

Massachusetts School Building Authority

Next Steps to Finalize Submission of your FY 2018 Statement of Interest

Thank you for submitting your FY 2018 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete.** The District is required to mail all required supporting documentation, which is described below.

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.

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 SOI will not be considered complete unless and until a summary of the accreditation report focused on the deficiency as stated in this SOI is provided.

ADDITIONAL INFORMATION: In addition to the information required above, 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 the MSBA at 617-720-4466 or SOI@massschoolbuildings.org.

Massachusetts School Building Authority

School District Webster

District Contact Ted Avlas TEL: (508) 943-0104

Name of School Bartlett Jr Sr High Sch

Submission Date 2/14/2018

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 mail hard copies 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 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 in a format acceptable to the MSBA. If Priority 1 is selected, your SOI will not be considered complete unless and until you provide the required engineering (or other) report, a professional opinion regarding the problem, and photographs of the problematic area or system. If Priority 3 is selected, your SOI will not be considered complete unless and until you provide a summary of the accreditation report focused on the deficiency as stated in this SOI.

Massachusetts School Building Authority

School District Webster

District Contact Ted Avlas TEL: (508) 943-0104

Name of School Bartlett Jr Sr High Sch

Submission Date 2/14/2018

Note

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

1. ^e 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. ^e Elimination of existing severe overcrowding.
3. ^e Prevention of the loss of accreditation.
4. ^e Prevention of severe overcrowding expected to result from increased enrollments.
5. ^b 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. ^e Short term enrollment growth.
7. ^e 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. ^e Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

SOI Vote Requirement

^b 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: Renovation/ Addition

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI: 2018 Bartlett Jr Sr High Sch

Is this part of a larger facilities plan? NO

If "YES", please provide the following:

Facilities Plan Date:

Planning Firm:

Please provide a brief summary of the plan including its goals and how the school facility that is the subject of this SOI fits into that plan:

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 15 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 15 students per teacher

Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District? NO

Does the District have related report(s)/document(s) that detail its facilities, student configurations at each facility, and District operational budget information, both current and proposed? YES

If "YES", please provide title, author, and date of report in area below.

Webster Public Schools Feasibility Study Dore & Whittier Architects 2011 Webster Public Schools FY17 - FY18 Operating Budget

Please include a hard copy of these report(s)/document(s).

Is there overcrowding at the school facility? NO

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

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 description of the local budget approval process for a potential capital project with the MSBA. Include schedule information (i.e. Town Meeting dates, city council/town council meetings dates, regional school committee meeting dates). Provide, if applicable, the District's most recent budget approval process that resulted in a budget reduction and the impact of the reduction to the school district (staff reductions, discontinued programs, consolidation of facilities).

The FY18 Budget included a 5.2% increase over FY17. The increase was sufficient to provide level services and increase staffing and program over the previous year.

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).

Bartlett High School was constructed in 1977-1979, opening in September 1979. In 1990, a new roof was installed to replace the original which was found defective. A 7,500 sf area of unused space (previously vocational programming) is now being renovated for New District Administration Offices. The projected completion date is 2018.

Some of the recent renovations include:

Conversion from oil to natural gas burners with assistance of a National Grid grant. 2010
 New lighting inside and outside the building through a National Grid energy efficient program 2015
 Installation of new lighting and new sound system in the auditorium. 2014
 Installation of a keyless access controls throughout the building 2011
 Installation of a complete surveillance system inside and outside the building 2012
 Conversion of locker room space into a modern weight lifting room through a private grant.
 Installation of wifi throughout the building. 2016

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

186000

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).

The overall campus contains some 60± acres of land. Contained on the overall parcel is Bartlett High School which is centrally located on the site. The Webster Middle School, constructed in 2005, is located in the northerly portion of the site. To the north and east of Bartlett are the athletic fields which comprise of four fenced and lit basketball courts, a large combination open field with backstops and infields for baseball and softball. These fields are multi-purpose and are also used for soccer and other field-sports.

To the north of this multi-purpose field is a six lane track and football practice field. The developed portions of the site have minimal contour relief, being principally flat. A raised area to the south-west of Bartlett is a six court tennis court and adjacent delineated student parking area. Potential wetlands areas exist on the periphery of the site in various locations. There are no known existing conditions that would impact a potential project.

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)

Bartlett High School, 52 Lake Parkway, Webster.

The campus is located in the south center geographic portion of the Town of Webster, ~1 mile from the center of the town and ~1 mil off I-395.

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).

