

Massachusetts School Building Authority

Next Steps to Finalize Submission of your FY 2017 Statement of Interest

Thank you for submitting your FY 2017 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.

- 1 **School Committee Vote:** Submittal of all SOIs must be approved by a vote of the School Committee.
 - 1 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.
- 1 **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.
 - 1 Regional School Districts do not need to submit a vote of the municipal body.
 - 1 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 Diane Sullivan at 617-720-4466 or Diane.Sullivan@massschoolbuildings.org.

Massachusetts School Building Authority

School District Andover

District Contact Paul Szymanski TEL: (978) 247-7070

Name of School West Elementary

Submission Date 4/6/2017

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. If Priority 1 is selected, your Statement of Interest 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.

Chief Executive Officer *

Andrew P. Flanagan

Town Manager

School Committee Chair

Joel G. Blumstein

Superintendent of Schools

Sheldon H. Berman

(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 Andover

District Contact Paul Szymanski TEL: (978) 247-7070

Name of School West Elementary

Submission Date 4/6/2017

Note

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

1. ^b 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. ^b Elimination of existing severe overcrowding.
3. ^e Prevention of the loss of accreditation.
4. ^b Prevention of severe overcrowding expected to result from increased enrollments.
5. ^e 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. ^b 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: Potential New School

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI: 2017 West Elementary

Is this part of a larger facilities plan? YES

If "YES", please provide the following:

Facilities Plan Date: 6/20/2016

Planning Firm: MGT of America Consulting, LLC (MGT)

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 January of 2016, the Town of Andover and the Andover Public Schools contracted with MGT of America Consulting, LLC (MGT) to develop a ten-year facility master plan to address the facility needs of the town and schools through 2026. The goal of the Town/School Facility Master Plan is to establish a long-range Facility Master Plan based on input from the community, using best practice facility standards that identifies and prioritizes the facility needs, and presents an effective and efficient implementation of projects over the ten-year planning period. The project included: • Development of facilities and site inventory system • Programmatic review of both town and school facilities to establish facility standards • Facility assessments • Analysis of school and community demographics • Analysis of school capacity and utilization • Public involvement and community collaboration • Standards for ranking building needs • Budget estimates • Prioritization and budgeting (Note: The material above is from MGT's Andover Master Plan Final Report, Updated April 3, 2017. The report and appendices are attached dated.) Following is how the plan was developed and how a yearlong process resulted in West Elementary being identified as the top priority for this SOI. MGT, a firm with extensive national experience in school facility assessments and planning, was engaged to evaluate the condition of all Andover school buildings. The work was launched in January 2016 with a meeting of key parties from MGT, the Andover Public School District (APS) and the Town of Andover. The group focused on developing strategies around educational/program review, facility assessments, enrollment projections, capacity and utilization, and community engagement. Over the next few days, MGT met with department heads and principals to refine the standards by which they would assess each building. MGT held a community engagement forum on February 24, which was attended by more than 75 people, and also received a good response to its online survey. Over the next few months, the MGT team conducted intensive on-site assessments of every facility. In mid-June, the team presented its findings in a series of meetings with District administrators and faculty, parents and community, and representatives of the Town. In the June 2016 Comprehensive Facility Plan, each Andover building is graded with a goal of establishing facility priorities for a decade or longer. The master plan options present alternative ways to address demonstrated facility needs. Each option has pros and cons and the plan is intended to provide a structure for further discussion by the Andover community in order to determine the best option based on priorities, fiscal resources and logistics. A chart presents each individual project, a time line, and a ten-year budget projection. Once MGT's written report was received in June, the School Committee discussed it in great detail in open meeting during the summer. Their task was to determine which facility needed to be the top priority because of its deficient impact on student outcomes. In October, the District arranged tours of three schools being considered, and held four forums for staff and community to gather their input. Presentation materials from the forums were placed on the District website and parents were sent a link to the site. Meanwhile, District administrators met with architects to begin working on initial site studies that would inform the School Committee's final decision. The Committee also reviewed research on the clear relationship between the condition of school facilities and students' academic performance. In December 2016, the School Committee selected West Elementary as its top priority. West Elementary was identified as the school in need of most immediate attention, rating "poor" in most metrics including building condition, educational suitability, and grounds condition. The evaluation concluded that the West Elementary facility is near the end of its functional life, with structural and system deficiencies, a layout that does not support programmatic requirements, accessibility issues and student safety concerns. Options presented for addressing these concerns included: Option 1 – Build a new West Elementary facility with capacity of 700 students on the same site with the adjacent new Shawsheen Preschool; Option 2 – Build a new West Elementary facility with capacity of 700 with adjacent new West Middle School sharing core facilities; Option 3 – Rebuild the West Elementary School with capacity of 700. Recommendations to support the implementation of the master plan were presented following the options. Since West Elementary currently sits on an unusually large site, future construction would allow the town to address facility issues of multiple schools within one project. In preparation of the Statement of Interest, MGT updated its enrollment projections in April 2017.

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 22 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 20 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.

APS Strategic Plan and Goals; Nancy Duclos, PhD, Assistant Superintendent of Schools and Sheldon Berman, EdD, Superintendent of Schools, presented to the school committee on June 9, 2016

Is there overcrowding at the school facility? YES

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

The term "functional capacity" takes into account the types of programs and services that are actually provided in the various classroom spaces. According to the analysis by MGT, the current functional capacity of West Elementary School is 637 students. In the 2015-16 school year, the actual population of West Elementary was 658 students, which is 21 students above its functional capacity. Because a number of students and programs were redistributed to other elementary schools, the 2016-17 enrollment declined to 637. Both the MSBA enrollment projections and MGT's update have projected that in 2026-2027, West's student enrollment will be 742 students, or 105 students over capacity. This projection means that West Elementary would continue to have the highest population of any elementary school in Andover. According to the MSBA report received in April 2017, total district K-5 enrollment in 2026 is projected to reach 3,011 students, compared with the current 2700. MGT projects 2893 students by 2025 and confirms MSBA's projection for 2026, so the projections are essentially in agreement. The MGT analysis also looked at each school's space utilization rate. West Elementary School's utilization rate now stands at 100% and is projected to reach 116% by 2026. However, overall capacity at the elementary level for all five elementary schools is 2,718. When enrollment K to 5 reaches 3,011 in 2026 the district will be at 111% of capacity and will have no place to house the increased enrollment.

Overcrowding currently exists in a number of areas at West. To accommodate needed programs, two classrooms (literacy and computer/maker space) were created out of a portion of the media center space. In the Special Education and English Language Learning area, finding space for assisted study programs is difficult. These study programs are scheduled for smaller groups of students, most of whom have Individual Education Plans or ELL service plans that require this accommodation. Currently, some of these student groups are housed in an open commons area with office partitions separating the areas, providing no privacy. Other small groups are forced into areas not designed for formal teaching; half of a former performance stage has been reconfigured into classroom space for the OT/PT programs with the other half utilized as a SPED speech classroom. There is no handicap access to either space. The administrative functions necessary to this department do not always receive the level of privacy that should be accorded the students with special needs. West Elementary offers inclusive programs as well as "The BRIDGE," a very specialized program for students on the autism spectrum. Often referred to as a substantially separate program, a one-to-one student-teacher environment is necessary in the BRIDGE. With the school already over capacity, West Elementary is unable to provide district students with appropriate therapy and small group spaces to meet the needs of this unique population, including a motor development space and a safe room for when students are overwhelmed—spaces that neighboring districts are able to provide for similar populations.

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.

Not applicable

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.

District administrators develop the budget to: align with School Committee priorities; meet all mandated program requirements, contractual obligations and high school accreditation standards; and implement the district's strategic plan. Each fall, the administrators review school and department budgets and present the needs to the School Committee. Meanwhile, the Town Manager recommends a district budget amount to align with expected revenues. The Town and School Department also formulate a capital improvement plan that addresses building maintenance, capital projects, and technology. Capital items are on the Town Meeting warrant and not part of the school budget. In the past 3 years, funds for these needs were limited, so the town's facility department focused its resources on preventive maintenance. After a March public hearing, a final recommendation goes to the Town Manager. The Board of Selectmen and Finance Committee submit their recommendations to Town Meeting, which adopts the operating and capital budgets. Rising health, retirement and OPEB costs have constrained resources for the town and the schools. Over the past 7 years, the district has received modest budget increases averaging 3.46%. The district did not experience staff reductions in FY17, but the budget provided for only modest steps to reduce elementary class sizes and address SPED and ELL needs. A significant financial pressure in FY17 and projected for FY18 is out-of-district (OOD) placement costs for SPED students. Two students whose private tuitions totaled over \$650K moved into the district and had to be absorbed into the budget. Fewer students aged out or graduated from OOD placement. The district is discussing the FY18 budget with the town and anticipates an increase in the range of 4%, which would enable the district to meet its obligations and implement a new high school schedule, but would not allow for other improvements.

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).

Originally constructed in 1951, West Elementary received its first addition in 1956 and then housed students from kindergarten through grade six. The second addition to West Elementary was completed in 1968. It included a media center, cafeteria, auditorium, faculty room, gymnasium, new offices, nurse space, conference room, reception area and two classroom wings (pods) with a large open area in the center of each pod. Much of the school was built according to the open-space concept, without walls to separate classes. This style of construction proved to be a major detriment because it offered an abundance of visual and auditory distractions for students and provided no privacy for adults' confidential meetings. In 2001, classrooms in the two open pods were walled in, leaving a large open area in the center of each pod, creating heating and ventilation issues in classrooms. In the ensuing years, West Elementary has added movable partitions to the open area to create small areas; however, the partitions do not reach the ceiling, do not provide privacy, and do not block sounds from adjoining areas. The partition walls have been used as a last resort, but are an unsatisfactory way to create small instructional areas. In September 1988, West Elementary became a K-5 school when the school system was reconfigured to K-5, 6-8, and 9-12. West Elementary has the second largest population of Andover's ten schools, exceeded only by Andover High School. It currently serves 637 students with a staff of 120 teachers, tutors, instructional assistants, and other support staff.

