

Massachusetts School Building Authority

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

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

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

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

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

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

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

- 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 Brian McLaughlin at 617-720-4466 or Brian.McLaughlin@massschoolbuildings.org.

Massachusetts School Building Authority

School District Cape Cod Region Voc Tech

District Contact Robert Sanborn TEL: (508) 432-4500

Name of School Cape Cod Region Voc Tech

Submission Date 4/11/2014

SOI CERTIFICATION

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

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

Massachusetts School Building Authority

School District Cape Cod Region Voc TechDistrict Contact Robert Sanborn TEL: (508) 432-4500Name of School Cape Cod Region Voc TechSubmission Date 4/11/2014

Note

Thank you in advance for your time and consideration in reviewing the Cape Cod Regional Technical HS 2014 Statement of Interest. We look forward to hearing from the MSBA in the upcoming months.

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

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

SOI Vote Requirement

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

Potential Project Scope: Potential New School

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI: 2014 Cape Cod Region Voc Tech

Is this part of a larger facilities plan? NO

**If "YES", please provide the following:
Facilities Plan Date:**

Planning Firm:

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:

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

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

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

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

In support of the district's strategic plan, the following facility improvements are necessary for college and career readiness; upgrades to existing science labs as well as new spaces for Engineering, Health and Marine Services Technologies. In addition, an analysis of the adequacy of all academic and technical spaces is necessary. With regard to student health and safety, the state of our HVAC and electrical systems are of serious concern.

Is there overcrowding at the school facility? YES

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

Although this is not a concern for the overall school facility, many spaces within the building experience overcrowding and limited space. For example, our academic classrooms are exceedingly small because the space was originally designed in the "open concept" and later partitioned. Marine Services and Engineering Technologies as well as Health and Dental Technology programs are examples of technical areas where space constraints limit program enrollment. In addition, Plumbing, Carpentry, Dental, Welding, Information Technologies, Graphic Arts and Engineering Technology have inadequate or no theory classrooms.

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

If "YES", how many teaching positions were affected? 0

At which schools in the district?

Please describe the types of teacher positions that were eliminated (e.g., art, math, science, physical education, etc.).

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

If "YES", how many staff positions were affected? 0

At which schools in the district?

Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

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

Does not Apply

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

Our most recent fiscal year 2014 Budget was approved by our school committee in February 2013 at our public hearing. This process began in April 2012 soliciting budget requests from all department leaders and review by our Finance subcommittee began in October of 2012. After the public hearing, the assessments are submitted to all twelve sending towns for placement on the town warrant. Our fiscal year 2014 budget was approved by all twelve towns. This budget process did not include any teacher layoffs.

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).

Cape Cod Tech was constructed from 1973-1974, opening in 1975. Since that time, many renovations and repairs have been undertaken. Walls have been erected in the academic third floor and vocational construction cluster because the school was built originally with the "open" concept approach to classroom instruction. Two press boxes were built, a florist shop (2004) was added off our greenhouse, a new renewable energy building was built (2009), and the library was moved to main floor from third floor (1996). In 2011 and 2012, two major entrances of the school were reconstructed due to safety issues. Another outlying building on the property, the Gilmore House, is in the process of being renovated. Also in 2012, an original boiler was replaced with the help of a subsidy from the Massachusetts School Building Authority.

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

214000

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 campus sits on a 67 acre parcel of land. In addition to the 214,000 square foot building, the campus also includes a residential style home known as "The Gilmore House" and a renewable energy building which is used as an additional classroom and lab. Within the building, Harbor Health Services, a nonprofit health care provider, operates a public dental clinic. After the school day, the district operates an Adult Education program with various offerings.

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)

351 Pleasant Lake Avenue - Harwich MA 02645. Our campus is conveniently located off Route 6 (Mid-Cape Highway) at exit 10. The location is central to the lower and mid-cape areas, allowing us to service 12 of the 15 Cape Cod towns.

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).

Cape Cod Tech is constructed mostly of steel and concrete. The original roof, constructed in 1975 was a built-up roof on 1 ½ rigid insulation. This original technology was replaced in 2005 with a modified bitumen roofing system. Although a majority of the roofing material was replaced, much of the roofing system remains original, including drains, ducts, flashing and brickwork. There is significant evidence that the roofing system is failing in areas such as the roof peaks as well as where the roof meets the penthouses. In these areas, there is significant evidence of water infiltration, resulting in numerous classroom and office leaks on both the third and second floor. Areas of ponding are significant on all main flat roof areas due to a lack of positive drainage to the roof drains.

