Massachusetts School Building Authority

Next Steps to Finalize Submission of your FY 2014 Statement of Interest

Thank you for submitting your FY 2014 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete**. The District is required to print and mail a hard copy of the SOI to the MSBA along with the required supporting documentation, which is described below.

Each SOI has two Certification pages that must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer*. Please make sure that **both** certifications contained in the SOI have been signed and dated by each of the specified parties and that the hardcopy SOI is submitted to the MSBA with **original signatures**.

SIGNATURES: Each SOI has two (2) Certification pages that must be signed by the District.

In some Districts, two of the required signatures may be that of the same person. If this is the case, please have that person sign in both locations. Please do not leave any of the signature lines blank or submit photocopied signatures, as your SOI will be incomplete.

**Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated as the chief executive office under the provisions of a local charter.*

VOTES: Each SOI must be submitted with the proper vote documentation. This means that (1) the required governing bodies have voted to submit each SOI, (2) the specific vote language required by the MSBA has been used, and (3) the District has submitted a record of the vote in the format required by the MSBA.

- **School Committee Vote:** Submittal of all SOIs must be approved by a vote of the School Committee.
  - For documentation of the vote of the School Committee, Minutes of the School Committee meeting at which the vote was taken must be submitted with the original signature of the Committee Chairperson. The Minutes must contain the actual text of the vote taken which should be substantially the same as the MSBA's SOI vote language.
- **Municipal Body Vote:** SOIs that are submitted by cities and towns must be approved by a vote of the appropriate municipal body (e.g., City Council/ Aldermen/Board of Selectmen) in addition to a vote of the School Committee.
  - Regional School Districts do not need to submit a vote of the municipal body.
  - For the vote of the municipal governing body, a copy of the text of the vote, which shall be substantially the same as the MSBA's SOI vote language, must be submitted with a certification of the City/Town Clerk that the vote was taken and duly recorded, and the date of the vote must be provided.

CLOSED SCHOOLS: Districts must download the report from the "Closed School" tab, which can be found on the District Main page. Please print this report, which then must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer. A signed report, with original signatures must be included with the District's hard copy SOI submittal. **If a District submits multiple SOIs, only one copy of the Closed School information is required.**

ADDITIONAL DOCUMENTATION FOR SOI PRIORITIES #1 AND #3: If a District selects Priority #1 and/or Priority #3, the District is required to submit additional documentation with its SOI.

- If a District selects Priority #1, Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of the school children, where no alternative exists, the MSBA requires a hard copy of the engineering or other report detailing the nature and severity of the problem and a written professional opinion of how imminent the system failure is likely to manifest itself. The District also must submit photographs of the problematic building area or system to the MSBA.
- If a District selects Priority #3, Prevention of a loss of accreditation, the MSBA requires the full accreditation report(s) and any supporting correspondence between the District and the accrediting entity.

ADDITIONAL INFORMATION: In addition to the information required with the SOI hard copy submittal, the District may also provide any reports, pictures, or other information they feel will give the MSBA a better understanding of the issues identified at a facility.

If you have any questions about the SOI process please contact Brian McLaughlin at 617-720-4466 or Brian.McLaughlin@massschoolbuildings.org.

Massachusetts School Building Authority

School District Lowell

District Contact Jay Lang TEL: (978) 674-2020

Name of School Lowell High

Submission Date 4/10/2014

SOI CERTIFICATION

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

- The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.
- The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.
- The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for any portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.
- The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students and that the facility for which the SOI is being submitted does not serve a solely early childhood or Pre-K student population.
- After the district completes and submits this SOI electronically, the district must sign the required certifications and submit one signed original hard copy of the SOI to the MSBA, with all of the required documentation described under the "Vote" tab, on or before the deadline.
- The district will schedule and hold a meeting at which the School Committee will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is required for cities, towns, and regional school districts.
- Prior to the submission of the hard copy of the SOI, the district will schedule and hold a meeting at which the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is not required for regional school districts.
- On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The District will use the MSBA's vote template and the vote will specifically reference the school and the priorities for which the SOI is being submitted. The minutes will be signed by the School Committee Chair. This is required for cities, towns, and regional school districts.
- The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline. This is not required for regional school districts.
- The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation and certification signatures in a format acceptable to the MSBA.

Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
Michael Q. Geary	Rodney M. Elliott	Jean M. Franco
Acting City Manager		
(signature)	(signature)	(signature)
Date	Date	Date

* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice. Please do not leave any signature lines blank.

Massachusetts School Building Authority

School District Lowell

District Contact Jay Lang TEL: (978) 674-2020

Name of School Lowell High

Submission Date 4/10/2014

Note

The following Priorities have been included in the Statement of Interest:

1. ¨ Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
2. ¨ Elimination of existing severe overcrowding.
3. ¨ Prevention of the loss of accreditation.
4. þ Prevention of severe overcrowding expected to result from increased enrollments.
5. ¨ Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
6. ¨ Short term enrollment growth.
7. þ Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
8. ¨ Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

SOI Vote Requirement

þ I acknowledge that I have reviewed the MSBA's vote requirements for submitting an SOI which are set forth in the Vote Tab of this SOI. I understand that the MSBA requires votes from specific parties/governing bodies, in a specific format using the language provided by the MSBA. Further, I understand that the MSBA requires certified and signed vote documentation to be submitted with the SOI. I acknowledge that my SOI will not be considered complete and, therefore, will not be reviewed by the MSBA unless the required accompanying vote documentation is submitted to the satisfaction of the MSBA.