The building is a 640' long, 2-story, steel-framed structure. The building width varies from 130' to 200'. Due to its length, the building is divided by two internal expansion joints in three segments – 200', 200' and 240' lengths. The building has a façade of brick veneer with 6" masonry block back-up. No vertical reinforcing is noted for the block back-up wall. There

are no reportable structural concerns about the building. There are some minor signs of structural settlements. There is significant evidence the roofing system is failing where leaks are reported and repaired. The existing windows are original to the building. The windows are losing efficiency as sealants have begun to fail. While the windows are a source of natural light, they lack the energy efficiency available in modern systems. The exterior doors are original and in various stages of disrepair. Most lack insulation with areas of leakage and damaged seals. There are other minor items.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS? NO

Year of Last Major Repair or Replacement:(YYYY) 1979

Description of Last Major Repair or Replacement:

None. Original to the building.

Roof Section A

Is the District seeking replacement of the Roof Section? YES

Area of Section (square feet) 100000

Type of ROOF (e.g., PVC, EPDM, Shingle, Slate, Tar & Gravel, Other (please describe))

Roofing consists of a built up roofing (BUR) system, constructed with multiple layers of felt and asphalt tarthen topped with stone ballast. Portions of the first floor have a prefinished pressed aluminum batten seam metal roofing system.

Age of Section (number of years since the Roof was installed or replaced) 28

Description of repairs, if applicable, in the last three years. Include year of repair:

2013

- An entire section above the gymnasium vestibule was repaired.

2014

- March - Install 3'x5' patch
- May - Repair 2'x6' splits
- May - Repaired Split
- May - Installed Drain Target Patch
- May - Auditorium roof repairs
- September - Repaired drain target over gym
- December - Drain and Flashing repairs

2015 - 2018

- Multiple leaks were repaired during the course these years.

Window Section A

Is the District seeking replacement of the Windows Section? YES

Windows in Section (count) 100

Type of WINDOWS (e.g., Single Pane, Double Pane, Other (please describe))

Exterior windows are original, anodized aluminum sliders with insulated glass units. Many of the insulated glass units have failed with visible signs of condensation within the air space between two panes of glass. All are energy inefficient.

Age of Section (number of years since the Windows were installed or replaced) 39

Description of repairs, if applicable, in the last three years. Include year of repair:

None.

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).

The HVAC system, 38 years old and original to the building, is comprised of two dual fuel boilers with a pumped low temperature heating hot water loop serving indoor air handlers, unit ventilators, convectors, unit heaters and fin tube terminal devices. Portions of the building are air conditioned by two roof mounted air cooled chillers. While there have been no catastrophic failures, the system has exceeded its maximum serviceable life, requiring continuous repairs to maintain acceptable temp control and at the expense of increased operating costs due to inefficiency in antiquated equipment.

The existing electrical systems range from original vintage, 38 years old, to ongoing upgrades/add-ons recently installed

including the fire alarm system and lighting retrofit. While the facility is well maintained and clean, most systems do not meet current Code requirements due to Code changes that have occurred over the years. Many of the existing systems are not suited for expansion due to the incompatibility of technologies. The existing electrical service is adequately sized for the facility at 2500 Amperes, 277/480 volts, 3-phase, 4-wire and is in fair condition; however, it could require replacement under a renovation program due to new distribution requirements. The existing fire alarm system, although recently installed, essentially replaced existing devices in some locations which originally did not have adequate coverage. The fire alarm system should be replaced with a Code compliant voice evacuation system and with additional coverages. The exterior lighting system should be replaced with LED fixtures of the cut-off type. The interior lighting, although retrofitted for energy efficiency with new lamps and ballasts, would not be suitable for re-use under a renovation program.

Boiler Section 1

Is the District seeking replacement of the Boiler? YES

Is there more than one boiler room in the School? NO

What percentage of the School is heated by the Boiler? 100

Type of heating fuel (e.g., Heating Oil, Natural Gas, Propane, Other)

Natural Gas with ability to convert to Oil. (Duel burners)

Age of Boiler (number of years since the Boiler was installed or replaced) 39

Description of repairs, if applicable, in the last three years. Include year of repair:

2013 - Remove right rear boiler section and connecting nipples and replace with HB Smith boiler section and nipples.

2015 - Remove left rear boiler section and connecting nipples and replace with HB Smith boiler section and nipples.

2016 - Through a National Grid Initiatives Program 25 new premium efficient motors and 27 new variable speed drives were installed.

2017- Boiler #1 Failed rear intermediate section - supply and install new section.

Has there been a Major Repair or Replacement of the HVAC SYSTEM? NO

Year of Last Major Repair or Replacement:(YYYY) 1979

Description of Last Major Repair or Replacement:

No major repairs. However, there are numerous minor repairs to unit ventilators, having exceeded their life expectancy.