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

94000

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 school site encompasses 11.8 acres of developed and wooded land. The site includes the existing school building, additions, approximately 115 dedicated parking spaces, play structures and outdoor tables, open field, paved play areas and two ball fields. As currently configured, the existing parent and bus drop off and pick up is constrained and limits staff's ability to provide safe and convenient access during the morning arrival and afternoon departure times. The number of parking spaces (115) is inadequate for the 120 personnel assigned to this facility, leaving few spaces for parents, delivery vehicles, district employees, contracted service personnel and community visitors. Main access to the school is off a major road with no parking allowed. One public side street has limited parking space, but it has been restricted by the local residents. Near the school is a small, corrugated metal, temporary structure for snow removal equipment. No other public or private buildings share this site with the school facility. There are no known existing conditions that would impact a potential project at the site.

In January 2012, the district's Plant and Facilities Department worked with Pare Corporation to develop a Site Improvements Master Plan for the entire district. On the basis of this plan, over the next two years the site deficiencies at two other schools were addressed. West Elementary was also a priority, with major concerns involving inadequate exterior lighting, ponding/poor drainage near the playground, inadequate parking, deteriorating driveways and walkways, and lack of compliance with ADA.

Pare Corporation issued a site report with photographs detailing areas at the West Elementary site that are not in compliance with the Americans with Disabilities Act. Problems include, but are not limited to, lack of above-ground signage and van-accessible space for handicap parking, lack of handrails next to entrance

steps, deteriorating asphalt in walkway, lack of curb cuts at main entrance, slope/grade issues on walkways, lack of accessible tables outdoors, and lack of an accessible path to the playground. This report is attached.

At that point, before site improvements could get underway at West Elementary, the Town put the plan on hold due to costs and indecision over how to handle the obvious overcrowding at the school. The Town did not want to approve funds for repairing/upgrading the site when the viability of the facility itself was in question.

In 2016, MGT assessed the condition of each school's grounds, measuring the amount of capital needs or deferred maintenance for each site, including driveways and walkways, parking lots, playgrounds, utilities, fencing, etc. West Elementary received a score of 65.18, which equates to a rating of "Poor," defined as "The site and/or a significant number of its systems are in poor condition and will require major repair or renovation."

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)

58 Beacon Street, Andover, MA 01810

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 facility is a single-story, split-level, K-5 elementary school. Construction is steel-framed structure with brick masonry exterior and concrete masonry back-up walls. The brick has been well maintained and shows little sign of deterioration. In 1993 an aluminum perimeter drainage and gutter system was installed. The window assemblies on the 1968 addition (including the two pods) are non-thermally broken single-glazed fixed and casement style units. The window assemblies on the original building, representing approximately 40% of the windows in the school, were replaced in 2001 with aluminum framed, double-glazed, fixed and hopper-style units. Some of these insulated windowpanes have condensation, indicating that the seal in the glazing has been compromised. The old single-pane windows can allow rooms to feel drafty. The entry doors are aluminum, hollow-core storefront units in aluminum frames with single-paned, non-thermally broken glass in anodized aluminum frames. A new PVC roof was installed in phases between 2005 and 2011. The R-values of the insulation in the original parts of the building as well in the 1968 window assemblies meet the codes that were in place at that time, but are below today's standards; the roof and windows that were replaced between 2001 and 2011 have higher R-values.

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

Year of Last Major Repair or Replacement:(YYYY) 1988

Description of Last Major Repair or Replacement:

This is the year the final addition was erected.

Roof Section A

Is the District seeking replacement of the Roof Section? NO

Area of Section (square feet) 94000

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

PVC (white)

Age of Section (number of years since the Roof was installed or replaced) 6

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

NA

Window Section A

Is the District seeking replacement of the Windows Section? NO

Windows in Section (count) 151

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

The window assemblies on the 1968 additions are non-thermally broken single glazed fixed and casement style units.

Age of Section (number of years since the Windows were installed or replaced) 17

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

NA

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).

All unit ventilators were replaced in 1996. There was a new generator installed and emergency power distribution upgrade in 2001. Both boilers were replaced in 2008. Also in 2008, the school received a lighting upgrade. Although new devices, equipment and fixtures were provided, the existing wiring, raceways, and boxes were generally reused. The facility is generally well maintained and clean; the systems, however, do not reflect nor do they meet the needs of a modern facility. The piecemeal approach of having expanded these systems and the need to work around existing ongoing operations with budget constraints has resulted in inadequate capacity for expansion. Code changes over the years have resulted in existing systems that do not meet today's electrical codes. Most of the existing systems are not suited for expansion due to the incompatibility of new technologies. Replacement parts are no longer available for many of the systems. Replacement of all of the electrical systems for this facility would be required under any potential renovation program. The current electrical system does not provide an adequate number or types of outlets for modern technology needs. Most classrooms have only two or three duplex outlets; teachers must use extension cords or power strips to enable multiple students to plug in at the same time. This situation poses the risk of overloading the circuits and also presents tripping hazards. Power strips are also widely used in the office area because there are an insufficient number of outlets. Because of its age, the building lacks a fire suppression (sprinkler) system; such a system would have to be installed if the building underwent a major renovation in the future, which would add greatly to the cost of the project. The fire alarm system has been updated over the years to a visual and audible system, but it does not offer voice evacuation. Most of the plumbing fixtures date from the original construction and do not meet current code for water conservation. The temperature controls for the individual classrooms are outdated and generally ineffective.

Boiler Section 1**Is the District seeking replacement of the Boiler?** NO**Is there more than one boiler room in the School?** YES**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-There are 2 boilers. Age: 9 years each.

Age of Boiler (number of years since the Boiler was installed or replaced) 9**Description of repairs, if applicable, in the last three years. Include year of repair:**

NA

Has there been a Major Repair or Replacement of the HVAC SYSTEM? YES**Year of Last Major Repair or Replacement:(YYYY)** 1996**Description of Last Major Repair or Replacement:**

All unit ventilators were replaced in 1996.

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? YES**Year of Last Major Repair or Replacement:(YYYY)** 2001**Description of Last Major Repair or Replacement:**

A new generator was installed and a building-wide emergency power distribution upgrade was completed. Also, lighting was upgraded in 2008

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 within the building have been maintained over time, but many are now worn and in need of replacement. Lighting quality in most areas of the school is sufficient due to the large window sizes. An upgraded lighting package was installed in

2008, including T-8 fluorescents in all classrooms. This upgrade accommodated the areas that were newly partitioned by divider walls. Fluorescent lighting was also installed in the storage closets that were converted into instructional spaces. This year, hallway lighting was replaced with LED fixtures. The acoustic quality of the school is fair, with acoustic treatment limited to a grid acoustic ceiling. Some classrooms have considerable background noise from unit ventilators or from adjoining music classes. Consistent heating and ventilation are problematic, with dramatic temperature swings throughout the building year-round. The corridor finishes are a mixture of painted CMU and painted wallboard and are in fair condition. Wall treatments in classrooms and offices are wallboard and paint. Wallboard in the 1968 addition has damage in need of repair.

Floor finishes include VCT, wood, carpet, ceramic tile and blue stone. The floor tiles in the front portion of the building have been replaced one by one as they broke; therefore they are mismatched and, while serviceable, give a poor impression to parents and visitors. The floor tiles in the bathrooms are in particularly poor condition; beyond their being mismatched in appearance (two adult bathrooms, A-Pod boys' bathroom, both fifth grade bathrooms, both first grade bathrooms), it is no longer possible to get the tiles and grout clean after years of ground-in grime and stains. The dirty appearance reflects poorly on the value we say we place on children. The wood floor in the upper gym buckles when the weather is humid and has repeatedly led to students tripping. In 2008, the school received an upgrade of the ceiling and hallway flooring. The custodian replaces water-stained ceiling tiles as needed. The office received new carpet three years ago (left over from another district project).

The gymnasium walls are glazed, faced brick. The interior doors are solid core wood. The majority of hardware has been replaced to provide ADA accessibility, better security and improved keying options. Partition walls were built in 2001 to divide the open-concept areas in both pods. Other partitions were installed to separate the office spaces. The necessity of erecting dividers within rooms to create additional segments of space has compounded heating and ventilation problems. While the building is classified as one-story, it is actually a split-level. Because of the site's uneven topography, some of the school's classrooms are located in a wing that is several steps above the rest of the building (about a three-foot differential). The basement is the site of the boilers and ventilation equipment and is also used for storage of school materials, which has not been a satisfactory location because of moisture there.

Plumbing pipes and fixtures date from the original construction, with the exception of items repaired over time. The number of bathroom facilities meets plumbing codes for the total number of students in the school; however, the location of the facilities does not correspond to the ages and groupings of the students according to where they must be served, thereby causing inconvenience, "accidents," and loss of instructional time on a daily basis. Some student restrooms and some adult restrooms are ADA compliant, but others are not. Each classroom has a sink.

In terms of instructional technology (IT), most rooms have two data drops, which is increasingly insufficient as the district implements the Andover 1:1 technology program. The school's network cabling is Cat5, which is still operational, although districts are moving to Cat6e to support gigabit connections. The district is in the process of installing VOIP in all schools. Any room that has a computer will be able to have a telephone. Currently, all standard classrooms have intercom communication to the office; closets and other spaces that have been converted into SPED/small instruction rooms do not have intercom access.

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

West Elementary School offers a comprehensive education program to students in grades K-5. The building's space and physical condition limit teachers' ability to create innovative teaching spaces and apply the most up-to-date instructional approaches. Spaces that were not intended to be used for student instruction are now so used with regularity. Small classroom spaces can no longer be expanded in size or increased in number, even as enrollment continues to rise and the student population becomes more differentiated. The educational program is rich, and the school still strives to grow academically, but lack of adequate space constrains this growth. An inordinate amount of time is spent on solving learning space problems rather than innovating. This is particularly true for the principal, who is forced to become a problem solver

rather than an instructional leader. Students often wait to access computers, there is only one small maker space and it was been carved out of the media center, and there is virtually no space for project-based learning. The cafeteria seats 150 and the auditorium seats 350. With 637 students plus faculty and staff, neither room is large enough for a total school assembly; therefore, programs have to be presented twice to reach all students, which detracts from the sense of unity we try to build as part of our school climate initiative. Special education spaces (resource rooms) are overcrowded, shared among teachers, and regularly have students in different grade levels working on different lessons. Spaces that were planned as administrative offices and tutorial rooms now house guidance counselor/school psychologist, speech/language and occupational therapy, and academic remediation services. In addition to lacking appropriate privacy, these spaces regularly house four or more students, where only one is recommended. There is a lack of common space for teachers to work or have grade level or data meetings. The space limitations of the current building make it increasingly challenging to conduct these programs effectively. There is a lack of storage space in the classrooms, and limited counter space to spread out projects, or places to have accessible instructional materials for children. The administrative offices are in the center of the building, not located near a door; even though there is a buzzer system plus cameras in the halls and at the two main entrance doors, the location of the offices makes it difficult to monitor and control access to the building. In addition, once visitors enter the front door of the building, they must then proceed down a hallway and around corners to find the maze of offices in the building's interior.