Potential Project Scope: Potential New School

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI: 2014 Lowell High

Is this part of a larger facilities plan? YES

If "YES", please provide the following:

Facilities Plan Date: 2/28/2014

Planning Firm: OMR Architects

Please provide an overview of the plan including as much detail as necessary to describe the plan, its goals and how the school facility that is the subject of this SOI fits into that plan:

In April 2013, OMR Architects was hired to prepare a Comprehensive Facilities Assessment and Master Plan which included 29 Lowell school facilities- elementary, middle, PK-8, high, alternative, day and the adult education center. The goals of the study were: 1) Perform a Physical and Programmatic Assessment of the Lowell Public School facilities, and 2) Develop a 10 Year Master Plan for critical maintenance, renovations and additions and/or building replacements. The facilities assessment and master plan included: reviewing the schools and their relationships within the City of Lowell and their defining neighborhoods; analyzing the existing conditions of all of the facilities (architecture, site, structure, MEP/FP) and providing baseline repair estimates; three educational visioning sessions with school and district administration and educational leaders to set the goals and values for the master plan study; analysis of NESDEC enrollment projections for ten years; educational programming space analysis comparing the existing and projected population and facilities to MSBA guidelines; understanding site availability in Lowell; developing multiple masterplan options and comparing these with cost and value; developing preferred options; and developing a 10 year capital plan for the design and construction work of this report. The Lowell High School fits into the Masterplan as the Preferred Solution Option 1D/E with a total project cost of $245.4M, not including escalation or land acquisition. This 650,000 GSF solution requires the possession of adjacent land and includes an addition/ demolition/ renovation/ repurposing response to the existing Lowell High School facilities. The same Masterplan includes the Elementary, Middle & K-8 School Preferred Solution of Option 1H with a total project cost of $270M, not including escalation or land acquisition. This solution includes: additions and renovations to Wang, Daley and Robinson Middle Schools to make eight-strand schools serving 792 students each; an addition/ renovation/ conversion of Rogers School to be a four-strand PK-8 facility serving 960 students; a new, four-strand PK-8 facility serving 960 students; and major and minor repairs of 23 other school facilities.

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 28 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 24 students per teacher

Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District? YES

If "YES", please provide the author and date of the District's Master Educational Plan.

OMR Architects February 28, 2014

Is there overcrowding at the school facility? YES

If "YES", please describe in detail, including specific examples of the overcrowding.

This is projected overcrowding. The school district's projected enrollment is significantly higher than the current 2013-2014 enrollment of 3,134 students in grades 9-12. NESDEC's 10-year average enrollment projection for the Lowell Public School District shows a need for the high school sized appropriately to house 3,424 in the 10 year projected average, but with a high in 2022-2023 of 3,900 students in grades 9-12 and no expectation for the PK-8 enrollment to go down in the subsequent years, the committee feels that 3,900 students is the appropriate size for the facility. Overall, there is a documented space need for approximately 2,500 additional seats in the entire Lowell Public School system in the upcoming years.

See NESDEC enrollment projections attachments.

Has the district had any recent teacher layoffs or reductions? NO

If "YES", how many teaching positions were affected? 0
At which schools in the district?
Please describe the types of teacher positions that were eliminated (e.g., art, math, science, physical education, etc.).

Has the district had any recent staff layoffs or reductions? NO

If "YES", how many staff positions were affected? 0
At which schools in the district?
Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

Please provide a description of the program modifications as a consequence of these teacher and/or staff reductions, including the impact on district class sizes and curriculum.

Does not apply.

Please provide a detailed description of your most recent budget approval process including a description of any budget reductions and the impact of those reductions on the district's school facilities, class sizes, and educational program.

On June 5, 2013, the Lowell School Committee approved the FY2014 annual operating budget of $144,360,281, a 4.28% increase over FY2013. There were no budget reductions impacting the school district’s facilities, class sizes or educational programs.

General Description

BRIEF BUILDING HISTORY: Please provide a detailed description of when the original building was built, and the date(s) and project scopes(s) of any additions and renovations (maximum of 5000 characters).

The Lowell High School facilities are comprised of multiple buildings located on a few city blocks crossing a canal in the Downtown neighborhood. The original 1892 building was added to in 1922 and renovated in 1971 and 1997 (minor), and included a large interior light well at the intersection of the two brick buildings. The 1980 facility is made up of an educational wing and a field house wing connected by lobby spaces and circulation, and was renovated in 1997. These two buildings, the 1892/1922 and the 1980, are connected by two enclosed, glazed bridges which span across the canal and park below. The Freshman Academy, a completely separate structure, is one city block away. Built in 1900 and added on in 1939, it was renovated in 1986. Ninth grade students typically walk along a less dense urban street to access specialty classrooms and the physical education spaces in the main buildings. The Freshman structure also houses their own cafeteria and theater. The Steam Plant, original construction unknown but renovated in 1996, which serves the entire complex, is located between the Freshman Academy and the 1920 facility, and is connected to the Freshman Academy above ground by overhead pipes and to the 1920 Building with a utilities tunnel under Kirk Street.

Outdoor athletic facilities are located in multiple locations including Cawley Stadium and Shedd Park to the southeast of the school, the Lowell Boathouse to the west, and Mount Pleasant Golf Course to the southwest. All are accessible only by bus or car.

