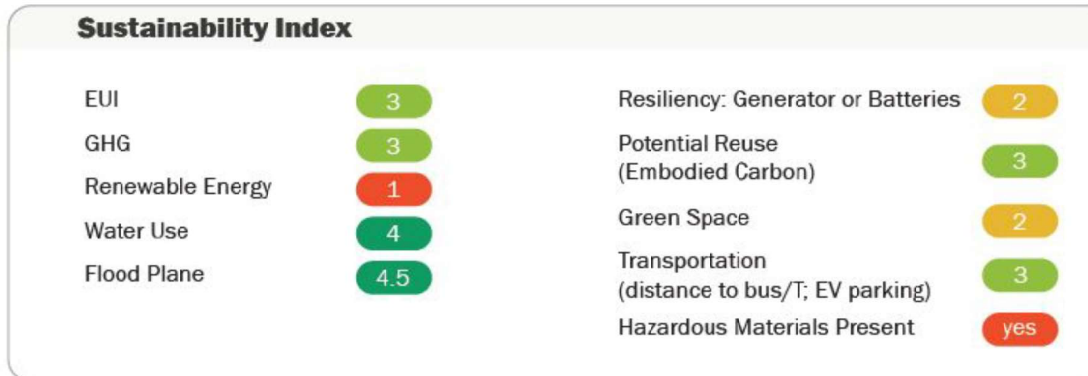
Baldwin School (Pre-K - 5)

Summary

- EAQ score close to district avg.
- Good location, great neighborhood presence
- Severely lacking green space, play space, drop-off areas, parking
- Good ADA accessibility
- Lacks variety in learning spaces and equipment
- Needs more breakout/support spaces



Cambridgeport School (Pre-K - 5)



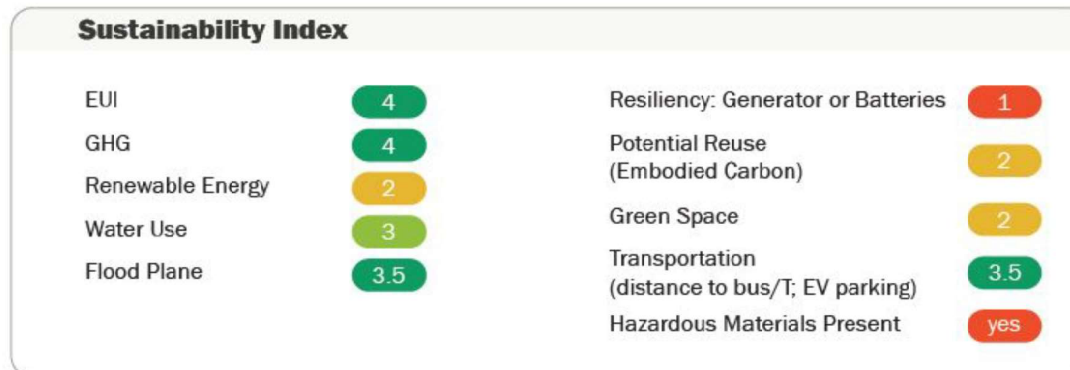
Cambridgeport School (Pre-K - 5)

Summary

- Oldest public school building in Cambridge
- EAQ just below district avg.
- Good community access
- Lacks designated drop-off spaces
- ADA accessible
- Needs more admin + support spaces



Fletcher Maynard Academy (Pre-K - 5)



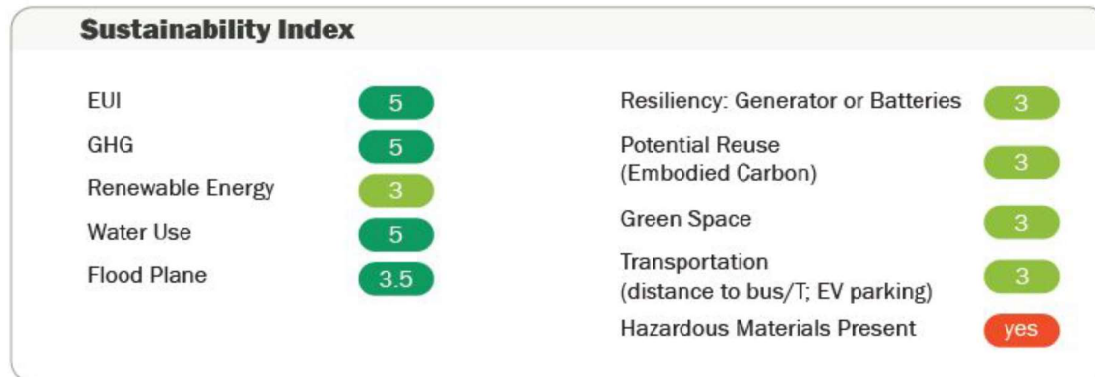
FMA (Pre-K - 5)