The existing windows are generally original to the building. Windows are 2'' aluminum frame construction with double pane and tinted glazing. The windows are losing efficiency as window sealants have begun to fail. There are numerous areas of the building where the sealants are missing and backer rod has been stuffed into gaps surrounding the frame opening. Further complicating removal and replacement is the knowledge of asbestos within both the caulking and window glazing. The existence of known asbestos has significantly increased the cost of routine window repair and replacement. Causing further damage to the building envelope is the improper pitch of the window sills, causing water to collect around the frame, contributing to further deterioration. The building's door system is a combination of original and replacement, all

in various stages of disrepair. Over the years, pass doors on the exterior of the building have been replaced, as well as some overhead shop doors. However, most lack insulation, areas of air leakage and damaged seals. The door system of greatest concern is the current main entrance system. Many of the window and door systems are the source of natural light to the building. However, these systems lack the energy efficiency characteristics available in modern systems. For example, the block windows that feed natural light to the main hallway leak every rain storm. The building walls, mostly brick, are in various states of disrepair.

Although the walls were reported to be in “satisfactory” condition, there is a persistent problem with the face of the brick; the brick is spalling and significantly deteriorated. The North side of the building is showing significant evidence of bowing – pulling away from the building wall. Occurring at all elevations are various levels of deterioration of existing masonry joints and sealants. Missing or degraded joints are a serious concern for the integrity of the exterior wall due to additional water infiltration. Many of the structural columns on the North side of the building have experienced significant damage, expansion joints appear to have been cut out, creating a considerable gap and allowing water to infiltrate the column enclosure. It has been recommended to repair these areas soon to prevent more serious damage to the columns. Over the last four years, the district has addressed significant structural issues to the two major areas of egress, replacing the “original main entrance” stairs, library roof deck and stairs as well as the buildings current main entrance. Still an area of major concern is the emergency egress stair #13 off the dinning commons. This area is exhibiting signs of deterioration with exposed rebar, crumbling at concrete nosing’s and treads as well as deterioration of the brick sidewalls, spalling and joint deterioration.

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

Year of Last Major Repair or Replacement: 2004

Description of Last Major Repair or Replacement:

In 2004, a portion of the exterior brickwork was pointed and sealed but significant areas are still in need of repair work.

Has there been a Major Repair or Replacement of the ROOF? YES

Year of Last Major Repair or Replacement: 2005

Type Of ROOF: A BUR System; Two layers of shingle material and a layer of foam insulation.

Description of Last Major Repair or Replacement:

In 2005, with the help of private donations, the roof was replaced with two layers of shingle material and a layer of foam insulation. However, much of the flashing and roof drains remain original to the building and are causing major water infiltration.

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

Year of Last Major Repair or Replacement: 0

Type Of WINDOWS: A combination of single pane and double pane windows outfit the school. A significant number of the windows are original to the school. Most with casements that are energy inefficient or in disrepair.

Description of Last Major Repair or Replacement:

With the exception of yearly window replacement for blown seals, the building envelope and window casements have not been addressed.

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).

Most mechanical systems as well as the building's electrical system are original equipment, most having surpassed their useful life.

Most fixtures are original to the building although some upgrades have been made in an attempt to update, however a majority of the fixtures do not meet accessibility codes as well as conservation requirements. Although all shop areas are equipped with stainless steel wash basins, the vents are not connected to the sanitary vent system and lack temperature controls. The water connected to the science classrooms are not protected by a backflow devices, lack temperature controls and emergency showers.

The boiler plant consists three boilers; two original boilers are HB Smith 450 Mils, 21 section boilers with a hot water capacity of 6200 MBH output. These boilers were accessed in 2010 and noted to be in fair condition; however they are

nearing the end of their expected service life. The third boiler which had been removed from operation due to its failed condition was replaced in 2012 with partial funding through the MSBA. The boiler breeching is routed to the outdoors to a free standing steel chimney which is also original to the building. The pumps that circulate both cold and hot water are stated to be in good condition, but original and have exceeded their expected service life. The York chiller was installed in 1988 and appears to be in good condition.

The administrative areas of the building are serviced with overhead air distribution systems and perimeter fin tube radiation. The majority of the overhead air systems are in good working order, however the fin tube radiation is in poor condition and is not properly zoned. The overhead systems in the auditorium and cafeteria are stated to be in fair to poor condition as well. Typically the systems that service the third floor of the building are difficult to control due to a history of changes to classroom areas while attempting to remedy the “open concept” approach to learning. Classrooms frequently experience temperature control

problems and lack proper ventilation. The kitchen is heated and ventilated by an indoor hot water heating and ventilation unit which is original and in fair condition.

A majority of the vocational areas experience significant issues with heating and ventilation;

* The welding shop’s Plymovent fume exhaust ductwork capture system is in fair to poor condition and the shop experiences significant ventilation issues.