Lowell Freshman Academy- 3 stories (1 is below grade)
Lowell HS Steam Plant - 1 story
Lowell High School - 1922 Building (Kouloheras) - 3 stories (1 is below grade)
Lowell High School - 1980 Buildings (Lord & Fieldhouse) – 3 stories

Scope of Renovations include: New windows and storefront systems were retrofitted to the existing 1892 and 1922 Buildings in 1980 and in 1995, respectively. Extensive renovations of the interiors of the 1892 and 1922 Buildings were included in the scope of the 1995 addition. These renovations succeed in updating many of the interior finishes as well as creating uniformity of finish materials between the new and existing. The scope of these renovations was limited to the academic floors and many spaces particularly on the lower level were left untouched. The auditorium was fully renovated including a new mechanical system with air conditioning. A new mezzanine was constructed in the upper part of the 1892 Building which serves as a suite for faculty work, lounge and dining. The upper part of this space is not accessible.

The Freshman Academy was repurposed and fully renovated in 1986. These renovations at the lowest level included the creation of a small theatre and a cafeteria dedicated to the freshman student population. The 1986 project included targeted renovations on the upper levels for academics, science, library, computer labs and faculty spaces. Most spaces were renovated to varying degrees at this time.

The 1980 Building has been maintained over the years but has not been renovated. Most finishes and systems are original with some notable exceptions: 1) the roof top mechanical systems have been recently upgraded, unfortunately, these upgrades have not been very effective. 2) There has been a concerted effort to replace existing carpet in most academic areas with vinyl tile. 3) Toilet rooms benefit from ongoing maintenance with the exception of the Locker/Showers which require full and major renovation.

TOTAL BUILDING SQUARE FOOTAGE: Please provide the original building square footage PLUS the square footage of any additions.

628558

SITE DESCRIPTION: Please provide a detailed description of the current site and any known existing conditions that would impact a potential project at the site. Please note whether there are any other buildings, public or private, that share this current site with the school facility. What is the use(s) of this building(s)? (maximum of 5000 characters).

Lowell High School sits on two parcels on municipally owned land totaling 243,000 square feet. In addition to the 1922 and
1980 buildings, a third building located across (and not connected) the street houses the Lowell High School Freshman Academy. The LHS Freshman Academy sits on a 10,000 square foot parcel.

The site for the steam plant is shared with the National Park Service Building and the exact limits of the site are unknown. Zoning is Downtown Mixed Use District. See site plan and existing conditions analysis attachments.
Context:
- Generally a flat site(s) fully developed and bordered either by city streets or adjacent properties. The High School occupies three separate distinct parcels that form the campus. The campus is divided by a canal, or in the case of the Freshman Academy, a city street. Students and staff are required to cross a city street or traverse the second story bridges to travel between buildings.
- All drop-off / pick-up takes place on the adjacent city streets and sidewalks. This creates serious traffic and safety issues.
- There is a city owned parking garage across a main street that serves both staff and students. There is metered, on street parking for visitors. There is little or no onsite parking.
- There is a discrete loading dock for deliveries and trash/recycling located to the southeast end of the campus. Access is from Father Morissette Blvd.
- Fire lane and emergency access to all buildings is good.
Surfaces and Features:
- There are a number of paved courtyards and walks adjacent to the main entrance and the cafeteria. The condition of these courtyards varies greatly from good to poor. The existing canal between the two main buildings is landscaped on each side and provides for a pleasant urban park like atmosphere. Unfortunately, there is also a Trolley for tourist and visitors to Lowell that parallels one side of the canal and further divides and separates the main campus. There are two connecting enclosed bridges at the second floor that span the trolley tracks and the canal to accommodate pedestrian traffic between the two buildings.
- The constrained site does not provide for any outside athletic or physical education opportunities.
- No apparent site drainage issues were identified. Drainage is handled by the city storm system.

Lowell Freshman Academy- 92,758 SF (1900 & 1939 portions)
Lowell HS Steam Plant – 2,500 SF, no additions
Lowell High School - 1922 Building (Kouloheras) – 322,000 (whole facility)
Lowell High School - 1980 Buildings (Lord & Fieldhouse) – 211,300 GSF, no additions
TOTAL: 628,558 GSF

ADDRESS OF FACILITY: Please type address, including number, street name and city/town, if available, or describe the location of the site. (Maximum of 300 characters)

Lowell Freshman Academy, 40 Paige Street, Lowell, MA 01852
Lowell HS Steam Plant, Paige Street, Lowell, MA 01852
Lowell High School - 1922 Building (Kouloheras), 50 Father Morissette Blvd, Lowell MA 01852
Lowell High School - 1980 Buildings (Lord & Fieldhouse), 50 Father Morissette Blvd, Lowell M

BUILDING ENVELOPE: Please provide a detailed description of the building envelope, types of construction materials used, and any known problems or existing conditions (maximum of 5000 characters).