Summary

- Low EAQ score
- Great transportation access
- Limited options for expansion
- Lacks ADA accessibility, air quality
- Lack of variety in learning spaces, minimal small group spaces
- Caf, storage, health, conference rooms not sufficiently or appropriately configured



Graham and Parks School (Pre-K - 5)



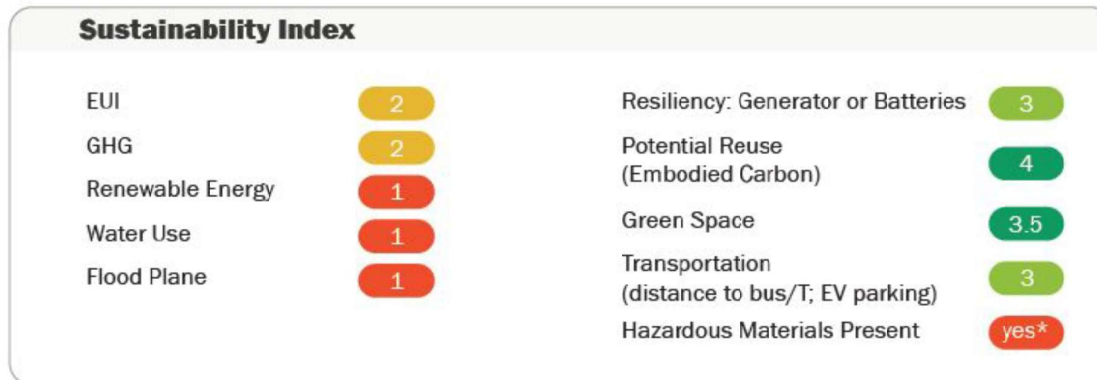
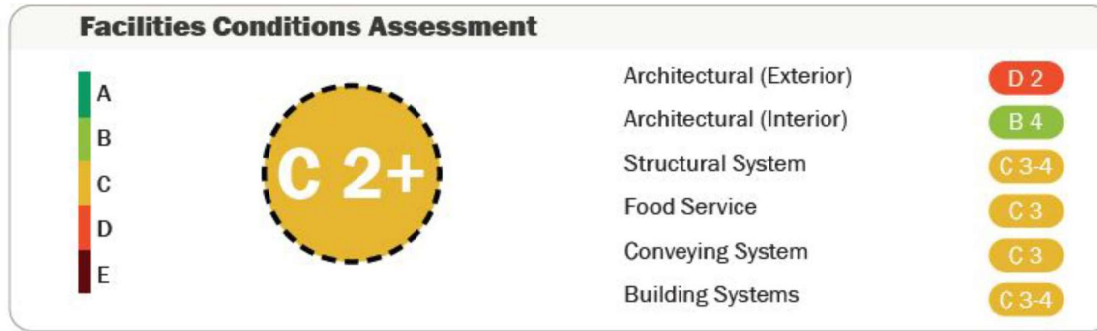
Graham and Parks School (Pre-K - 5)

Summary

- High EAQ score
- Great transportation access
- Good outdoor/play space
- Good security and site access
- “Above average” variety of learning spaces
- Good access to auxiliary spaces
- Needs lighting upgrades



Haggerty School (Pre-K - 5)



Haggerty School (Pre-K - 5)

Summary

- EAQ score slightly above district average
- No drop-off areas
- Side entrance accessibility issues
- Lacks variety of auxiliary spaces



Kennedy-Longfellow School

Facilities Conditions Assessment



Architectural (Exterior)	C 3
Architectural (Interior)	C 4
Structural System	C 4-5
Food Service	D 2
Conveying System	D 2
Building Systems	C 3-4

Educational Adequacy Index



Site	3.00
Security	3.60
Learning Modalities	2.86
Educational IEQ	1.81
Instructional Spaces	2.34
Public & Support Spaces	2.37

Sustainability Index

EUI	3	Resiliency: Generator or Batteries	3
GHG	3	Potential Reuse (Embodied Carbon)	1
Renewable Energy	2	Green Space	3
Water Use	1	Transportation (distance to bus/T; EV parking)	3
Flood Plane	3.5	Hazardous Materials Present	yes