In 2017 - Removed and rebuild the heating loop pump in A Section

Original to the building.

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? NO

Year of Last Major Repair or Replacement:(YYYY) 1979

Description of Last Major Repair or Replacement:

None. Original to the building.

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).

Flooring

The main lobby space has inset brick flooring with a thick wax finish. While this floor is very dark, it has held up very well and is in good condition. The flooring in corridors and most classrooms is vinyl sheet goods, and appear to be original. All of these floors have outlived their life cycle and are due for replacement. One area of the corridor has cracked flooring, which appears to be the result of a cracked slab. Reportedly the 30' long crack occurred around 1984. The administration area, library, auditorium, some classroom and office areas, and portions of the upstairs corridor have carpeting. The carpeting throughout the school has been maintained exceptionally well. The blue carpeting is original to the school and while it appears to be in good condition, replacement is required. Other areas of original carpeting and areas where newer carpeting has been installed are in need of replacement. The floor in the Gymnasium is strip hardwood

(maple) flooring over sleepers. This floor has been well maintained but a pipe leak within a wall cavity behind a water cooler caused the gym floor to buckle and split in several areas. Repairs have been made. Floors in the locker rooms are painted concrete, with ceramic mosaic tile in the shower areas. The weight room has cushioned rubber tiles, which appear to be in good condition. Floors in the kitchen are quarry tile (brick shape) and appear to be in adequate condition. Floors in multi-stall toilet rooms and in most single-user toilet rooms, have ceramic mosaic tile. These appear to be in fair to poor condition, with some areas exhibiting buckling/delaminating due to water intrusion behind the tile.

Ceilings vary in type but are similar in that most ceilings are in fair condition. Ceilings in the corridors are 12" x 12" ceiling tile in concealed splines. These are in generally poor condition with unevenness noted throughout. Many are stained, broken or chipped. Most classrooms have 24" x 24" acoustical lay-in tiles in suspended aluminum grid. Some rooms are in satisfactory condition but many are bowed from varying temperature swings and humidity. Ceilings in the art room are gypsum wallboard, sloped to follow the roof pitch. Leaks in this roof have caused damage to the ceilings, ultimately requiring replacement. The gym, cafeteria, auditorium and music rooms have painted exposed metal deck. The paint is peeling off in most of these areas, likely due to several factors, including condensation (inadequate roof insulation), high humidity and roof leaks. Interior doors are primarily painted metal, with lever hardware. Most of these doors are in fair condition with the exception of doors in high traffic areas. The hardware at most doors are in poor condition and should be replaced.

The interior lighting consists of recessed 2' x 2' regressed door, acrylic prismatic lensed fixtures with (2) 32 watt "U" type (FBO32/741/6/ECO) lamps in corridors. Corridor lights are remote controlled via (6) switches with LED indicators located outside the janitorial office. The classrooms consist mainly of (3) rows of continuous recessed 2' x 4' regressed door, acrylic prismatic lens fixtures. Fixtures contain (2) 30 watt, T8 lamps. Exterior classrooms typically have (3) switches, one (1) per row. Interior and specialty classrooms typically have (2) switches controlling alternate fixtures. Science classrooms typically have (4) rows of fixtures. Ceiling mounted motion sensors have been provided in classrooms to turn fixtures off when classroom is unoccupied.

Cafeteria has continuous rows of indirect 6" square single T8 lamp fixtures and recessed 2' x 2' lensed 250 watt metal halide fixtures. Open channel strips with "black light" lamps have been provided for dancing functions. Perimeter wall mounted square fixtures with incandescent 150 watt par lamps also exist. Utility and mechanical rooms consist of open channel strip fixtures with T8 lamps. The Auditorium has suspended dimmable Tungsten halogen par lamp cylinders controlled with local dimmable entry stations. Furniture mounted isle lights are breaker controlled. A fair amount of theatrical lighting exists and is controlled from a rear control booth. The dimming rack is located at the back of the stage. Four foot open channel strips with (2) T12 lamps mounted to deck exists for emergency lighting (normally off). Kitchen lighting consists of 2 x 4 recessed fixtures with acrylic lens and (3) T3 lamps. The Servery is lit with continuous rows of 6" square fixtures with baffles and (2) T8 lamps. Office lighting consists mainly of recessed 2 x 4 regressed door prismatic lens fixtures with T8 lamps. Gym lighting consists of suspended 15" x 4' fluorescent high bays with (4) T8 lamps and electronic ballasts with integral occupancy sensors. Fixtures have clean lens and wire guards. Fixtures are breaker controlled.