* The auto repair shop is heated and ventilated by a ceiling mounted heating and ventilation air handling unit. The unit is original and in fair to poor condition, providing minimal heating capacity. The shop appears to be under positive pressure in relationship to the interior corridor zone.

* The auto collision shop’s air handling unit is also original and in fair condition. However it appears that additional exhaust grilles are needed, the paint storage area lacks ventilation and paint fume exhaust air is often re-entrained to the intake louver.

* The marine shop is positively pressurized in relationship to the interior corridor, subsequently sending noxious fumes from the shop to adjacent classrooms and hall.

* The units appear to be in fair condition, but are original and past useful life and leaking. This shop also experiences issues with positive air pressure.

Currently, the district is working with architect/engineers Garcia, Galuska and DeSouza of Dartmouth, Ma, to produce schematic design and bid documents to replace our main switchboard. This switchboard, original to construction, was manufactured by Federal Pacific. The district felt that this project, although incredibly expensive to fund, was vital to the continued operation of the district and the safety of the students. In the 2010 facility study, the equipment was deemed to be obsolete and in poor condition. Because of this, the district hopes to complete an upgrade to the main switchboard (only) no later than August 29th, 2014 at an estimated approximate cost of \$350,000 - \$500,000.

Unfortunately, not included in the scope of the project, due to the additional cost, are upgrades to the electrical sub-panels located throughout the facility. These panels are circuit breaker type and obsolete, the panels manufactured by FPE and some have live bussing, posing a life safety risk. Also worth noting is that kitchen receptacles are not ground fault type and lack emergency push button shut offs. The fire alarm panel has been replaced approximately 20 years ago. The panel is Faraday Model MPC 2000. The system is not ADA compliant, lacks proper heat detector sensors, and is obsolete.

Has there been a Major Repair or Replacement of the BOILERS? YES

Year of Last Major Repair or Replacement: 2012

Description of Last Major Repair or Replacement:

Through the Green repair program, we replaced our worst boiler. However the remaining two are original

equipment.

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

Year of Last Major Repair or Replacement: 2007

Description of Last Major Repair or Replacement:

In 2007 we replaced approximately 18 unit ventilators, 6 overhead unit ventilators and all of our motor starters for such equipment. However, no major repairs to the system have been done.

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

Year of Last Major Repair or Replacement: 0

Description of Last Major Repair or Replacement:

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

Natural Gas

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

The school was designed and constructed in an era that found merit in an “open concept” approach to learning. The third floor academic classrooms, as well as the construction cluster on the first floor were constructed utilizing this open concept. Over the years, numerous partitions, walls and offices have been erected considerably decreasing the amount of useable space. In attempts to provide vital spaces for 21st century learning, a “carving up” of the space has compromised other building systems such as building HVAC.

There are several different types of flooring throughout the building. Among the types are concrete slab with hardener, carpeting, quarry tile, and resilient flooring. Floors tend to be worn and in some locations cracking. The hardener on the concrete floors in the Kitchen and Athletic Locker Rooms and the quarry tile in the Mall show the most evidence of failing, causing maintenance to repair using epoxy to prevent tripping hazards. The resilient tile in many shop spaces; Health Technologies and Dental as well as first floor classrooms is severely cracked. At the third floor, the carpeting is stained and worn and in areas does not lay flat. The main Mall is roughly 100,000 sq. feet of quarry tile that is in failing condition and the district has been unsuccessful in finding replacement tiling to remedy the issue.

The buildings ceilings are mostly 2x2 tiles which have been addressed; however, the ceilings of the shop spaces have not been addressed. Shops and service areas are mostly gypsum board ceilings, original to the school. Specific areas such as the gymnasium and auto technology shop have high vaulted industrial ceilings which are in need of significant repair. The interior stairs between levels are of steel pan and concrete construction. The anti-slip protection at the stair treads is worn and, at some locations, has been painted over with yellow caution paint.

Due to the age of the building and year of construction, many areas of our building lack the proper AAB requirements. While the building guard rails meet requirements for minimum height, baluster spacing does not meet current code. Many of the buildings door and hallway clearances are insufficient for maneuvering, and door hardware is not handicap accessible. Although the building has an elevator that serves all three floors, there is a lack of accessibility to significant portions of the building. Specifically, the building’s greenhouse/head house lacks accessibility. Furthermore, students who need access to one of the four construction shops (construction cluster) must wind through a hallway of obstacles and “cut through” numerous shop spaces to be able to access the area.