Kennedy-Longfellow School

Summary

- EAQ close to district average
- Site is well-sized
- Good parking, outdoor spaces
- Building is “heavy and dark” in some areas
- Good security, easy to navigate
- Undersized learning spaces
- Not ADA accessible
- Some classrooms lack proper equipment
- Power access is limited



158 Spring Street Planned Renovations

Potential Improvement	Impact Type	Critical Disclaimer
Auditorium Gymnasium Technology Flex space(s)	Instructional	<p>These are potential renovations and tentative and subject to capital funding appropriations.</p>
Cafeteria floor and ceiling Restroom floors Framing and drywall Finish carpentry Reception area/lobby	Aesthetic	
Sanitary systems and pest control Asbestos abatement PA systems	Safety	
HVAC systems Elevators Plumbing systems	Operational	

Longfellow Building

Facilities Conditions Assessment



Architectural (Exterior)	D 3
Architectural (Interior)	C 3
Structural System	C 3-4
Food Service	D 3
Conveying System	D 1
Building Systems	C 3-4

Educational Adequacy Index



Site	2.63
Security	2.20
Learning Modalities	2.36
Educational IEQ	2.40
Instructional Spaces	1.88
Public & Support Spaces	2.09

Sustainability Index

EUI	4	Resiliency: Generator or Batteries	1
GHG	4	Potential Reuse (Embodied Carbon)	2.5
Renewable Energy	1	Green Space	1
Water Use	3	Transportation (distance to bus/T; EV parking)	3.5
Flood Plane	3.5	Hazardous Materials Present	yes

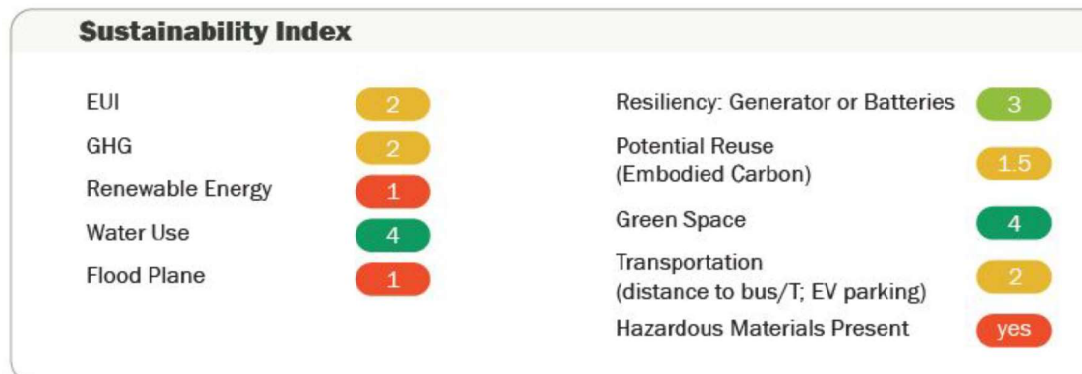
Longfellow Building

Summary

- EAQ below district average
- Good location
- ADA accessible improvements
- Needs better demarcation of program spaces
- Sizable play spaces but need some repair
- Needs more support spaces
- Lighting improvements needed
- HVAC improvements will help air quality
- Undersized public spaces



Morse School



Morse School

Summary

- High EAQ
- Large site, good external amenities
- Good security
- Good public spaces / community connection
- Good “character”
- Varied learning spaces
- Good lighting
- Mostly accessible
- Capacity to expand significantly



Peabody/RAUC School

Facilities Conditions Assessment



Architectural (Exterior)	B 3
Architectural (Interior)	B 3-5
Structural System	C 3-4
Food Service	C 3
Conveying System	B 4
Building Systems	C 3-4

Educational Adequacy Index



Site	3.50
Security	3.50
Learning Modalities	2.95
Educational IEQ	2.36
Instructional Spaces	3.09
Public & Support Spaces	2.73

Sustainability Index

EUI	3	Resiliency: Generator or Batteries	3
GHG	3	Potential Reuse (Embodied Carbon)	4.5
Renewable Energy	1	Green Space	4
Water Use	5	Transportation (distance to bus/T; EV parking)	4
Flood Plane	2	Hazardous Materials Present	yes

Peabody/RAUC School

Summary

- Highest district EAQ
- Good location
- Good outdoor spaces
- Layout can be confusing
- Good air quality
- Good lighting
- Well organized learning spaces
- Support spaces centrally located