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

Bartlett High School is currently accredited by NEASC and serves approximately 448 students in grades 9 through 12. In 2015 the school was placed on "Warning", with a strong recommendation towards upgraded facilities. NEASC accepted a 2-Year Progress Report in 2016 and removed the school from warning, with continued follow up. BHS is focused on improving student outcomes for college and career readiness and seeks to improve the facility so that we can provide more hands on learning opportunities in Science, Technology, Engineering, and Mathematics for our students. Currently, BHS offers an approved vocational/technical educational program in Business/Accounting and thirteen Advanced Placement courses for students in grades 10 through 12. Our graduation requirements support increasing student completion of the MassCore course sequence for college and career readiness, including access to fine and performing arts electives and programs for choir, instrumental music, pottery, photography, drawing and painting. There are a number of extracurricular activities at BHS for students to explore their talents in. They include: Drama, Show Choir, Band, Jazz Band, and Art. Our Athletics program provides students three seasons of multiple sports..

BHS seeks to develop more programs to meet the various needs of our students. Currently, BHSI offers the Nichols Honors Program for highest academically performing students. This program provides students first hand experiences at Nichols College and an accelerated pathway to college. BHS also offers the Quest Program, which is an alternative educational program for at-risk students with behavioral/social/emotional needs.. BHS offers the STRONG Program, a 9th grade dropout prevention program that provides additional supports to reduce academic failure and improve student attendance. BHS includes an array of special education services that support full inclusion with co-teaching, as well as Life Skills Programs. There is an adult special education program serving students ages 18 to 22 years old.

In collaboration with Bay Path RVTHS, the district has explored an expansion of Chapter 74 approved programs. BHS had been designed to house a preschool program with access to an outside area for play, a separate entrance, and appropriate bathroom facilities. Remodel of these areas would become educational space for an Early Education and Care program. Currently, our preschool is located at our Elementary School where we have experienced a drastic increase in enrollment (840+). Remodeling would enable us to move the preschool program back to BHSI and develop an Early Education Center that could also become a site for extended learning opportunities for students seeking to become teachers or early child care providers. Remodeling our facilities would enable us to develop a Radio and Television Broadcasting program that would complement and enhance our existing performing arts programs and provide our students with a new avenue for innovation and creativity. Developing a new career pathway in cinema and television production would expand our students future career opportunities as well as their technical knowledge on camera operation, sound systems, and editing.

Another benefit of remodelling BHS would be the addition of a Biotechnology Program. According to the Mass Biotechnology Council, "Massachusetts is home to a biotechnology supercluster that is second to none." With over 700 companies and high student interest in the life sciences, a Biotech Program would provide a technical education program that prepares students for a career in the life sciences. The science laboratory classrooms at BHS are outdated and do not support the flexible problem and project based learning identified in the Mass. Science, Technology, and Engineering Curriculum Frameworks. The fixed placement of the lab benches inhibits flexible grouping and collaborative teamwork. Of the six science classrooms, three with combination classroom and laboratory workstations, only two rooms have fume hoods for the safe use of chemicals in the laboratory setting. There is a lack of handicap accessible workstations in the labs, resulting in the accommodation of the students at alternate lab tables. With growing student interest in STEM related fields, modernized laboratory space is needed to promote scientific practices and learning.

The current state of the athletic fields and facilities prohibits the use for interscholastic competition and inhibits/limits implementation of components of the phys ed curriculum, developed with the goal of promoting lifelong habits of fitness. Yet the conditions of our gym and outdoor fields limit how lessons can be taught. The running track located on the campus has severe cracks and is unusable. The condition of the tennis courts prohibit the implementation of the USTA Tennis in Phys Ed curriculum.

EDUCATIONAL SPACES: Please provide a detailed description of the 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, a description of the cafeteria, gym and/or auditorium and a description of the media center/library (maximum of 5000 characters).

The school is divided into three sections: A-Wing, B-Wing and C-Wing

A-Wing 1st floor has 4 classrooms of varying footage, a nurses suite, metal and woodworking shops (vacant), print shop (vacant), graphic arts (vacant), custodial room, shipping dock, boiler & mechanical room, kitchen & supplies. The 3 vacant rooms are currently being renovated for District Administration Offices

2nd floor consists of science & social studies classrooms, biology & physics & chemistry labs along with science & central prep. All science rooms/labs are original to the building and severely outdated.

B-Wing 1st floor consists of the cafeteria & staff lunch room (6000+sf), Art rooms (2), classrooms for accounting, business, math (5), computer labs (2), Guidance suite, principals office suite, conference room and office spaces (4). 2nd floor consists of classrooms for social studies (2), foreign language (3) ELA (5), history, the Library-Media Center,

literacy labs (2), teacher lounge.