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, a description of the cafeteria, gym and/or auditorium and a description of the media center/library (maximum of 5000 characters).

In the table below, the column on the left lists the actual sizes of the core educational spaces at West Elementary. There was not sufficient space to enter the MSBA Standards for that space. However, almost every educational space at West Elementary fails to meet MSBA's standards and therein lies a significant factor in the overcrowded conditions.

Actual Space at West Elem.

Kindergarten–half day – 1317 sq. ft.
 Kindergarten–all day – 1320 sq. ft.
 Kindergarten–all day – 1186 sq. ft.
 Kindergarten–all day – 806 sq. ft. w/NO toilet
 1st grade – 869 sq. ft.
 1st grade – 860sq. ft.
 1st grade – 857 sq. ft.
 1st grade – 870 sq. ft.
 1st grade – 860 sq. ft.
 2nd grade – 804 sq. ft.
 2nd grade – 794 sq. ft.
 2nd grade – 800 sq. ft.
 2nd grade – 798 sq. ft.
 2nd grade – 975 sq. ft.
 3rd grade – 976 sq. ft.
 3rd grade – 807 sq. ft.
 3rd grade – 796 sq. ft.
 3rd grade – 788 sq. ft.
 3rd grade – 792 sq. ft.
 4th grade – 798 sq. ft.
 4th grade – 800 sq. ft.
 4th grade – 792 sq. ft.
 4th grade – 796 sq. ft.
 4th grade – 962 sq. ft.

5th grade – 833 sq. ft.
 5th grade – 840 sq. ft.
 5th grade – 844 sq. ft.
 5th grade – 838 sq. ft.
 5th grade – 843 sq. ft.
 SPED Resource – 374 sq. ft.
 SPED Resource – 794 sq. ft. – two teachers share
 SPED Resource – 792 sq. ft. – two teachers share
 SPED Resource – 963 sq. ft.
 Intensive SPED – 770 sq. ft.
 Intensive SPED – 783 sq. ft.
 Intensive SPED – 814 sq. ft.
 Lower gym– 2390 sq. ft.
 Upper gym – 3779 sq. ft. – two classes share
 Music – 734 sq. ft.
 Music on stage – 820 sq. ft.
 ELLs & Tutor – 1240 sq. ft. – four teachers share
 Art – 832 sq. ft.
 Art – 845 sq. ft.
 Library/Media - 1965 sq. ft.
 Computer room/Maker space – 606 sq. ft.
 Literacy – 362 sq. ft.
 Cafeteria – 3644 sq. ft.
 Speech – 176 sq. ft. ft.
 Speech in closet – 120 sq. ft.
 Speech – 264 sq. ft.
 Auditorium – 3772 sq. ft.
 OT & PT & SPED RR – share 820 sq. ft. on stage
 OT/PT in partitioned hallway – approx. 160 sq. ft.
 Psychologist – 154 sq. ft.
 Conference room – 342 (154) sq. ft.
 Nursing clinic – 360 sq. ft.
 Principal's office – 130 sq. ft.
 Assistant principal's office – 103 sq. ft.

There are no science labs and no rooms designated for the study of science. Two pods were added in 1968. They are attached to the main building. Each pod houses standard classrooms around its perimeter. The interior section of each pod was wide open and has now been separated by wall partitions for assorted small-group instruction areas, including Title I math, speech for the BRIDGE program, small-group reading support, some ELL instruction, and language lessons for high-functioning students with autism. Last summer a hollow wall was built to separate the literacy room from the computer room/maker space; however, the noise transfers freely between the two rooms and distracts both groups of students. The cafeteria seats 150 and the auditorium seats 350-375. With 637 students plus faculty and staff, neither room is large enough for a total school assembly; therefore, programs have to be presented twice to reach all students. All of the kitchen equipment is original to the building and is energy inefficient. The conference room contains the laminator, photocopier, refrigerator, a counter, and two storage cabinets, so only 154 sq. ft. of the room's space is available for meetings with parents and others. The lower gym serves one class at a time. The upper gym is larger, but is divided so that two classes use it simultaneously. There is a groove through the center of the gym floor where a folding divider once was. The groove has a lip that has already caused one student to trip and be sent to the hospital for glue stitches.

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).

The term “functional capacity” takes into account the types of programs and services that are actually provided in the various classroom spaces. According to the analysis by MGT, the current functional capacity of West Elementary School is 637 students. In the 2015-16 school year, the actual population of West Elementary was 658 students, which was 21 students above its functional capacity. The 2016-17 enrollment declined to 637, in part because a number of students and programs were redistributed to other elementary schools. Both the MSBA enrollment projections and MGT’s update have projected that in 2026-2027, West’s student enrollment will be 742 students, or 105 students over capacity. This projection means that West Elementary will continue to have the highest population of any elementary school in Andover. According to the MSBA report received in April 2017, total district K-5 enrollment in 2026 is projected to reach 3,011 students, compared with the current 2700. MGT projects 2893 students by 2025 and confirms MSBA’s projection for 2026, so the projections are essentially in agreement. The MGT analysis also looked at each school’s space utilization rate. West Elementary School’s utilization rate now stands at 100% and is projected to reach 116% by 2026. However, overall capacity at the elementary level for all five elementary schools is 2,718. When enrollment K to 5 reaches 3,011 in 2026 the district will be at 111% of capacity and will have no place to house the increased enrollment.

The facility has limited classroom spaces, particularly to meet requirements in special education and one-to-one instruction. Because enrollment within these programs has grown, the number of spaces needed for support has also increased. The ELL program and the math and reading remediation programs have experienced significant growth. Finding appropriate spaces in which to deliver these services has been challenging, and new segments of space have been created throughout West Elementary by constructing both permanent and temporary walls to subdivide classrooms and the open common areas. For example, closets have been converted to instructional space; periodically teachers are put in the position of having to expand into the hallways; the stage in the auditorium is used for music classes; and the stage in the lower gym has been repurposed for occupational and physical therapy services and a speech class, which is even more problematic since the stage is not handicapped accessible. One section of the OT/PT program has to be offered in a partitioned space in the hallway between the music room and the first-grade classrooms. Programs are regularly shifted to different spaces both within the school to maximize use of space and provide appropriate settings for students to work. Additionally, space for kindergarten is insufficient; enrollment numbers this year required three families who tried to register after space filled in August to select another kindergarten across town. West Elementary regularly sees an influx of 10-15 additional students in the first grade who did not attend kindergarten in Andover. The auditorium is a large room; unfortunately, its outdated design features a sloping floor and fixed seats, which renders it unusable for anything except assemblies and performances. Storage space for instructional materials is virtually non-existent, because all available space is needed for students and staff.

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).

Over the past 66 years, millions of dollars have been spent at West Elementary on preventative maintenance with replacement of boilers, roofs, some windows, lighting, and many internal repairs. Piping and wiring have had to be routed along the ceiling to replace those buried in the walls and floors.

Presently, the district uses a manual system to provide preventive/predictive maintenance services and uses a combination of in-house staff (maintenance and custodial) and contractors to complete the tasks. Contractors are utilized for jobs requiring specialized licenses, such as fire alarm, boiler and fire extinguisher maintenance. During the first three weeks in March, West Elementary required daily maintenance, which is above average, but the school generally requires maintenance more often than other buildings in the district do.

Capital repair projects at West Elementary have included:

1993 – installation of aluminum perimeter drainage and gutter system

- 1996 – replacement of all unit ventilators
- 2001 – replacement of about 40% of windows (those on original 1951 building)
- 2001 – installation of new generator and upgrade of building-wide emergency power distribution
- 2005-2011 – replacement of original roof with PVC roof
- 2008 – replacement of both boilers
- 2008 – upgrade of ceiling, hallway flooring, and lighting

The district analyzed the work orders of the five elementary schools that were in operation for the entire period of 2012-2016. Of these five schools, West Elementary submitted the highest total number of work orders: 752. (Other schools ranged from 453 to 709). The total amount of money spent on repairs at West Elementary also exceeded that of the other four schools over the same time period: \$445,178. (The other schools ranged from \$287,461 to \$412,850.) These figures break down to an average of about \$89,000/year being spent at West Elementary for maintenance, or nearly \$1/square foot/year. These expenditures are difficult to maintain in operational budgets from year to year, do not allow the district to address major capital needs of a building of this age, and are sapping funds for maintenance that could be better directed to educational programs.

The MGT assessment of building conditions scored West Elementary at 69.42, which translates to a Rating of “Poor,” defined as “The building and/or a significant number of its systems are in poor condition and require major repair, renovation, or replacement.” West Elementary received the lowest score of any of the district’s comprehensive elementary schools.

Priority 1

Question 1: Please provide a detailed description of the perceived health and safety problem(s) below. Attach copies of orders or citations from state and/or local building and/or health officials.

Andover Public Schools has performed various health-related tests in West Elementary School during the 2016-17 school year. Results of the testing have repeatedly indicated the presence of conditions that have the potential to seriously jeopardize the health and safety of the building's occupants.

The first condition concerns the exceeded maximum contaminant level (MCL) of lead in the water supply. Initial testing by the Department of Municipal Services of Andover, Massachusetts, took place on February 24, 2017 with the results above the MCL for lead (test results were 0.082 mg/l). Where the MCL for lead is over 0.015 mg/l, further testing is required. Follow-up testing yielded results that still exceeded the MCL for lead (0.129 mg/l). Work was undertaken to replace over five feet of piping from the branch point and to install a new fixture (water bubbler) at the location where the lead level was unusually high.