Exterior Envelope:
- Exterior windows appear to be in fair to poor condition with a few exceptions; plastic lexan glazing and insulated units

with broken seals should be replaced. In most cases the operable hardware needs to be replaced or maintained. Security screens should be replaced or refurbished. Perimeter sealants and glazing beads for the most part are in need of replacement. Buildings have brick veneers in all cases. Size and type of brick varies depending on the age of the building or addition. Some buildings/additions have traditional masonry back up while the newer buildings have metal studs. The condition of the exterior envelope is generally good with limited, but specific some areas requiring immediate attention. Interestingly, the older buildings in many cases are faring better than the newer construction.
- Painted/anodized aluminum door and frames generally appear to be in poor condition with a couple of exceptions. Painted steel door frames with transoms have failed. In general all storefront/curtain wall systems require maintenance and/or replacement. The fixed acrylic glazing for one of the two bridges is in good condition the other bridge will require re-glazing at some point in the future.
- All exterior door hardware is in fair to poor condition and should be replaced or repaired.
- Buildings have brick veneers in all cases. Size and type of brick varies depending on the age of the building or addition. Some buildings/additions have traditional masonry back up while the newer buildings have metal studs. The condition of the exterior envelope is generally good but with limited areas requiring immediate attention. Interestingly, the older buildings in many cases are faring better than the newer construction. The spit faced concrete block at the 1980's Building is in good condition. Existing cement asbestos cladding needs attention and/or replacement in some cases. The lintels over openings in the 1922 building appear to be compromised and should be investigated for potential repair and/or replacement. Existing skylights are original to the 1922 Building and need replacement. The Kalwall translucent glazing within the lightwell has far exceed it useful life and should be replaced.
Roof:
- The roofing membranes/flashings vary in age and condition. Most roofs are in fair condition with one notable exception; a large area of the 1922 Building has failed. In contrast, the pitched (and flat) roof of the 1892 building has been recently been replaced with artificial slate and new copper gutters/leaders. The workmanship is of the highest quality. The field house has a sloped corrugated metal roof with built in gutters and downspouts that appear to have reached or exceeded their life expectancy. Some sections of the built in gutter have failed and have damaged the façade. Ponding is occurring in many flat roof locations. Roof drains appear to be clogged in some locations and will require periodic maintenance.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS ? NO
Year of Last Major Repair or Replacement: 1995
Description of Last Major Repair or Replacement:
Partial window and entrance retrofits and other miscellaneous projects.

Has there been a Major Repair or Replacement of the ROOF? YES
Year of Last Major Repair or Replacement: 2012
Type Of ROOF: EPDM/Slate(2012)/Metal - Partial replacement and repair.
Description of Last Major Repair or Replacement:
A full replacement of the slate roof on the 1892 Building. This is a small portion of the high school roof, the other sections have not been repair or replaced.

Has there been a Major Repair or Replacement of the WINDOWS? YES
Year of Last Major Repair or Replacement: 1995
Type Of WINDOWS: Aluminum, single hung
Description of Last Major Repair or Replacement:
New windows retrofit in 1980 and 1996 in the 1922 Bldg.

MECHANICAL and ELECTRICAL SYSTEMS: Please provide a detailed description of the current mechanical and electrical systems and any known problems or existing conditions (maximum of 5000 characters).

MEPFP: Freshman Academy
FIRE PROTECTION - There are areas of the building without coverage of a wet sprinkler system. The system should be supplemented to cover all areas of the building.
HVAC- Heating and ventilating units are in fair to poor condition. Heat exchangers show signs of having corrosion. Both will be required to be replaced in the near future. It is recommended that the present pneumatic automatic temperature controls be replaced with a DDC system. Exhaust systems should be replaced.

ELECTRICAL - The main service is in poor condition and should be replaced. Branch circuits are in fair condition except neutral conductors appear to be shared and many outlets that are near sinks are not GFCI protected. These items should be corrected. There is no emergency source of power. It is recommended that an emergency generator be provided. The fire alarm system is in poor condition and should be replaced. Lighting fixtures have recently been upgraded with more energy efficient lamps and ballasts, however there are a number of damaged fixtures which should be replaced.

MEPFP: 1922 and 1980 Buildings
FIRE PROTECTION- The building is mostly protected with an automatic dry sprinkler and wet stand pipe system. Sprinklers should be added at areas without coverage.
HVAC- Steam from the boiler plant is converted to hot water which serves fin tube radiators throughout the building. Gas fired roof top units provide ventilation for the building. Cooling for the auditorium is provided by rooftop units and a chiller. These systems are in fair condition. However the heat exchangers and circulation pumps are corroded and will need to be replaced soon. The automatic temperature controls system should be supplemented with DDC thermostats. All pneumatic control systems should be replaced with new DDC systems.
ELECTRICAL – The main service installed in 1990 is in fair condition but the secondary switch board which dates earlier should be replaced. Panel feeders are in fair condition but panel boards should be replaced. Branch circuits require updating to separate neutral conductors. Lighting fixtures are in fair condition. Lamping and ballasts have recently been updated. Emergency power is provided by a generator located in the Boiler Plant. An abandoned generator in the basement should be removed. It is recommended that the clock and paging systems be replaced.
The fire alarm system is outdated and should be replaced.

Has there been a Major Repair or Replacement of the BOILERS? NO
Year of Last Major Repair or Replacement: 1996
Description of Last Major Repair or Replacement:
Units were retubed in 2009

Has there been a Major Repair or Replacement of the HVAC SYSTEM ? NO
Year of Last Major Repair or Replacement: 2005
Description of Last Major Repair or Replacement:
Several roof top units on the 1980 Building were replaced in 2005

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? NO
Year of Last Major Repair or Replacement: 1997
Description of Last Major Repair or Replacement:
Several sections of the High School were upgraded as part of the 1997 Renovation

HEATING FUEL: Which of the heating fuel types below does your building primarily rely on for heating?