C-Wing 1st & 2nd floors consists of clustered classrooms (15) & a preschool wing (2), spaces for Ot & PT (6), the auditorium & stage, music rooms (4), gymnasium (2 full court gym floors). C-Wing contains the only basement for locker rooms and storage.

Attached are hard copies of existing floor plans providing a detailed description of the Core Educational Spaces, description and sizes of classrooms, science labs and media center. .

CAPACITY and UTILIZATION: Please provide the original design capacity and 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).

The use of space in the school is close to what was originally planned with some exceptions:

- The metal shop, wood shop and graphic arts has been renovated to house the District Administration Offices.
- What was formerly the Home Economics and Sewing Program space is now being used by the Southern Worcester County Collaborative for a Life Skills Program.
- Special Ed spaces occupy many of the smaller interior rooms but are also located in other rooms that may be larger or smaller than needed.

One classroom in C-Wing has been converted into a small conference room.

In 2016 an entire district grade reconfiguration removed the 7th and 8th grades from the school. The spaces have been filled by some existing programs, including special education. The excess capacity now makes an expanded Chapter 74 vocational program more accessible, with renovation required.

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).

A regular maintenance program is budgeted and in place. The district has contracted with School Dude to provide an online maintenance schedule and referral method for staff to report issues for timely repair. A Five Year Capital Plan is updated annually and submitted to the Town of Webster as part of the communities overall capital improvement plan (see attached).

Specific projects include:

- * Roof replacement in 1990
- * Replacement of damaged gym floor 2014
- * New access control system and a new digital surveillance system (2011)
- * Replacement of all gym lockers in the boy locker room in 2013
- * Extensive boiler repairs in 2013, 2015 and 2017
- * Re-paying of driveways and entrances in 2015 and 2016
- * WIFI was installed throughout the building in 2015

There have been no override or debt exclusion votes taken for capital projects at this facility.

Priority 5

Question 1: Please provide a detailed description of the issues surrounding the school facility systems (e.g., roof, windows, boilers, HVAC system, and/or electrical service and distribution system) that you are indicating require repair or replacement. Please describe all deficiencies to all systems in sufficient detail to explain the problem.

- 1 **HVAC:** The HVAC System serving the Bartlett High Schools comprised of two (2) dual fuel boilers with a pumped low temperature heating hot water loop serving indoor air handlers, unit ventilators, convectors, unit heaters and fin tube terminal devices. One of the two boilers recently failed twice (2013 & 2015) and the second failed (2017) requiring a major repairs. Portions of the building are air conditioned by two roof-mounted air cooled chillers with pumped chilled water to the terminal devices via a dual temperature piping loop. The school has received average to above-average maintenance of the HVAC systems over its occupied years. Even with adequate maintenance, the systems are deteriorating due to scale, poor water conditions to a point of exceeding their maximum serviceable life. With the possibility of catastrophic failures with the present systems, they will require continuous repairs to maintain acceptable space temperature control as the equipment exceeds its serviceable life. This continued operation will be at the expense of increased operating costs due to inefficiency in equipment and through the generally antiquated nature of the systems themselves. Replacement is required.
- 1 **Boiler Room:** The boiler room is provided with two(2) individual HB Smith 450 mills cast iron sectional boilers of them 22 section design. Each boiler is original to the building installed in approximately 1978. The boilers were originally oil fired but were converted to dual fuel (gas/oil) fired boilers in 2010. One of the two boilers recently failed twice (2013 & 2015) requiring a major repair. The second boiler failed in September 2017 also requiring major repairs. There is extensive surface contamination on the mud drums of each boiler which could be related to nipples leaking between the cast iron sections and the mud drum itself. From an outward standpoint, each boiler is severely contaminated. From a visual standpoint, it's apparent that both boilers have reached their maximum operating life. A new boiler to provide hot water during the non-heating months was installed in 2010. Heating hot water is distributed throughout the entire building by a primary and stand by base-mounted end suction heating hot water pump. The automatic temperature control boards within the boiler room are antiquated and appear to be original condition to the building. A complete upgrade to include direct digital control is recommended.
- 1 **Air Conditioning:** Two roof mounted chillers provide chilled water to air conditioned parts of the High School. The chilled water is distributed to the conditioned area via base-mounted pumps and schedule 40 black, steel dual temperature piping. Each pump is showing severe signs of leakage and contamination on and around the impellers and motors. Complete replacement of each base-mounted pump is recommended.
- 1 **Windows:** Exterior windows are original, anodized aluminum sliders, with insulated glass units. These windows are some of the earlier versions of insulated commercial aluminum window systems. While the aluminum finish appears to have withstood the elements fairly well, many of the insulated glass units have failed, with visible signs of condensation within the air space between two panes of glass. This may be partially attributed to the fact that these are excessively large insulated window panels with thin frames. The combination of hot and cold weather and stress on the window unit from opening and closing, is causing the seal to fail sooner than if they were smaller units or had sturdier frames. The operable sash will fail sooner than the non-operable sash as well. These windows are very large, with some units being five or six feet tall by four feet wide. The size and weight of these units make them difficult to open/close and difficult to provide a good seal when closed. Gaps are visible at the high-side of the window with the operable sash in the fully closed and locked position, allowing air to freely enter the room. The windows also present a safety concern; the units have no screens and no integrated open-limiting hardware, thus creating the potential for an accidental fall. Recommend replacement all exterior windows.
- 1 **Doors:** Exterior doors are original hollow metal with hollow metal frames. The doors have been retrofitted with continuous hinges and hardware but the doors exhibit signs of severe deterioration, particularly at the lower portion of the door. Water has entered the seam of the metal around the window units and formed significant deterioration. Recommend replacement of all exterior doors. Interior doors are in fair condition with the exception of high traffic areas. The hardware at most doors are in poor condition and should be replaced.
- 1 **Soffits:** Exterior soffits appear to be exterior-grade gypsum sheathing with a stucco-type finish. Generally, these appear