Retesting was performed at the location on March 9, 2017, resulting in (0.175 mg/l), and on March 15, 2017 (0.308mg/l)—levels that were still above the MCL for lead. Further testing and determination of the lead source is still in progress. However, due to the rapid increase in lead levels at this location and the failure of the extended pipe replacement to ameliorate the problem, there is a concern that the problem involves a large portion of the building. Due to the age of the building and the location of the piping buried in the walls, accessing and replacing all the piping, if determined necessary, would be extremely invasive.

Additional testing occurred on all 88 fixtures (faucets and water bubblers) within the building. This testing was completed on March 27, 2017. As a result, 11 fixtures are being permanently taken offline due to the test results identifying high levels of lead contamination. Testing/monitoring of the water continues and is being conducted in conjunction with a certified state laboratory at the Andover Water Treatment Plant. The latest report is attached.

Additionally, following complaints by the building's occupants of "sick building syndrome," CO² testing was conducted by Andover Facilities Department on January 17, 2017. Eight staff members, all of whom already suffered from allergies, reported an increase in respiratory problems and incurred absences as a result. The test results recorded high levels of CO² based on ASHRAE and OSHA standards. EBI Consulting was brought in to review the conditions and provided a report with recommendations dated February 13, 2017. This report is attached. APS and Municipal Services acknowledge the recommendations and will continue to monitor the air quality in the building.

In addition, the two pods that were added in 1968 have recently pulled away from the main structure.

Priority 1***Question 2: Please describe the measures the district has taken to mitigate the problem(s) described above.***

Although testing continues throughout the building, the problem of lead contamination appears to be confined to the original sections of the building, not the pods that were added in 1968. The one drinking fountain that was initially identified as non-compliant for levels of lead was physically removed and the connecting pipe was capped. Three faucets that tested high are still shut off. Andover has installed lead filters on a limited number of faucets that tested above allowable levels, mostly in the first grade and fifth grade classrooms, and is undertaking further extensive testing to determine the source point(s) in the system of the lead contamination.

All parents and staff were informed of the issue by means of intra-district communications. Parents and the general community continue to receive updates as testing proceeds and more information becomes available. APS is also planning to hold a public forum for parents, which will include representatives from the schools, facilities, Health Division, and Public Works Department.

The district continues to deal with one problematic site. A water bubbler was removed from room C12 at West Elementary School and replaced with a new fixture, but it still showed elevated lead levels. Next, all of the plumbing and copper pipes feeding that fixture were replaced, and the lead levels actually rose. That fixture is currently off limits, and the facilities department is investigating a number of possible causes.

Because there is labor and expense involved in installing filters on the bubblers and because those filters would require continual monitoring and replacement, all bubblers that tested at or even just below the maximum level of lead allowed were capped. To offset the loss of fixtures that have been taken offline, the district is purchasing six water bottle filling stations for the school. If necessary, bottled water will be brought into the building. The district will continue to periodically test the system and try to pinpoint the source of the lead contamination.

Andover is addressing the recommendations noted in the EBI air quality report. Rodent infiltration was found and is being mitigated. Dust and debris in ductwork, ceiling tiles and near air filters was cleaned or removed and these areas will continue to be cleaned regularly. Mold in sink areas, including a wall and closet in one kindergarten classroom, has been eliminated. Standing water found in the basement has led to removal of leaves in outside drains and clearing drains of roots and debris. Although water intrusion makes the basement a poor location for storing materials, the crowded classroom and office conditions on the main floor of the school have left few other options for storage. The wet cardboard storage boxes were replaced with plastic boxes. Some wet and moldy materials had to be discarded. Large items that will not fit in plastic boxes are now stored on the gym floor. Teachers have been reminded to remove boxes of materials that were being stored in a manner that blocked ventilation grates. Regular testing continues in order to monitor air quality.

The 1968 pod additions have been bolted to the main structure to ensure no further separation. This situation will be monitored for any further separations and safety implications.

Priority 1

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.

The lead contamination has not specifically affected the educational program at this time. There was minimal disruption caused by the replacement of pipes. Parents and staff remain understandably concerned about the extent to which they or their students may have been exposed to the contaminated water. The repair costs will eventually impact the school budget. There will be a need for additional supervision because students cannot access water within their classrooms where those faucets have been shut off; thus, students will need to leave the room to wash their hands, get water to clean their desktops, or for a science experiment, etc.

The air quality issue led to a higher than normal number of teacher absences. Approximately twelve teachers were affected and were absent from school due to illness from long-time exposure to the poor air in certain areas of the building. Students, who move around the building and go outside during the day, did not seem to be affected to the extent that teachers have been.

Please also provide the following:

In the space below, please tell us about the report from an independent source that is not under the direct control of the school district or the city/town, stating that the facility is structurally unsound or jeopardizes the health and safety of the students. The entirety of this report should be submitted in hard copy along with the hard copy of the district's SOI.

Please note that the MSBA will accept an official report from a city or town department/employee, if the person preparing the report is a licensed building inspector, architect, or engineer. For example, a report from the district, city, or town maintenance or janitorial department would not meet this requirement.

Name of Firm that performed the Study/Report (maximum of 50 characters):

Town of Andover Municipal Services

Date of Study/Report: 3/20/2017**Synopsis of Study/Report (maximum of 1500 characters):**

Lead in the tested fixture was significantly higher than normal. Even after remediation, the level of lead contamination in the water exceeded allowable levels. Testing will continue beyond the time that this SOI must be submitted. Additional reports of testing results will be provided to MSBA upon request.

Is the perceived Health and Safety problem related to asbestos?: NO

If "YES", please describe the location in the facility, if it is currently viable, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

Is the perceived Health and Safety problem related to an electrical condition?: NO

If "YES", please describe the electrical condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

Is the perceived Health and Safety problem related to a structural condition?: NO

If "YES", please describe the structural condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

Is the perceived Health and Safety problem related to the building envelope?: NO

If "YES", please describe the building envelope condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

Is the perceived Health and Safety problem related to the roof?: NO

If "YES", please describe the roof condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

Is the perceived Health and Safety problem related to accessibility?: NO

If "YES", please describe the areas that lack accessibility and the mitigation efforts that the district has undertaken to date. In addition, please submit to the MSBA copies of any federally-required ADA Self-Evaluation Plan and Transition Plan (maximum of 2000 characters):

Priority 2***Question 1: Please describe the existing conditions that constitute severe overcrowding.***

The existing conditions at West Elementary are overcrowded because: 1. Enrollment is higher than the building was designed to accommodate, and 2. Requirements for learning environments—particularly around special education, ELL and remedial education service delivery—have changed since the building was constructed. These two pressures have combined to produce an inadequate learning environment for all West Elementary students.

West Elementary enrollment was at least 21 students over capacity in 2015-16 and is at capacity in 2016-17. This number would be higher, but some programs and some kindergarten students have been relocated to other district schools. As overall district enrollment increases at the elementary level (by the year 2026 it is projected to be 3,011 students, not accounting for new 40B development already approved in town), it will be impossible to continue to make these accommodations since all schools, including the new Bancroft Elementary, are now at or approaching capacity themselves.

In addition, the district has created special programming that is supporting more SPED students in the district at their neighborhood or nearby schools. This decision affects enrollment, but more specifically the increase in SPED and ELL students requires particular uses of space. Overcrowding presents educational challenges at West Elementary in a number of areas, particularly in the delivery of special education and one-to-one required services on IEP, ELL or 504 plans. Enrollment within specialized programs has grown significantly, and there is no additional or repurposed space available to accommodate this type of learning. Small groups of special education students are force-fit into areas not designed for formal teaching and learning.

West Elementary does not have adequate space to deliver services for all students. The Andover English Language Learner (ELL) population has grown 163% between the 2011-12 and the 2016-17 school years. Students with disabilities make up nearly 19% of the district population and 21% of students at West Elementary School. Building space has been repeatedly modified to support these expanded types of learning, but programs are now unreasonably constrained and the school is approaching a breaking point. West Elementary School's parents are becoming increasingly vocal about their dissatisfaction that their children do not receive the educational advantages afforded by the district's more up-to-date facilities.

In the fall of 2014, a new (replacement) elementary school opened in the district and another nearby elementary school was reconfigured to serve only PreK students. As a result, West Elementary lost three upper-grade classes and gained three lower-grade classes: one kindergarten, one first grade, and one second grade. The school does not have space in the primary wing for the additional kindergarten class; therefore, that class had to be assigned to a room in the fifth-grade hallway. This classroom also lacks a bathroom, which is a serious disadvantage for kindergartners.

Two pods were added to the building in 1968. These pods house the majority of the school's regular education classrooms (grades 2-5). When installed, it was anticipated that the pods would have a useful life of 15 years. It has now been 49 years and the wear and tear is increasingly beyond the scope of routine maintenance.

The original computer lab was converted into a space for tutoring and ELL students. About one-fourth of the media center was turned into a space for literacy tutoring. A former performance stage in the lower gym has been reconfigured into classroom space for OT and PT programs, plus a speech classroom. Other related services, such as Adaptive PE, are also offered on this stage.

West Elementary has three music teachers and only one music room. Two of the music teachers must teach on the stage of the auditorium. The principal juggles schedules for these two part-time teachers to ensure they do not overlap schedules for that shared space.

The same situation exists for the physical education program. West Elementary has three general education PE teachers and one Adaptive PE teacher. The three general education PE teachers share two gyms—upper and lower. The upper gym is used by two classes at a time, three days a week. The size of the upper gym is inadequate for operating two classes simultaneously. An area near the center of the gym floor buckles in humid weather, causing children to trip when running, and a groove runs through the center of the floor where a folding wall once divided the gym into two undersized gymnasiums. This gym is now divided in half by a curtain. In addition, the gym has extremely loud commercial-size vents that operate all day. The lower gym is smaller in size and is used by only class at a time. The Adaptive Physical Education teacher has no space to offer the five to seven classes needed each week and must resort to offering her program on the lower gym's stage or in the cafeteria, when lunch is not being served.

Scheduling conflicts are inevitable and sap a great deal of the principal's time that could otherwise be devoted to instructional leadership.

West Elementary lacks a sufficient number of small classrooms for specialized support services. The tutoring and ELL instructional areas are housed in the same space and are not near the classrooms of the students they serve.