Natural Gas

BUILDING INTERIOR: Please provide a detailed description of the current building interior including a description of the flooring systems, finishes, ceilings, lighting, etc. (maximum of 5000 characters).

Finishes:
- Masonry and GWB walls require painting especially corridors and shared core spaces.
- Sagging and damaged acoustic ceilings systems should be replaced – condensation and/or roof leaks above ceilings require repair.
- Carpet is being replaced in many locations with resilient tile as part of an ongoing project.
- VCT in fair to good condition in many areas and new in others – replace damaged tiles as needed.
- Given the age and the number of buildings there are many different floor finishes and, of course, their condition varies greatly. Generally, wood, older ACT and VCT, rubber and sheet vinyl floors are in poor condition. Terrazzo floors are old but are in good condition except for an occasional crack. Existing painted concrete floors in the basement of the 1922 Building are spauling with shrinkage and settlement cracks. Ceramic tile floors (and walls) are recent for the most part with

the notable exception of the locker/shower rooms in the Fieldhouse. Most of these spaces (toilet rooms) benefit from an ongoing maintenance commitment. This includes toilet partitions and accessories.
- Gymnasium synthetic flooring is in fair to fair/poor condition. Floor needs courts and lanes to be restriped. The synthetic floor extends into the lobby area and has failed due to excessive traffic.
- Casework/Millwork and hardware conditions vary greatly from poor to good depending on location and age. Millwork is non-conforming to current ADA/MAAB requirements.
Openings:
- The condition of interior doors and hardware vary greatly depending on age and location. In many cases the hardware is non-conforming. It should be noted that the oldest buildings date back to the late 1800's and early 1900's the doors and frames are original to that period. Other locations are as new as 1980 and 1995 and, as would be expected, in good conditions and mostly conforming. Unfortunately, this represents only about half of the overall campus.
- Hollow metal door and frames should be painted and/or replaced
- Magnetic hold open devices require repair and/or replacement at some locations
Vertical Circulation:
- There are a total of 4 elevators. Three of which are old and non-conforming. The elevator in the oldest building is the newest and is in good condition.
- Stairs handrails and guardrails do not meet current building code requirements and should be modified.
- Access to stage is by way of a lift and meet currents ADA/MAAB requirements. There is handicapped seating in the auditorium. The balcony and control booth are not accessible.
Lighting: in general is in fair condition. Classrooms consist of continuous rows of surface fluorescent wrap around type fixtures with a (2) lamp cross section electronic ballast powering 32WT8 lamps. The gymnasium fixtures have recently been upgraded to (4) lamp T5HO high bays with occupancy sensors and wire guards. Library fixtures are pendant direct/indirect (2) lamp cross section with electronic ballasts and 32WT8 lamps. Corridors consist of recessed fluorescent 2X2 fixtures with acrylic lens. The auditorium house lighting contains fluorescent strips mounted in coves for indirect lighting and incandescent PAR down lights. General areas consist of surface mounted 2X2's and 8" fluorescent down lights. Light levels seem adequate. Lighting control consists of occupancy sensors in the classrooms and time clocks for exterior lighting. All other lights are controlled with local live voltage switching.

PROGRAMS and OPERATIONS: Please provide a detailed description of the current programs offered and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc. (maximum of 5000 characters).

Lowell High School currently serves approximately 3,200 students and employs 400 full-time staff members. LHS provides a comprehensive high school offering of programs for all Lowell Public School students in grade 9 – 12, as well as ROTC, Culinary arts, and swimming. In particular, the science related program offerings are constrained due to outdated and inadequate education spaces with the buildings. The facility also houses city-wide services programmed for the students including a community health center, bank, CCTV, DARE, UP and a thrift shop. See space summary attachment.

CORE EDUCATIONAL SPACES: Please provide a detailed description of the Core Educational Spaces within the facility, a description of the number and sizes (in square feet) of classrooms, a description of science rooms/labs including ages and most recent updates, and a description of the media center/library (maximum of 5000 characters).

The core educational space of Lowell High School is spread across three separate buildings, two of which are connected via two above ground tunnels. The third building, which houses only 9th graders, is a standalone academic building.

The original building, consists of 77 traditional classrooms, 2 computer labs, 1music lab, 1 digital photography lab, 1 graphic design lab, and 1 language lab (currently not in working order). The average square footage of a traditional classroom in this building is approximately 850 square ft. There are no dedicated science labs in this building. The designated chemistry lab is within a classroom. There is working gas, with working gas lines. The total square footage of workable lab space in this room is 480 square ft. There is no fume hood installed in this room. There have been no major

updates or renovations to this lab/room in the past 25 years.

The second building which was constructed in 1980 has 34 classrooms and 2 dedicated computer labs. This building also houses the LHS television studio. The average square footage of a traditional classroom in this building is approximately 661 square ft. The 1980 building has 4 dedicated science labs. The total size of the four science labs is 3,083 square ft. One of the labs has working gas and a fume hood. One of these labs has an inoperable fume hood. The four science labs have not been updated since the original build out in 1980.

The 3rd building, designated as the Freshman Academy is a standalone academic facility. This building has 37 traditional classrooms and two computer labs. The average size of the traditional classrooms in this building is approximately 730 square ft. There is one dedicated room for science experiences, this room has running water. There are no eye wash stations or fume hoods in this lab. This room was a former home economics room, and has never been fully updated as a dedicated science lab.