to be in good condition; however there are specific locations where water stains and fungal growth are present. The cause of this is not known, however these areas are located beneath a heated space. The condition and continuity of the insulation and/or vapor retarder above these soffits is not known. Because the condition is not consistent along the entire soffit areas, it appears that most likely, it is due to an inconsistent insulation/vapor retarder system. Soffit areas should be further examined for possible replacement.

- 1 **Roofing and Chimney:** The roofing consists of a built-up roofing (BUR) system, constructed with multiple layers of felt and asphalt tarthen topped with stone ballast. It was installed in 1990. It has exceeded its lifespan and should be replaced. Most roofs of this type expect to last approximately 25 years before needing annual repairs or replacement. There is 2-1/2" of rigid insulation placed on the roof. At R-5/inch, this would provide an approximate R-value of 12.5. However, considering diminishing thermal value over a 27 year span, the actual R-value may be closer to R-10 or R-11. This is significantly below the standard today of R-30 to R-40 with continuous insulation. The roof structure is sloped to allow for drainage, with the insulation placed in a consistent thickness. It appears that the roof drains well throughout most of the roof, however there are low spots where it is evident that water ponds for an extended period of time. The built-up roofing system exhibits signs of significant degradation in numerous areas. These can be seen primarily by the bubbling and cracking of the tar and failure at flashing joints and terminations. The expansion joints have failed in numerous locations with significant tears visible. Leaks have been reported in numerous areas of the roof and multiple stains in the ceiling below are evident. Portions of the first floor have a prefinished pressed aluminum batten seam metal roofing system installed. It appears to be in fair to poor condition. Significant ice-damming is reported all along the eave of this roof. Evidence of damaged, bent metal panels is visible in numerous areas, as well as damaged exhaust fan from the art classroom. Damaged building materials are evident from the interior. It appears that there is a significant heat loss occurring in this entire area. The roof pitch is too low for this type of roof system and may be a contributing factor to the leaking. This roof system should be replaced entirely with increased insulation and a re-build of the roof framing at a steeper pitch. Gutters and downspouts at the edge of the metal roof system are residential-type, inappropriate for commercial construction; many of these have failed as well. Significant cracking was observed at the chimney stack in several locations. Some cracking extended vertically straight through multiple brick, showing signs of severe stress. Further examination is needed for possible repair/replacement.
- 1 **Flooring:** The flooring in corridors and most classrooms is vinyl sheet goods, and appear to be original. Although they have been well maintained, most of these floors have out-lived their life cycle and are due for replacement.
- 1 **Ceilings:** Ceilings vary in type but are similar in that most ceilings are in fair to poor condition. Ceilings in the corridors are 12" x 12" ceiling tile in concealed splines. These are in generally poor condition with unevenness noted throughout. Many are stained, broken or chipped. Most classrooms have 24" x 24 acoustical lay-in tiles in suspended aluminum grid. Some rooms are in satisfactory condition but many are bowed from varying temperature swings and humidity. Ceilings in the art room are gypsum wallboard, sloped to follow the roof pitch. Leaks in this roof have caused damage to the ceilings. The gym, cafeteria, auditorium and music rooms have painted exposed metal deck. The paint is peeling off in some of these areas, likely due to several factors, including condensation (inadequate roof insulation), high humidity and roof leaks.
- 1 **Building Plumbing:** The majority of the plumbing systems is original to the building. The systems, while continuing to function, have exceeded their useful life. Maintenance and replacement of failed components is on the rise. A 2014 interior pipe failure flooded the cafeteria kitchen with extensive water damage and repairs. A 2015 interior pipe failure flooded the woodworking space with water damage and repairs. A 2016 pipe burst flooded three administration offices. Water quality tests have shown an increase in lead. Although the quality is maintained with daily flushing, a permanent solution is recommended. Plumbing fixtures, in fair to poor condition, are constantly being repaired and have out served their useful life. There are also ADA code concerns. Plumbing fixtures must be replaced with all new fixtures.
- 1 **Science Labs:** The science labs are original installation and should be addressed so as to meet current standards of curriculum delivery.
- 1 **Other Issues:** Storm Drainage, Pavement, Site and Pedestrian Access, Lighting, Code issues, Athletic Facilities (Running Track, Tennis Courts, Gym Bleachers), Toilet partitions, Handicap Accessibility, Food Services.