West Elementary houses the BRIDGE program for the district. This intensive special education program was created eight years ago to serve students on the autism spectrum. The program uses three classrooms and each student has an instructional assistant. Each of the BRIDGE classrooms should have a smaller room adjacent to it for students who temporarily need a space for 1:1 calming. Currently, these students are taken to an office, the nursing clinic, or partitioned spaces in hallways—none of which is private or suitable or even available on-demand.

A Special Education Intensive Program Head is attached to the BRIDGE program to provide oversight and to chair all of the IEP meetings. The Program Head holds several weekly meetings with the six staff members who are affiliated with each of the three BRIDGE classrooms. She does not have an office or meeting place, so often displaces the principal or assistant principal from their small office spaces. On some occasions she has to use the school's conference room.

West Elementary has only one conference room, originally constructed at 342 sq. ft. The space now houses two storage cabinets, the photocopying and laminating machines, and the staff refrigerator and serves as a conference room and workspace for teachers. With only 154 sq. ft. left for meetings, the conference area can comfortably seat six people (eight in a pinch) at the table. In late March, the Program Head called a meeting with a student's parents, advocates, etc. The ten people in attendance had to sit in two rows in order to squeeze into the conference room. The school has no other place for conducting such meetings.

Lack of bathroom facilities and their poor locations are major issues. The nursing clinic does not have a handicap accessible bathroom and there is no sink within the bathroom stall. One kindergarten classroom does not have a bathroom in it, so students must go to a bathroom in a nearby hall. The A-Pod bathroom has one stall for 140 boys to share. The building's one adult bathroom in the front wing of the school can be accessed only by going through either the school psychologist's office or a grade five classroom.

A closet was used for occupational therapy—until someone noticed that the closet also housed an electrical unit with a WARNING sign on it, at which point the room's use was discontinued. Another closet intended for storage has been repurposed for speech therapy. This small area has no windows and no ductwork to provide fresh air.

Some of the support services are clustered in a section of the building that was once open space. These support spaces are separated by partition walls. However, these walls do not go to the ceiling because they would hinder airflow from the existing vents and some areas would receive neither heat nor cooling. These partition walls provide no privacy for the work that is done by support personnel. The layout is a maze that is both inefficient and unwelcoming.

With all available spaces devoted to instruction and other services, storage space has become almost non-existent. Because of air quality problems, boxes cannot block ventilation grates. PE equipment was stored in the basement, where it became moldy from water intrusion. Therefore, the large PE equipment is now stored in the upper gym itself, subtracting even more of the floor space that is badly needed for student activities. Gym mats are stuffed between the rows of fixed seats in the auditorium.

Each of the two classroom pods once had a teachers' workroom. Five years ago, the workrooms were converted into a social worker's office space and a workspace for the Board Certified Behavior Analyst; the BCBA creates behavior plans for all of the autistic and disregulated students K-5 and helps teachers and assistants with tracking data. Neither of these converted areas has a window. The rest of the former teachers' workroom space is used for storage of supplies, as well as desks for the four PE teachers, the Title I teacher, and other roving staff members. The school's one remaining faculty room is used for storage of PTO materials, for a copy machine that is frequently out of order, and as a lunch space for instructional assistants and substitutes.

The main office suite is located in the interior of the building with no direct observation of any entryways. The offices were once used for small group speech, counseling and nursing services. Walls were constructed to create offices that are very small; the principal and the assistant principal each work in offices that measure about 10' by 13'. The principal and assistant principal can meet with only three other people at a time in their offices. The office suite provides very limited space for office staff and a conference/teacher workroom discussed above.

The MGT Master Facilities Study scored West Elementary “poor” for educational suitability (62 out of 100), citing specific concerns that the current enrollment classrooms do not meet size standards, do not adequately support educational programming, do not provide flexible use of space, and do not have sufficient storage. The report also noted the media center is “undersized” and “chopped into so many different areas as to render its function as a library limited to checking books in and out,” the cafeteria is “very undersized,” and the faculty room is “not adequate for number of staff.” Outside the building, there is “not enough parking” and vehicular traffic “backs up onto the street” during pickup.

Priority 2***Question 2: Please describe the measures the School District has taken to mitigate the problem(s) described above.***

Over time, throughout West Elementary, administrators and teachers have employed a variety of strategies to adapt the spaces that were available to them in order to meet the changing needs that a growing population of students presented. These strategies were originally creative, but in recent years have morphed into desperate attempts to juggle groups of children and adults. Students have been forced into areas not designed for formal instruction, with new segments of teaching space created by constructing both permanent and temporary walls. Classrooms and open common areas have been subdivided; closets and teachers' workrooms have been converted into instructional space; instruction occurs in hallways; and the lower gym stage, albeit non-accessible, has been repurposed for special education and therapy services. Computers and charging stations were placed on carts that can be wheeled from room to room; however, the classrooms are so crowded already that it is a challenge to find space for these carts, even on a temporary basis.

Additionally, the locations of educational programs are regularly shifted both within the school and throughout the district, to maximize use of space and provide settings for students to work. Because all of the kindergarten classes were full, the last three children who registered at West Elementary in August 2016 had to be assigned to a kindergarten class at another school. This reassignment means the students and families will have to establish bonds with a completely different set of peers when they return to West Elementary next year, and they will have to adjust to a new environment and operating practices. West Elementary is the only school in the district that is forced to turn students away because of overcrowding.

These makeshift approaches do not, of course, resolve the overcrowded conditions. They are simply an attempt to keep students safe, to maintain as effective an educational program as possible given the physical constraints of the setting, and to make the best of a bad situation until such time as a more appropriate educational facility can be provided.

Priority 2

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.

The configuration that results from moving or inserting walls and temporary dividers does not provide reasonable consistency or privacy for learning spaces or administrative functions. Classrooms have been carved from other spaces, such as the media center or old multi-use rooms or closets, often without suitable ventilation. Students may be required to learn without adequate light or heat, or in too much heat in the early fall and late spring months. Two classes share the gym at a time, offering half of the required space for each, or they are merged with their two teachers trying to adequately supervise and provide behavioral supports for 50 students at a time. There is no clear designated safe space for the BRIDGE students, and because the gym is always in use for PE classes there is no space for them to run and jump when needed; nor is there a quiet space where they can avoid and feel safe from overstimulation. The school has less space for differentiated instruction and student projects and, due to continual space-related problem solving, less time to innovate. Teachers adjust and compensate for the lack of appropriate space, but the educational programs are inevitably compromised. Periodically, students overflow into hallway space for projects, differentiated instruction grouping, or for instructional supports. There is limited room at West Elementary to establish the maker spaces that have become popular and effective teaching tools at other schools. The daily struggle caused by overcrowding affects staff morale. Teachers, in particular, are discouraged because they are unable to implement educational approaches that require more space for students to work independently, in small groups, or on projects that require spreading out materials on walls, floors, or tables.

Overcrowding presents educational challenges at West Elementary in a number of areas, particularly in the delivery of special education and one-to-one required services on IEP, ELL, or 504 plans. Enrollment within specialized programs has grown significantly, and there is no additional or repurposed space available to accommodate this type of learning. Small groups of special needs students are force-fit into areas not designed for formal teaching and learning.

The school does not have space in the primary wing for the additional kindergarten class; therefore, that class had to be assigned to a room in the fifth-grade hallway. This placement separates this one class of children from the other three kindergarten classes, making it harder for the teachers to coordinate activities and share students to meet individual needs. In addition, the makeshift kindergarten classroom is only two-thirds the size of the other kindergarten spaces (806 sq. ft. vs. 1216 sq. ft.), making it difficult if not impossible to conduct some instructional activities that require students to move around the classroom area, gather in small groups, or spread out on the floor to work on a common project. This classroom also lacks a bathroom, which is a serious disadvantage for kindergartners. The children must use the Grade Five bathroom in an adjacent corridor. Each time one or more students heads to the bathroom, they must be accompanied by the classroom assistant. Thus, the assistant is pulled away from instructional activities multiple times each day, which negatively impacts students' learning.

A former performance stage in the lower gym has been reconfigured into classroom space for OT and PT programs, plus a speech classroom. Other related services, such as Adaptive PE, are also offered on this stage. The stage can be reached only by stairs and there is no handicap access. Thus the very space that is, by default, being used by students with special needs is not even ADA compliant. The stage is not appropriate for the therapies and the students in the speech class continually lose their concentration when interrupted by the thumping sounds in the PT and APE space, as well as in the main body of the lower gym, which is used for regular PE classes. Needless to say, speech classes should be conducted in a quiet area where students can hear the differentiated sounds they are learning to pronounce.

Two music teachers share space on the auditorium stage. When the school has assemblies or hosts cultural events, the music teachers are displaced into a general education classroom, which inhibits nearby general education teachers' ability to implement their lessons—and students' ability to focus on those lessons—due to the noise level from the music program.

The upper gym is used by two classes at a time, three days a week. The size of the upper gym is inadequate for operating two classes simultaneously. An area near the center of the gym floor buckles in humid weather, causing children to trip when running, and a groove runs through the center of the floor where a folding wall once divided the gym into two undersized gymnasiums. This gym is now divided in half by a curtain, and the crossover noise inhibits students' ability to hear instructions from the PE teachers. In addition, the gym has extremely loud commercial-size vents that operate all day, adding to students' difficulty in hearing the

teachers' directions.

The tutoring and ELL instructional areas are housed in the same space and are not near the classrooms of the students they serve. Students in both of these programs need quiet areas in order to hear and pronounce words, to build their self-confidence, and to work on the literacy skills they need for a solid foundation. In addition, the students waste instructional time walking through the building to reach their service providers, who are located in distant wings.

West Elementary houses the BRIDGE program for the district, serving students on the autism spectrum. Each of the three BRIDGE classrooms should have a smaller room adjacent to it for students who temporarily need a space for 1:1 calming. It is critical that such students have a safe space that offers virtually no stimulation. Currently, these students are taken to an office, the nursing clinic, or partitioned spaces in hallways—none of which is private or suitable or even available on-demand. Neighboring districts that house similar populations provide a small therapy room attached to each classroom.