The Lowell High School Media Center is located in the 1980 building. The media center has 10 computer stations for student use. The Media Center was last updated in 1997. One of the dedicated computer labs is off the back of the media center.

CAPACITY and UTILIZATION: Please provide a detailed description of the current capacity and utilization of the school facility. If the school is overcrowded, please describe steps taken by the administration to address capacity issues. Please also describe in detail any spaces that have been converted from their intended use to be used as classroom space (maximum of 5000 characters).

Lowell High School currently serves approximately 3,200 students and employs 400 full-time staff members. LHS provides a comprehensive high school offering of programs for all Lowell Public School students in grade 9 – 12.

See space summary attachment.

MAINTENANCE and CAPITAL REPAIR: Please provide a detailed description of the district's current maintenance practices, its capital repair program, and the maintenance program in place at the facility that is the subject of this SOI. Please include specific examples of capital repair projects undertaken in the past, including any override or debt exclusion votes that were necessary (maximum of 5000 characters).

The district is responsible for the daily cleaning and maintenance of the School, while the City of Lowell DPW is responsible for the major repairs associated with the school facility. The Lowell Public Schools employs a full-time custodial crew of twenty (20) building custodians to clean and maintain the facilities on a daily basis. The City of Lowell Department of Public Works (DPW) provides for the repair of broken furnishings and equipment and major repairs. The district, in conjunction with the City of Lowell, prepares an annual capital plan for inclusion in the City's overall budget. The Lowell Public Schools has recently concluded a comprehensive facilities assessment with the assistance of OMR Architects to assess and document the needs of each school facility city-wide. A copy of the facilities assessment pertaining to this school is attached to the SOI to serve as additional backup for consideration of this project. No overrides or debt exclusion votes have been necessary in the past to fund school related capital projects with the MSBA's assistance.

Priority 4

Question 1: Please describe the conditions within the community and School District that are expected to result in increased enrollment.

The school district projected enrollment is significantly higher than the current 2013-2014 enrollment of 11,043 students in grades PK-8 and 3,134 students in grades 9-12. NESDEC's 10-year average enrollment projection for the Lowell Public School District shows a need for school buildings sized appropriately to house 11,811 students in grades PK-8 and 3,900 students in grades 9-12. In addition, givenLowell's complex, district-wide, school assignment policy and regular mid-year fluctuation of class sizes, it is recommended that 15 additional swing classrooms be provided in the PK-8 space program across the district.

Understanding the current overcrowding situation though, the elementary, middle and PK-8 schools are showing physical space needs across the board in most student-designated spaces, especially in core academic classrooms due to the current overcrowding. Grades K-4 are currently overcrowded by 593 students and based on enrollment projections will be overcrowded by 924 students in the next four years. Grades 5-8 are currently overcrowded by 594 students and based on enrollment projections will be overcrowded by 1,174 students in the next six years. Add to this the 15 swing classroom need. Therefore with the projected population added into the already overcrowded classrooms, there is a documented space need for approximately 2,500 additional seats in theLowellPublic Schoolsystem in the upcoming years.

Given the confirmed need to expand the grade PK-8 schools by 2,500 additional seats, it is agreed that it will be necessary to build additional school buildings or a comprehensive expansion of the existing facilities. There is a desire to keep the strand sizes small and keep school enrollments below 1,000 students at grades PK-8, but there is also a scarcity of suitable land to build additional schools in the City ofLowell. The committee considered moving PK out of the elementary and middle schools and consolidating those services in smaller facilities around the city. And they considered reconfiguring the existing schools to place fifth graders in the elementary schools. Each of these reconfiguration solutions freed up existing square footage to accommodate more students in the current facilities, but the City feels most comfortable retaining the PK in the schools and maintaining the existing grade configuration. The continuation of increasing enrollment throughoutLowellwill mean that the district will need to bring in modular classrooms in subsequent years to many of the PK-8 facilities. There is little space to build new in the City, busing around the city is too expensive and parents want neighborhood schools.

This may seem to not affect the high school, but knowing the full needs of the total school district system, provides a complete understanding of the much larger problem thatLowellfaces in the next decade. Since every child inLowellgoes through the one high school, the city feels that this grouping of buildings has the most need at this time.

Priority 4

Question 2: Please describe the measures the School District has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

The school district and the city recognize the issue of current and projected overcrowding. The district began by hiring OMR Architects to analyze the bigger issues of the existing facilities and develop a 10 year plan to resolve the issues in a systematic fashion. Coupled with that was the enrollment changes that were discovered during the process as what once was thought of as an enrollment bubble, seems to have become a constant that is more significant than can be handled with minor classroom changes. In addition, this summer, the district is planning on renovating the Rogers PK-K school (once served as a middle school and now houses district offices and some PK-K) to take on the developing elementary school problem in a systematic fashion.

There is only one high school in Lowell, made up of multiple buildings. It is at the center of the city. There is overwhelming support to keep it in the city center for a number of reasons including: it is a historical building; one unified school is important to school pride; busing to multiple locations is reduced as there is a city bus system used by many students; location near UMASS Lowell and the City Municipal buildings brings opportunities for the students and the education; the urban presence of the school adds to the pride of the city; parking for students and teachers is simplified by city parking garages; and building a new school for 3,900 students is cost prohibitive. Knowing that these school parcels are important to theLowellSchool District, they are discussing acquiring a small parcel of land to the SW of the current 1980 facility to help with future construction phasing. The Lowell Planning Department has also started considering the extension ofDutton Streetto meet up withFather Morrisette Blvd, if the 1980s building is demolished. This would allow a safer drop-off and pick up scenario for students in the future.