Priority 5

Question 2: Please describe the measures the district has already taken to mitigate the problem/issues described in Question 1 above.

The District continues to provide general and emergency maintenance and support of the facility in an effort to maintain a safe and welcoming environment that also provides for reasonable teaching and learning. The District continues to make temporary enhancements to the facility until a more long term remedy can be determined. These include:

- | HVAC system has annual routine maintenance with continuous repairs during the course of service.
- | Boilers have annual routine maintenance, some minor repairs and some major repairs during the course of service, including three major insurance claims in 2013 & 2015 & 2017.
- | Air Conditioning has annual routine maintenance and experienced multiple repairs during the course of service.
- | Windows have been repaired as necessary. In some instances they have been permanently closed for safety reasons.
- | Doors have been repaired as necessary. It is getting more difficult to find replacement parts.
- | Roofing had been maintained, repaired and where necessary, replaced. The repair of leaks throughout the building has increased substantially in the past 36-48 months.
- | Ceilings are repaired and replaced where necessary.
- | Plumbing repairs and replacement is on-going. A significant increase in repairs over the past 48 months with three major failures causing significant flooding.
- | Other items have been repaired as necessary. Driveway and parking pavement has been patched but is deteriorating. A new layer of asphalt was applied to the driveways, entrances and walkways in 2015 & 2016..

Priority 5

Question 3: Please provide a detailed explanation of the impact of the problem/issues described in Question 1 above 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.

The physical conditions and needs of the school are foundational to the development of an academically rich learning environment. The school house must be safe, meet the comfort needs of students and staff members, and provide access to resources for learning to promote the conditions for school readiness and academic success. The two areas of most immediate concern impacting the educational programs and access to high quality learning are the room-by-room temperature control.

The heating issue is the result of an antiquated pneumatic control system and the indoor air quality issues are a result of old, faulty equipment that is past or very close to past due. The inability to maintain appropriate and balanced classroom temperatures, particularly those classrooms without windows, decreases faculty and student productivity. During a classroom-by-classroom walk through, one observes a wide variation in classroom temperatures from rooms with little to no heat warranting students and staff to wear additional clothing to those with extremely high temperatures that are uncomfortable to the point of causing illness. Whether too cold or hot, some classes have had to be relocated based on availability. The relocation of classes and students being excused to the nurse has caused an increase in loss of class time and the conditions are a continual distraction from learning. When the roof does leak it can create health and safety issues such as slippery floors and stair wells, damage to ceilings, walls, and carpeting, etc. The custodians continuously locate and repair the leaks but it is an ongoing battle and continued health & safety problem. Poor air quality and turnover reduces productivity in working and learning environments and leads to higher levels of distraction, lack of focus, and attentiveness.

Students at the high school level are preparing educationally to enter college and career. Higher education institutions and most careers expect a level of proficiency with the use of technology for communication, accessing resources and information, conducting independent research, and demonstrating knowledge through the use of online assessments. Bartlett High School was built at a time when the digital environment of secondary schools, colleges, and jobs did not exist, nor was it imagined. Schools were not built to accommodate technology infrastructure to support whole school and grade level wifi access, let alone for a whole classroom. In 2014 the district negotiated increases in bandwidth with the cable access provider. In 2015 the district applied and was approved through e-rate grant funding to upgrade the technology infrastructure by installing wifi access to the entire building. In 2016 a one to one initiative was introduced with each high school student receiving a chrome book. However, the aforementioned temperature balancing has lead to issues for the maintenance of hardware in technology labs, the library, and classrooms.

Renovation of the science labs will provide the science department to have more flexible spaces, better prep and chemical storage and better delivery of curriculum.