The district has made a commitment to implement the Andover 1:1 program, which is designed to provide a computer for every student. However, the classrooms at West Elementary lack sufficient data drops to support this approach. Laptop computers and charging stations have been placed on mobile carts, but the classrooms are so crowded that teachers find it challenging to make space for the carts. Because the integration of technology presents a logistical challenge and teachers are already pressed for time, it is understandable that teachers revert to more traditional methods of instruction. Students are missing out on the benefits that derive from using software to reinforce skills in a remediation setting, to extend knowledge through access to online sources, to conduct science experiments and collect data, or to collaborate with students who are in another classroom/school/state/country. In addition, as the district strives to employ technology in creating environments that promote universal design for learning, thereby making the curriculum accessible to students with varying abilities, the space and infrastructure limitations at West Elementary serve as a roadblock to universal access.

West Elementary has only one conference room. It can comfortably seat six to eight people at the table. In late March, the Special Education Intensive Program Head called a meeting with a student's parents, advocates, etc. The ten people in attendance had to sit in two rows in order to squeeze into the room. The room must be closed off when needed for a confidential meeting. Such closures prevent all of the school's 120 employees from having access to the equipment that is in the conference room—copy machine, telephone, laminator and staff refrigerator—which again disrupts the smooth flow of services and wastes staff time in fruitless walking to a room that cannot be accessed. The meeting held in late March prevented staff from accessing this essential equipment for three hours—including office staff who needed to photocopy documents for a parent who was trying to register a new student. This type of meeting happens on a relatively frequent basis.

The A-Pod bathroom has only three urinals and one stall for 140 boys to share, including those who may be in the maker space, media center, or upper gym. Second and third graders cannot always wait and several accidents have occurred. The building's one adult bathroom in the front wing of the school can be accessed only by going through either the school psychologist's office or a grade five classroom. Since most staff feel uncomfortable disturbing a classroom of 24 students, all adults cut through the psychologist's office to gain access to the bathroom, which disrupts psychometric and other testing and is awkward for all parties.

The support spaces cut out of the center of each pod area are separated by partition walls that provide no privacy for the work that is done by support personnel. The continuous transfer of noise (from telephones, computers, and other equipment) through and above the partitions is distracting and impinges upon productivity. The spaces are backed up against each other in a veritable maze, making it confusing for visitors to find the person with whom they are trying to meet. The layout is both inefficient and unwelcoming.

The main office is located in the interior of the building with no direct observation of any entryways. The offices were once used for small group speech, counseling and nursing services. Walls were constructed to create offices that are very small; the principal and the assistant principal each work in offices that measure about 10' by 15'. The principal and assistant principal can meet with only three other people at a time in their offices. The office provides very limited space for office staff and a conference/teacher workroom discussed above.

Storage space is almost non-existent. PE equipment stored in the basement became moldy from water intrusion, forcing nearly \$2000 worth of equipment to be discarded. The principal now purchases plastic bins for anything stored there. However, large pieces of PE equipment (such as for floor hockey) will not fit into bins. The large PE equipment is now stored in the upper gym itself, subtracting even more of the floor space that is badly needed for student activities. Gym mats are stuffed between the rows of fixed seats in the auditorium and have to be moved whenever there is a performance or assembly.

Please also provide the following:

Cafeteria Seating Capacity:	150
Number of lunch seatings per day:	6
Are modular units currently present on-site and being used for classroom space?:	YES
If "YES", indicate the number of years that the modular units have been in use:	49
Number of Modular Units:	2
Classroom count in Modular Units:	10
Seating Capacity of Modular classrooms:	25
What was the original anticipated useful life in years of the modular units when they were installed?:	15
Have non-traditional classroom spaces been converted to be used for classroom space?:	YES

If "YES", indicate the number of non-traditional classroom spaces in use: 4

Please provide a description of each non-traditional classroom space, its originally-intended use and how it is currently used (maximum of 1000 characters):.

Storage closet repurposed as a speech therapy classroom.

Stage in the auditorium converted into a classroom space shared by two music teachers.

Former performance stage in the lower gym reconfigured into classroom space for the OT and PT programs and a speech classroom.

Another section of OT/PT is provided in a partitioned area of the hallway near the music room.

The computer lab converted into a shared classroom for ELL and SPED (resource tutoring).

Part of the media center was converted into a small maker space for students, plus a workspace for the digital learning teacher.

Two faculty workrooms in the pods converted into a social worker's office and a work area for the Board Certified Behavior Analyst.

A 5th grade CR with no bathroom is being used for a FDK class.

The full-size upper gym was divided into two under-sized gyms.

The principals' offices and the conference room were originally intended for speech or counseling and are grossly inadequate in size.

Please explain any recent changes to the district's educational program, school assignment policies, 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):.

In the fall of 2014, a new (replacement) elementary school opened in the district and another nearby elementary school was reconfigured to serve only PreK students. As a result, West Elementary lost three upper-grade classes and gained three lower-grade classes: one kindergarten, one first grade, and one second grade.

In addition, the district has created special programming that is supporting more SPED students in the district at their neighborhood or nearby schools. This decision affects enrollment, but more specifically the increase in SPED and ELL students requires particular uses of space in the delivery of required services on IEP, ELL or 504 plans. Enrollment within these specialized programs has grown significantly.

West Elementary houses the only elementary BRIDGE program in the district. This intensive special education program was created eight years ago to serve students on the autism spectrum. The program uses three classrooms, with the students assigned by age level.

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

It shall be the policy of the Andover School Committee to provide classroom teaching personnel sufficient to carry out the stated philosophy of the Andover School System.

Pre-K & K: be at or below 20 students per class, and if not feasible, to within a range of 16 to 24.

Grades 1 & 2: be at or below 23 students per class, and if not feasible, to within a range of 19 to 27.

Grades 3-5: be at or below 25 students per class, and if not feasible, to within a range of 21 to 29.

Priority 4***Question 1: Please describe the conditions within the community and School District that are expected to result in increased enrollment.***

Enrollment projections for West Elementary School, provided by the Massachusetts School Building Authority and MGT's study, show an increase over the next decade that will push enrollment well beyond current capacity. Currently, enrollment at West Elementary is 637 students. By the year 2026-27, enrollment at the elementary level across the district is projected to reach 3,011 according to the MSBA analysis. MGT projects that West Elementary will need to house 742 students at that time, 105 students above capacity. West Elementary School's utilization rate now stands at 100% and is projected to reach 116% by 2026. However, overall capacity at the elementary level for all five elementary schools is 2,718. When enrollment K to 5 reaches 3,011 in 2026, the district will be at 111% of capacity and will have no place to house the increased enrollment.

It is important to understand that these analyses are based solely on projected births; they do not include the impact of recently approved building projects in Andover. Schools across Andover are seeing increases in enrollment due to large-scale building projects, including new 40B housing. In the near term, Andover expects to enroll more than 200 new elementary school students from three new or developing sites. The Slate just opened in 2016 with 224 apartments, Northfield Commons is currently under construction with 56 units and The Lodge at Andover court-approved construction of 248 apartments is to begin in summer 2017.

Largely because of the trend toward in-migration over the past years, the district experiences growth in the elementary grades each year. In grades kindergarten through fifth grade in 2017 we had a net increase of 55 students moving from K to 1st grade, 23 students moving from 1st to 2nd grade, 24 students moving from 2nd to 3rd grade, 16 students moving from 3rd to 4th grade, and 17 students moving from 4th to 5th grade. Therefore, although a grade cohort may begin in kindergarten with an enrollment of around 400, by the time that cohort is in 5th grade the cohort has grown to over 500. More recently, we have been experiencing growth during the school year as new developments open to residents. For example, between Oct. 1, 2016 and April 1, 2017, elementary K to 5 enrollments grew by 46 students. This in-migration of families with school age children has been averaging about 60 students per year.

In addition, the demographic makeup of the student body has changed and will continue to change based upon the building projects being undertaken in the community. The number of ELL students at West Elementary has doubled in less than three years, now standing at 30 students. Across the district, ELL enrollment has tripled in the past five years with an average growth rate of 20% a year. The vast majority of these students are in grades K through 3, resulting in an expansion of programs and services to meet their needs throughout their educational experience. In the past ten years, the percentage of economically disadvantaged students has nearly doubled and the number of special education students has increased by 17%. The impact of this growth is that West Elementary and other district schools will need additional small group spaces to provide individual and small group instruction, as well as larger classroom space to accommodate inclusion of students in the regular classroom along with the adults who provide their support services.

Growth in Andover is projected to continue. Several more large projects are in the planning stages with rezoning articles to be presented at the annual Town Meeting in May 2017. A 2013 study of the demographics of Andover by Barry Bluestone, the Director of the Dukakis Center for Urban and Regional Policy at Northeastern University, revealed that Andover had a large concentration of older citizens (age 70 and over) in residential homes, with no school-age children in the homes. A corroborating study conducted in 2017 by the Town of Andover, drawn from state census and assessor data, reveals that 1511 of Andover's 8610 single-family residences (i.e., 17.55%) have at least one occupant age 69 or older. Given their age, these individuals are likely to downsize and sell their homes to younger families moving into the community. An internal district study of home sales and census data over the past two years affirms that trend. In the 485 homes sold during this two-year period, nearly one-fifth were populated only by senior citizens. As a result of the sales, the population of residents age 70 and over in those houses declined from 171 to 75, while the population of residents under 18 increased from 267 to 473. We anticipate this trend will accelerate due to additional senior housing under construction and planned for Andover, placing additional pressure on school capacity. Two related studies are included on the attached thumb drive. They are: Assessing Current and Future Needs of Residents Aging in the Town of Andover Commissioned by the Town of Andover, Division of Elder Services & The Center at Punchard, April 2015 and A New "New Paradigm" for Housing in New England - Barry Bluestone, December 13, 2012

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 multiple changes in size and demographics that are projected for Andover's population are beyond the ability of the school district to influence. The role of the district is to stay apprised of the most current projections and to work with the town and the state to prepare for what lies ahead.

In recent years, programs were relocated across the district and redistricting was performed after the opening of the new Bancroft school. Kindergarten students are required to enroll at other elementary schools once West Elementary goes beyond its capacity (which typically occurs in August).