Priority 4

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

Students and teachers are directly affected as the available room for instruction is reduced. This is felt within the regular education classrooms and special population classrooms. Small rooms and/or spaces for teachers to meet in small groups or for 1:1 instruction are very difficult to come by in the facility. The school facility also lacks dedicated spaces for required services (OT/PT, speech, etc.) to be delivered to students. The school is at capacity for adding additional sub-separate programs, such as CSA (autism) classrooms to provide instruction in the district as opposed to tuitioning CSA students to out-of-district placements.

Please also provide the following:

Cafeteria Seating Capacity:	350
Number of lunch seatings per day:	8
Are modular units currently present on-site and being used for classroom space?:	NO

If "YES", indicate the number of years that the modular units have been in use:
Number of Modular Units:
Classroom count in Modular Units:
Seating Capacity of Modular classrooms:
What was the original anticipated useful life in years of the modular units when they were installed?:

Have non-traditional classroom spaces been converted to be used for classroom space?:	NO

If "YES", indicate the number of non-traditional classroom spaces in use:
Please provide a description of each non-traditional classroom space, its originally-intended use and how it is currently used (maximum of 1000 characters).:

Please explain any recent changes to the district's educational program, school assignment polices, grade configurations, class size policy, school closures, changes in administrative space, or any other changes that impact the district's enrollment capacity (maximum of 5000 characters). :

As a short-term measure to reduce current class size enrollment at the elementary school grade levels, the Lowell School Committee recently voted to re-open the Rogers School to serve students in grades Pre-K – 2 for the upcoming 2014/15 school year. This is a short-term solution to begin to address overcrowding at the elementary school level, however when this population reaches the 5th grade at the start of the 2016/17 school year, the current middle school configuration (number of classes) will not be able to accommodate the entering 5th grade students.

What are the district's current class size policies (maximum of 500 characters)?:

There are no class size policies, but the preferred class sizes are 20-22 at elementary, 22-24 at middle and under 25 at high school. The preferred school strand sizes are four at elementary schools, six at middle schools and two at Washington, Moody and K-8 schools. To solve the overcrowding issue, and due to the lack of available land, there is a willingness to expand middle schools to eight strand and K-8 to four strand schools with additions.

Priority 7

Question 1: Please provide a detailed description of the programs not currently available due to facility constraints, the state or local requirement for such programs, and the facility limitations precluding the programs from being offered.

With the current overcrowding conditions -- which has intensified the problematic issues with the existing conditions of the buildings related to maintenance, building systems and other larger capital projects -- and the magnitude of the future enrollment projections, and the changing methodologies and space needs necessary to meet 21st century teaching and learning standards, there is a significant shortfall in the current net and gross square footage in the great majority of the Lowell school buildings, including the high school.

Coupled with this is the desire to bring special needs students and their associated programs, back into this school for a better educational environment for the students and teachers. Currently, many special needs students are displaced for partial semesters to one of the alternative or day schools in the city, and are brought back into the mainstream at different intervals throughout the year. This disrupts the educational experience for all the students and contributes to additional and sometimes unplanned overcrowding in classrooms throughout the school year. Additions to this school should include much needed special needs spaces and programs.

The district desires to have21st century-style, flexible spacesfor the development of critical thinking, creative problem solving, independent learning, and student and teacher collaboration at each school. This facility is obsolete and not conducive to 21st century teaching and learning methodologies. These standards in school design include:

Flexible spaces for student collaboration, interaction and creative thinking, such as small seminar, large group and breakout spaces

Adaptable and varied spaces that allow for personalization, differentiated instruction and student choice

Distributed spaces adjacent to classrooms to build student - teacher and teacher - teacher connections, such as teacher planning spaces

Spaces for visibility to experiential and hands on activities or project-based learning, which include places to work and display, such as Fabrication Labs and non-passive learning environments.

The evolution of the Library toMediaCenterto Information Commons to today's series of spaces that form the Learning Commons

Right sized spaces that allow for today's seamless and interactive technology, evolving tools and accessibility needs

Efficient, interdisciplinary layouts to optimize the time and ways we educate our students

Buildings with a sense of place, indoor / outdoor connections, natural daylight and appropriate environmental systems for sustainability and student engagement

And the changing tools and systems required to make secure and safe buildings

The single high school in Lowell, serving grades 9-12 across a sprawling urban campus of buildings, is showing insufficient space in the areas of core academic, vocations and technology and media center, with a clear need for state-of-the-art science and fabrication labs, small and large group seminar, and group work spaces for the students. The current science labs are both under-sized and under- engineered and therefore do not meet state and local standards and codes. At the present time, the current number and configuration of science classrooms/laboratories constrain the staff from providing science programming that meets state and local requirements, including the Common Core initiative. Teacher offices are not integrated into the educational areas making it difficult for interactions between the faculty and students as well as faculty to faculty. There are also student-designated spaces which are oversized based on current MSBA guidelines, such as the physical education and auditorium/ drama spaces, but without further, in-depth, educational programming with the users, a reasonable and probable conclusion is that these spaces fill a much needed role in scheduling and usage throughout the

school day. The considerable size of the student population, a model seen in few other high schools inMassachusetts, will need further discussions with the MSBA. Bringing theFreshmanAcademyinto the folds of the main building in a wing of their own, will provide more safety and security for these students, help develop four year teacher interactions, and provide efficiency in their day to day movement through campus. This HS facility will see a need in the next decade for educating 3,900 students each year as well as provide community-integrated spaces for the City.