Bartlett High School has implemented several initiatives to address areas of need for a high risk population including freshmen academies, safety nets for attendance intervention and dropout prevention, and increased enrollment and participation in Advanced Placement courses. However, the quality of life experienced in the school is impacted by the physical operation of the learning spaces. The facilities interfere and stand in contradiction to the development of a school climate invested and committed to creating a more engaging and rigorous curriculum. The upgrade of the facilities will have a significant and substantial effect on the attitudes and disposition of the students, staff, and local community, and this pride will translate into higher levels of engagement, positive student outcomes, and community support for education.

Priority 5

Question 4: Please describe how addressing the school facility systems you identified in Question 1 above will extend the useful life of the facility that is the subject of this SOI and how it will improve your district's educational program.

Bartlett High School is over 39 years old, and there have been efforts to keep the building structurally sound and well maintained, as well as several municipal investments of capital projects to address safety and wellness concerns. Upgrading the operational systems (mechanical, electrical, plumbing, HVAC, etc.) will increase the longevity of the current building for many more generations of students. Increased energy efficiency through new roofing and windows will save valuable resources and funds that can be used to support the instructional core through curriculum, educational resources, and staffing. Modernization of the facility will allow for increased use of innovative instructional approaches, provide support to the learning of 21st century learning skills, and increase student engagement by attending to classroom climate and access to technology for learning.

In order for students to achieve college and career readiness for today and into the future, improvement of the science labs and the integration of technology resources supports an on-going shift in instruction to support application of content knowledge through problem solving and project based learning. Bartlett High School was built to be a traditional high school supporting a traditional educational program. The school provided direct instruction preparing some students for college and some students for the factory and/or mill, which were part of the economic infrastructure of the community at the time. The factories and mills have closed and more students need to attain their high school diploma and pursue post secondary training to enter into the workforce defined by health, hi-tech, and automated manufacturing careers.

The renovation of available existing spaces would allow the introduction of several Chapter 70 Programs that would keep those students in school and provide them with the skills necessary for a successful career. Several programs have been identified and endorsed by our regional vocational school, including:

Early Education and Care - The school was originally designed to house a preschool program. Renovation in this area would become educational space for our new program.

Radio and Television Broadcasting - A renovated of classroom space would allow an opportunity to enhance the existing arts programs providing a career pathway in cinema and TV production, including technical knowledge for camera operation, sound systems and editing. It could also support community engagement in the activities and performances of the school through local cable and internet access.

Biotechnology Program - According to the Massachusetts Biotechnology Council, "Massachusetts is a home to a biotechnology super cluster that is second to none". With over 700 member companies and high student interest in the life sciences, a biotech program provides an excellent technical education program that prepares students for a career in the life sciences.

Schools built in the same time period as Bartlett High School were also not built with the same focus and concern for security and student safety. The district has invested in security cameras for multiple doorways and hallways and a key-card system for building access. The front door is monitored and access is provided through an electronic system with the expectation that all other doorways are locked within the school day. However, the doors at the entrances can be easily compromised and the amount and quality of open glass windows to classrooms and doorways provide an unmitigated level of risk of entry to the school by force.

By addressing the school facilities systems at Bartlett the intent is to develop a safe, welcoming, and engaging learning environment. An academic learning environment meets the needs of students so that they can maintain focus on their learning and fully participate to complete their education. In the hierarchy of needs, an academic learning environment addresses the fundamental context in which learning can happen. At the secondary level, this environment has consistent climate control and flexible learning spaces, which allow for peer-to-peer collaboration, use of technology to promote independent learning, and an elevation of the curriculum and instructional practices for more rigorous and relevant learning experiences.

Please also provide the following:

Have the systems identified above been examined by an engineer or other trained building professional?:
YES

If "YES", please provide the name of the individual and his/her professional affiliation (maximum of 250 characters):

- Dore & Whittier Architects, Inc.
- Nitsch Engineering
- Places Associates, Inc.
- LeMessurier Consultants, Inc.
- Garcia, Galuska & DeSousa, Inc.
- R.G. Vanderwell Engineers, LLP
- Crabtree McGrath Associates, Inc.
- ATC Associates

The date of the inspection: 9/1/2011

A summary of the findings (maximum of 5000 characters):

We have attached a hard copy of a study that includes the reports of each of these professionals.

REQUIRED FORM OF VOTE TO SUBMIT AN SOI

REQUIRED VOTES

If the SOI is being submitted by 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 the SOI is being submitted by 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
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Douglas C Willardson	David Hurton	Ruthann Goguen
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Town Administrator

		
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(signature)

(signature)

(signature)

Date

Date

Date

2/14/2018 4:12:42 PM

2/14/2018 3:27:28 PM

2/14/2018 3:33:07 PM

* 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.