Currently, West Elementary has the following numbers of students enrolled in its regular education classrooms:

Kdgtn: 23-24 (because of overcrowding, additional K students were sent to another school)

Grade 1: 19-21

Grade 2: 21-22

Grade 3: 18-22

Grade 4: 21-24

Grade 5: 22-24

With the exception of Kindergarten, the overcrowding problems that West Elementary is experiencing are not due to excessive enrollment in terms of district policy. The problems are caused by an out-of-date building's classrooms that are now too small to accommodate today's class size and instructional strategies, coupled with a growing number of children who require specialized services provided in small settings—services and settings that were not envisioned when West Elementary was constructed in 1951. Because other schools in the district are also struggling to provide small-group spaces, there is no simple way to re-district the programs, nor does the district want to assign students with special needs away from their own neighborhoods. Given the demographic changes that are on the horizon for Andover in the next decade, these pressures of functional capacity at West Elementary are only going to intensify.

Andover needs to build town-wide classroom capacity to accommodate this growth, and may eventually require redistricting to balance students at both the elementary and middle school levels. This prediction is significant since special programs and kindergarten students have formerly been relocated from West Elementary to other district schools to alleviate crowding; however, this strategy will become increasingly difficult or impossible to implement as enrollment increases districtwide and other elementary schools begin to face their own issues of overcrowding.

The projected increases in enrollment require the community to address the need for regular and specialized classroom space in the very near future so that student learning and student support services are not compromised. The Town of Andover offers its strong support to this SOI in order that the district meets its space challenges in an educationally sound and fiscally responsible manner.

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.

The earlier response to Priority 2–Question 3 described in detail the pressures that the current overcrowding is already placing on the facility, staff, and students at West Elementary. Those conditions will only be exacerbated as the enrollment at West Elementary increases and growing numbers of students with diverse needs must be served in a facility that was never designed for them. Without additional classroom capacity, the district will be forced either to purchase modular classrooms to add onto schools or to significantly increase elementary class sizes—which would compromise the overall instructional program and the delivery of quality, personalized instruction.

The stage in the auditorium that is used for PT/OT is not ADA accessible since it requires students to climb stairs to this area. This deficiency must be addressed soon because students with motor disabilities will need to access this program.

Finding additional spaces to serve the growing ELL population will be particularly challenging. It will require placing more students than desired into spaces not intended as learning environments. Addressing the need to offer increased services to special needs and ELL students, teachers are required to share spaces resulting in overcrowded rooms where different lessons are being delivered simultaneously. Unfortunately for students, these multi-purpose classrooms tend to be distracting and negatively impact learning.

The general education classrooms are also affected by the growing student population. Not only do those classrooms become filled beyond their maximum functional capacity, the student-teacher ratio rises and students receive less of the individual attention they need to excel. Moreover, students with special needs and their support staff will funnel into the general education classrooms for part of the day, placing even more demands upon room space and staff time. Given the space constraints and inadequate infrastructure at West Elementary, students will have decreased opportunities to integrate computers into their daily learning and to develop the technology-based skills needed for success in 21st century careers. At some point, parents will likely question whether their children are receiving the quality of education they need and deserve in order to be competitive in high school, college and beyond.

The crowded conditions will lead to staff, parent, and student uncertainty as they wonder whether and when they will be assigned to a different school. Adults will be less willing to invest their energy in a school, knowing that they may be uprooted. Faculty will need to devote increased time to professional development in order to hone the skills needed to serve differentiated populations appropriately and effectively in classrooms with more students and greater demands.

Please also provide the following:

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Please explain any recent changes to the district's educational program, school assignment policies, 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). :

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In addition, the district has created special programming that is supporting more SPED students in the district at their neighborhood or nearby schools. This decision affects enrollment, but more specifically the increase in SPED and ELL students requires particular uses of space in the delivery of required services on IEP, ELL or 504 plans. Enrollment within these specialized programs has grown significantly.

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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.

West Elementary School was built in 1951, added to in 1968, and is now past its functional life in terms of building systems appropriate for instructional programming. While the School Committee and the district and school administration have maintained a commitment to offering all required and many desired educational programs for students, these programs are negatively affected by facility constraints. The concern is not that the programs are not available at all; the issue is that the programs' depth and quality are increasingly limited by the facility, and students are being placed at a disadvantage in their educational opportunities and progress. While the teachers and administrators are doing their best to work around the facility's many physical drawbacks and limitations, they have reached the end of what they can accomplish and accommodate through creativity and perseverance alone. It is time to confront and address the escalating constraints of the building itself.

The building has no designated rooms for project-based or hands-on learning in science and engineering, and there is no space to store the supplies needed for such programs. With all areas of the building occupied and in use throughout the day, the school is unable to provide students with breakout areas and areas for collaboration—a skill that is greatly valued in today's job market.

MGT assessed each school's functionality and educational suitability. The score indicates how well the facility supports the educational programs it houses. Aspects examined at each school included:

- The overall environment of the facility with respect to creating a safe and positive working/learning environment.
- Pedestrian/vehicular circulation and the appropriateness of site facilities and signage.
- The existence of facilities and spaces to support the educational programs, (e.g., general and special classrooms, libraries, science labs, gyms), and support spaces (e.g., administrative offices, counseling offices, reception areas, kitchens, cafeterias, health clinics).
- The adequacy of the size of the program spaces.
- The appropriateness of adjacencies (e.g., physical education and music spaces separated from quiet spaces).
- The appropriateness of storage, utilities, fixed equipment, and room surfaces.

West Elementary received an educational suitability score of 62.48—the lowest score of any of the district's comprehensive elementary schools. This score equates to a rating of "Poor," which means "the facility has numerous problems meeting the needs of the educational program and needs significant remodeling, additions or replacement."

MGT assessed the capability of each school's infrastructure to support information technology. West Elementary earned a score of 75.0, which equates to "Fair," defined as "The facility is lacking in some infrastructure to support information technology."

The classrooms in the 1968 addition, which represents a large portion of classrooms in the building, were designed around the open school concept prevalent in the 1960s. The school has been forced to build walls to enclose classroom spaces, use dividers in the remaining open space to create small group support service space, and divide the media center into separate rooms, in an effort to create usable space for classes and support programs. This stopgap effort has compounded problems in heating and ventilation (described in more detail below) and detracted from a positive learning environment. Programs such as special education, English language learning (ELL), reading services, occupational therapy, and physical therapy cannot provide the most appropriate opportunities for students to be successful. The existing spaces for these programs are small and suffer from overcrowding. Due to the lack of sufficient space, programs are shifted to different spaces both within the school and to different schools throughout the district, to maximize use of space and provide appropriate settings for students to work. Thus, the school finds it challenging to provide a consistent learning environment for students with special needs. Special education students lack quiet classrooms where they can work and learn. The gymnasium stage was divided into spaces to provide OT, PT and speech services for special education students; these spaces are less than adequate due to ventilation and heating issues as well as noise. While the impact on learning is difficult to isolate and measure, the impact on students' attention span is clearly evident. Because of cramped working areas, West Elementary School's guidance and school nursing programs cannot provide adequate services and privacy for students and parents. The school's ELL program and math and reading remediation programs can only accommodate those students who most need to receive important services, leaving unserved other

students who could benefit. The main office and administrative areas are located at the interior of the facility in accordance with the original building design. Thus, security programs to deal with intruders and building access control are compromised. In addition, the administrative areas are grossly inadequate in size, the only conference room in the building cannot comfortably accommodate a group larger than eight (a number that many IEP meetings have), there is a severe lack of storage space for instructional and therapy supplies, a number of teachers have to share a classroom, and many of the instructional areas do not meet MSBA standards for square footage.

Finally, the facility is not in full compliance with the Americans with Disabilities Act (ADA). Because of over-crowding, some students must receive instruction on the stage of the lower gym. There is no ramp or other means to serve a student in this stage setting if that student is mobility-impaired. In addition, the school's split-level layout means that some classrooms are accessed by climbing several steps; again, no ramp is available. If a mobility-impaired student, parent, or visitor wants to access those classrooms, they must go all the way around the other end of the school and enter from the reverse side.

While the question in Priority 7 asks for a description of the programs not currently available due to facility constraints, the school community is most concerned that the programs that are already in the building are being compromised by the many limitations of the facility. Variations in heat and lack of ventilation can cause significant learning distractions for teachers and students. The plumbing is insufficient as demonstrated by having only one toilet and three urinals to serve 140 boys in the Grades 2-3 pod. Additional classrooms for early elementary grades would help address concerns about large class sizes as enrollment grows. Additionally, the space for kindergarten classes is already insufficient (one class is in the fifth grade hall and has no bathroom) and enrollment numbers this year required three families who tried to register in August to select another kindergarten across town. West Elementary regularly sees an influx of 10-15 additional students in the first grade, again suggesting that we are not able to provide a consistent learning environment for these early learners at the K-1 level. K-5 programs require adequate space to support the use of technology and science for students, maker space resources, and a media center that can fulfill its designed function, as well as supporting essential technological resources. The loss of the stage also means less space is available for culminating performances of understanding in the regular education program. The lack of sufficient electrical outlets in classrooms limits the use of technology to support the district's 1:1 computer-to-student learning system, as well as technology-supported accessibility to the curriculum for students with varied learning needs and modalities. The classrooms are outdated in terms of providing a modern instructional program with a variety of space and room configurations. The crowded classroom conditions discourage teachers from implementing creative means of instruction, causing them to rely on traditional techniques that keep students seated at their desks.

The school environment suffers due to its overall limitations and the scope of major and minor issues. For example, inconsistent heating and ventilation exists throughout the building because the unit ventilators and controls are outdated and the vents are not optimally placed due to the additions and temporary walls, thereby creating dramatic temperature swings throughout the building year-round. The 60% of the windows that are still single pane, many of which have leaking seals, cannot maintain heat in the winter, leaving those classrooms uncomfortably drafty. Part of the basement is prone to water intrusion, which impacts building air quality and storage space. These interrelated environmental issues lead to increased staff and student absences and consequent loss of time for learning. Not only does the variation in temperature distract from learning, but it also contributes to student and staff absences due to illness. Many of the building systems and site conditions are in poor condition. Further, concerns abound relative to lead in the school's drinking water, with recent samples exceeding maximum contamination levels. These concerns compromise teachers' and students' attitudes about their work and learning environment, negatively impacting school climate.

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.