Priority 7

Question 2: Please describe the measures the district has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

In April 2013, OMR Architects was hired to prepare a Comprehensive Facilities Assessment and Master Plan which included 29 Lowell school facilities- elementary, middle, PK-8, high, alternative, day and the adult education center. The goals of the study were: 1) Perform a Physical and Programmatic Assessment of the Lowell Public School facilities, and 2) Develop a 10 Year Master Plan for critical maintenance, renovations and additions and/or building replacements.

The facilities assessment and master plan included: reviewing the schools and their relationships within the City of Lowell and their defining neighborhoods; analyzing the existing conditions of all of the facilities (architecture, site, structure, MEP/FP) and providing baseline repair estimates; three educational visioning sessions with school and district administration and educational leaders to set the goals and values for the master plan study; analysis of NESDEC enrollment projections for ten years; educational programming space analysis comparing the existing and projected population and facilities to MSBA guidelines; understanding site availability in Lowell; developing multiple masterplan options and comparing these with cost and value; developing preferred options; and developing a 10 year capital plan for the design and construction work of this report.

The Lowell High School fits into the Masterplan as the Preferred Solution Option 1D/E with a total project cost of $245.4M, not including escalation or land acquisition. This 650,000 GSF solution requires the possession of adjacent land and includes an addition/ demolition/ renovation/ repurposing response to the existing Lowell High School facilities. The same Masterplan includes the Elementary, Middle & K-8 School Preferred Solution of Option 1H with a total project cost of $270M, not including escalation or land acquisition. This solution includes: additions and renovations to Wang, Daley and Robinson Middle Schools to make eight-strand schools serving 792 students each; an addition/ renovation/ conversion of Rogers School to be a four-strand PK-8 facility serving 960 students; a new, four-strand PK-8 facility serving 960 students; and major and minor repairs of 23 other school facilities.

As a short-term measure to reduce current class size enrollment at the elementary school grade levels, the Lowell School Committee recently voted to re-open theRogersSchoolto serve students in grades Pre-K – 2 for the upcoming 2014/15 school year. This is a short-term solution to begin to address overcrowding at the elementary school level, however when this population reaches the 5thgrade at the start of the 2016/17 school year, the current middle school configuration (number of classes) will not be able to accommodate the entering 5thgrade students.

Priority 7

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

An example of the facility deficiency may be observed in Room 314 in the 1922BuildingofLHS, a science lab. There is a working gas with working gas lines. The total square footage of workable the lab space in this room is 480 square ft. Science labs in the 1980BuildingofLHSalso have working gas with working gas lines, however the total square footage of workable the lab space in this room is 661 square ft.

Understand that the number of occupants allowed in the laboratory must be set at a safe level based on building and fire safety codes, size and design of the laboratory teaching facility, chemical/physical/biological hazards, and students" needs (NSTA 2000; Roy 2006). Science classes should have no more than 24 students to allow for adequate supervision during science activities, even if the occupancy load limit might accommodate more (NSTA 2004). It is equally important to ensure adequate workspace for each student. NSTA recommends 60 sq. ft. for each secondary student.

Research data show that accidents rise dramatically as class enrollments exceed 24 students or when inadequate individual workspace is provided (West et al. 2005).

Recommended lab size:

60 sq. ft. x 25 students =1500 sq. ft.

Room 314 at 480 square feet of lab space falls short of NSTA recommendations by1120 sq. ft.

The labs in the 600's at 661 square feet of lab space fall short of NSTA recommendations by 839 square feet (this calculates to 26.5 square feet of workable lab space per student).

ADAcompliance is also an issue.

Another example of facility deficiency may be observed in theLibraryMediaCenter. The library has 110 seats in addition to 25 computer stations in the library and 30 computer stations in the attached computer lab. Due to area constraints only two classes can be in the library at any one time comfortably. The number of classes running each period range from 125 classes to 167.

REQUIRED FORM OF VOTE TO SUBMIT AN SOI

REQUIRED VOTES

If a City or Town, a vote in the following form is required from both the City Council/Board of Aldermen **OR** the Board of Selectmen/equivalent governing body **AND** the School Committee.

If a regional school district, a vote in the following form is required from the Regional School Committee only. FORM OF VOTE Please use the text below to prepare your City's, Town's or District's required vote(s).

FORM OF VOTE

Please use the text below to prepare your City's, Town's or District's required vote(s).

Resolved: Having convened in an open meeting on _____, prior to the closing date, the _____ *[City Council/Board of Aldermen, Board of Selectmen/Equivalent Governing Body/School Committee]* of _____*[City/Town]*, in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated _____ for the _____*[Name of School]* located at _____*[Address]* which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future

_____

_____

_____

_____

_____

_____; *[Insert a description of the priority(s) checked off on the Statement of Interest Form and a brief description of the deficiency described therein for each priority];* and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the City/Town/Regional School District to filing an application for funding with the Massachusetts School Building Authority.

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
Michael Q. Geary	Rodney M. Elliott	Jean M. Franco
Acting City Manager		
(signature)	(signature)	(signature)
Date	Date	Date

* Local Chief Executive Officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice. Please do not leave any signature lines blank.