For years, teachers have altered and compensated in order to offer required instruction. They group students in shifts, share instructional spaces, create larger groups for differentiated instruction, push student groups into hallways for project work, work from maker space or computer carts, share resources as a routine part of the job, work with students one on one in hallways or repurposed closets, and willingly sacrifice their own workrooms and break rooms to make more space for small group instruction. Meanwhile, students are exposed to overcrowded rooms where multiple lessons are being taught simultaneously. The principal devotes an increasing amount of time to solving space-related problems to support teachers. The district and town have stepped up maintenance as needed; for example, they visited the school daily over a three-week period this past winter.

Consultants and contractors have been hired to address the current air and lead issues. The mold and other sources of poor air quality were removed from the ventilation system to the extent possible; however, ongoing water intrusions into the building will likely cause more mold to grow. One drinking water fixture was permanently removed from the school and the connecting pipe was permanently capped. A five-foot branching section of water pipe was removed and replaced; however, the lead contaminants continued to exceed the allowable level. More testing is being done to monitor the level of lead in the building's water and address any problems immediately.

Over the past 66 years, millions of dollars have been spent on preventive maintenance with replacement of boilers, roofs, some windows and many internal repairs. Piping and wiring have had to be routed along the ceiling to replace those buried in the walls and floors. In addition, the two pod areas that were added in 1968 recently pulled away from the main structure and have since been bolted to the primary building in an attempt to prevent further separation.

Part of the basement is still prone to minor flooding. Many of the building systems and site conditions are in poor condition requiring significant investment in resources to repair or replace. The classrooms are outdated in terms of providing a modern instructional program with varied space and room configurations. These kinds of conditions compromise children's education and teacher performance and diminish the morale of students, teachers and parents. Although the community has made significant investments in preventive maintenance, the building is at a point where further investments would be substantial and would entail major renovation just to prop up a failing structure. The town halted further work on the site because the future of the building itself was in question.

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.

Even under these cramped conditions, the school continues to provide programs and services that meet state standards. However, there are educational losses and compromises that cannot be ignored. Beyond teachers' anecdotal reports, it is difficult to quantify the impact that overcrowding has on students' ability to focus on their tasks and to effectively participate in the learning process. The stress that the overcrowded conditions place on teachers is also difficult to measure, yet it is palpable to those who must work in these circumstances day after day and year after year. There is a limit to how long we can keep asking people, even dedicated professionals, to be flexible and to make do with less, even as we hold their performance to higher standards.

Andover is pursuing this SOI to ensure that we take every step possible to continue meeting standards even as our enrollment increases and more students with special needs and English language learning needs are identified. Our families want their children to experience educational opportunities in a safe and up-to-date learning environment that meets MSBA standards and corresponds to the latest advances in educational programs.

The majority of classrooms and common spaces within the school are undersized and do not meet current MSBA space standards. The lack of appropriate spaces to house both ELL and special education programs affects the school's ability to deliver best-practice services for these students. Frequently, students from varying grade levels share the same space. Their academic and social needs also vary significantly, requiring added efforts from staff. More specifically, ELL students requiring different levels of service are often scheduled at the same time in the same area.

Students requiring specialized small group instruction are often taught within a subdivided classroom or in a space that was designed for another purpose but has been converted into an instructional area. With multiple students and multiple adults tackling multiple tasks within the same space, the distractions are many for our most needy learners, with likely negative ramifications for their learning progress and self-confidence. These conditions can even be a cause or underlying factor in poor attendance or behavior outbursts, exacerbating a situation where a student needs a break from sensory stimulation or from feeling that their peers are observing their every move.

The PT and OT programs do not have some of the large equipment they need (such as swings) because there is no space for storing the equipment. However, it is not only special education and special areas that are being placed at a disadvantage through the overcrowding. Because both stages are almost always in use and filled with instructional equipment, students have limited opportunities to access the stages in order to put on a performance, play or demonstration that illustrates what they have learned and their comprehension of a unit of study.

The hallways are increasingly being used for instructional purposes, which could pose safety issues in the event a building evacuation is needed. For example, the school features a West Elementary news program and students must do their filming in the halls, where there are continual interruptions and distractions and where noise ruins the audiotaping, forcing "do overs." Also, since the classrooms have no breakout space for collaborative projects, the students regularly spill into the hallways to work on projects, either carrying chairs with them or sprawling on the floor.

The West Elementary student news crew occasionally films in the media center on its "quiet" days; but on two days each week, the media center must serve two classes at a time all day. Because of the crowding, the students have time to do little more than check out books. They are not learning to use the media center for research, how a library is organized to help them find information, or the critical skill of how to separate fact from fiction.

Space constraints affect the music program not only because two sections must operate on a stage, but also because there is insufficient storage space for instruments, especially the larger ones, which limits some programs that can be offered. The space constraints in turn put limits on the times when the school can offer chorus or band. In fact, because of space issues, the schedule had to be rearranged so that band, orchestra, and chorus are never on the same day, making it impossible for the groups to practice or perform together. One section of music is taught in a classroom in the first grade wing. The noise from the music class permeates the regular classrooms, and small groups of students who are separated only by partitions sometimes cannot hear their

own teachers and classmates at all. The music teacher cannot do any small group projects that involve recording, audio, or playing instruments and twice this year has borrowed the principal's office for the purpose of recording.

As educational programs incorporate 21st century skills, computer technology is critical for students. Both students and teachers would benefit greatly from increased opportunities to access technology and make it a regular part of instruction and learning. However, desired improvements in technology opportunities for students have been met with challenges. There are no dedicated computer labs, that space having been turned into a classroom for ELL and tutoring. A small Maker Space has been created out of one section of the media center and that space does house several computers. The Maker Space has only 608 sq. ft. and can barely hold a full class—and then the students have no room to move around. The Maker Space is also used for filming, as a STEM lab, and as a computer Scratch lab, yet is able to serve none of these purposes very effectively. Not all grade levels are able to have access to this space. Lack of classroom wiring and outlets to handle multiple computers reduces teachers' integration of technology into students' daily classroom work.

The projects that can be undertaken by the art teachers are also severely restricted by space. There is no room to undertake set design for school performances. There is no space to create a wall mural or any large project that has to be left in place while students work on it for an extended period of time. Clay and other 3-D projects have to be staggered and some classes do not receive this learning opportunity at all. The kiln is in the boiler room, which is not an appropriate space for students, so they cannot be part of the firing experience. Art teachers must coordinate with the custodian to access the kiln. Students' clay projects are often accidentally broken because of lack of display/storage space. The sink in each art classroom is grossly undersized for art-related activities, especially when 24 students need to wash paint, chalk or clay off their hands and work surfaces. Also, one art classroom is adjacent to the ELL classroom, separated only by a partition; the routine noise level in the art class severely impedes the ability of the ELL students to focus on the language skills they are trying to develop. Finally, the ventilation in the art classrooms is inadequate.

The undersized classroom spaces, when combined with large class sizes, significantly impact teachers' ability to differentiate instruction through small group interventions as there is not enough room to spread the children out. There are a limited number of spaces for intervention services; currently many teachers use hallways and even stairwells. Problems with repurposed space and an older facility with deficient heat distribution and ventilation make the learning environments uncomfortable on a daily basis. The PT and OT programs do not have some of the large equipment they need (such as swings) because there is no space for storing the equipment. The school operates a Buddy Program, pairing older and younger students. However, space limits most of their experiences to simply reading a book together in the hall, as there is no room to carry out cross-age integrated projects.

The overcrowded conditions also affect the ability of school administrators and support staff to serve parents and students. For example, (and this happens often), on March 30, the Intensive SPED District Coordinator needed to conduct a meeting that included parents, advocate, teacher, etc.—a total of ten people. Neither the conference room nor the principal's office can comfortably accommodate a group that large. They finally squeezed into two rows of chairs in the conference room, and closed the door for privacy. Their need for privacy meant that for three hours, the rest of the staff could not access the photocopier, laminator, or refrigerator that are also in the conference room. Meetings like this are typical throughout the school week.

The poor location of bathrooms continues to contribute to students (especially the younger ones) having bowel and bladder accidents. These incidents not only cause a loss of instructional time, they lead to embarrassment, teasing, and the reluctance of some students to return to school. This is one of many ways the facility is negatively affecting school climate. Also, the only adult bathrooms on one end of the building are accessed by going through the office of the school psychologist, which frequently interrupts psychometric testing or the psychologist's sensitive conversation with a student.

According to national standards, the recommended PE space for students is 110 sq. ft. per student. The lower gym at 2430 sq. ft. offers 100 sq. ft. per student, or about nine percent below the standard. The upper gym serves two classes at a time and part of that severely limited floor space is lost due to stored PE equipment. Ignoring the space intrusion of the equipment, the upper gym with its 3692 sq. ft. provides 74 sq. ft. per student, which does not even approach the standard. The three PE teachers must continually modify the curriculum due to lack of space. For example, all students in the class should be simultaneously engaged in such activities as throwing/catching, floor hockey, or soccer, using three-on-three groupings. However, lack of space forces students to wait and observe, rather than participating. Not only do the students get less physical exercise and have less opportunity to develop skill proficiency, the wait time leads to boredom, inattention, scuffles, and other behavior infractions.

West Elementary is at a point where ongoing repairs and preventive maintenance cannot extend building components whose lifecycles have been exceeded. Even more critical, it is time to acknowledge that even the best repairs and maintenance cannot transform this duck into a swan. In the 66 years since ground was broken on this school, the delivery of elementary education has

transformed in ways no one could have imagined and the students who walk through our doors have needs that no one expected would be laid at the feet of public education. P.L. 94-142 did not go into effect until 1975, opening the schoolhouse to students with all manner of special needs—mental, physical and emotional. Also since the late 1970's, America has seen wave after wave of refugees and immigrants who turn to public schools to help their children assimilate and succeed in their new land. Where students of the 1950's sat in rows of desks and worked with paper and pencil, today's students are expected to learn teamwork and problem solving through project-based educational experiences supported by technology. All of these changes in the student body, in society's expectations, and in the needs of the work force dictate a different way of delivering education. Our school facilities need to respond by providing spaces that support small-group instruction, integration of technology, and teacher collaboration.

We are committed to providing the best possible education for every student at West Elementary, but the current facility is forcing staff to do their jobs in spite_of the building's conditions. We are seeking to provide a building that, instead of holding children back, actually serves an integral role in expanding and deepening their opportunities to excel.

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
Andrew P. Flanagan	Joel G. Blumstein	Sheldon H. Berman
Town 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.