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

Cape Cod Tech offers 17 vocational programs: Electrical, Plumbing, HVAC, Carpentry, Graphic Arts, Cosmetology, Culinary Arts, Marine Services Technology, Dental Assisting, Metal Fabrication/Welding, Auto Technology, Auto

Collision, Horticulture, Health Technology, Engineering Technology, Early Childhood Education, and Information Technology.

The deficiencies are as follows;

- Inadequate lab spaces for Science classes
- Electrical- inadequate shop space
- Plumbing- inadequate shop space and theory classroom
- HVAC- inadequate shop space
- Carpentry – lack of theory classroom
- Graphic Arts – appropriate
- Cosmetology- lack of storage space
- Culinary Arts- inadequate shop and retail space
- Marine Services – inadequate shop space
- Dental Assisting- inadequate shop, lab and storage space
- Metal Fabrication- inadequate theory space
- Auto Technology- ceiling issues and inadequate theory space
- Auto Collision- due to ventilation issues, space needs to be redesigned or removed from the main building
- Horticulture- inadequate education and theory space with heating issues
- Health Technologies- inadequate shop, lab and storage space for an extremely popular program
- Engineering Technologies- inadequate shop space with ventilation issues
- Early Childhood Education- inadequate shop, theory and daycare space
- Information Technologies- inadequate shop space with heating and cooling issues

We have built a renewable energy training center but more space would be needed to transition to a Chapter 74 approved Engineering Technology program, integrating elements of Renewable Energy Curriculum. Additionally, we would like to add space for more health related offerings such as: Bio-Medical Sciences, EMT, Medical Office Assistant, etc.

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

Due to the carving up of the building, our core educational spaces are inadequate in size. The campus is currently occupying all available classroom space and could benefit from expansion. The average square footage of academic classrooms is under 720 square feet where the state minimum is 750 for fifteen to twenty students. The Library Media Center is on our main floor, it is approximately 4050 square feet. Cape Cod Tech has four classrooms utilized for Science instruction, two of which have been updated in the last six years but the other two are inadequate for Science instruction. In addition, the inadequate science classrooms fall well below the state minimum of 900 square feet, measuring 690 and 756 square feet.

The gymnasium and "cafetorium" are both inadequate in size and functionality. The school was built with a "cafetorium" which is a cafeteria, small meeting space and stage. Each individual space is inferior. We don't possess a permanent cafeteria because it is often converted into a meeting space. We don't possess a true auditorium to offer the Arts properly. Finally, we don't have a permanent meeting space that will accommodate the entire student body.

The gymnasium does not provide enough space for practice during the winter season. Physical education has no separate classroom space to provide health and wellness instruction. Finally, the district has carved out space for a weight room and cardiovascular fitness but the spaces are exceedingly small. The cardiovascular fitness room, constructed by the district, took space from the men's locker room.

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).

Cape Cod Tech currently services approximately 654 daytime high school students. In addition, we serve nearly five hundred Adult Education and post graduate students every year. Over the years, many renovations have been made to existing space to allow for more classrooms. Our original library, radio station, masonry shop space were converted into classrooms. Several other areas have been converted into offices and theory rooms of inadequate size. Cape Cod Tech is currently fully utilizing all existing space and is in need of additional storage, office and classroom spaces. Although the school does not have the issue with overall overcrowding, individual shops enrollments are limited due to the space constraints of these learning spaces. Almost all educational spaces are undersized when compared to state minimums.

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

The district has a long standing history of dedication to the maintenance and upgrades to the building and its major systems. The district regularly develops and reviews its capital improvement schedule. Over recent years, major renovations and equipment upgrades have been accomplished using funds dedicated to capital within the operating budget. However, because of the twelve-town regional agreement and process for acquiring debt, the district has never sought funding outside its yearly operating budget, ultimately limiting the scope of the building's projects.

Over the past ten years numerous projects have been carried out; replacement of an original boiler, elevator, unit ventilators, roof fans, gym floor, and cooling tower. Both major entrances have been reconstructed, a partial parking lot resurfacing project, tennis court reconstruction and walking track replacement. The most notable project is the complete roof replacement of the building in 2005, which was financed mostly through a private donor and grant funding. This year, the district is addressing the replacement of the building's original electrical switch gear.

Cape Cod Tech as was stated previously has always had a strong commitment to maintenance. A capital plan is constantly reviewed and updated by the facilities subcommittee of the school committee. The following are merely highlights of major projects while preventative maintenance is on-going (February, April vacations as well as July/August are dedicated to preventative maintenance): Roof replaced (2005), new suspended ceilings (2005-2010), twenty classroom unit ventilators replaced (2007-2008), lighting completely retrofitted for energy conservation (2005), energy management system installed (2005), supervisory controls and VFDS installed (2005), Electrical motor starters replaced entirely (2007), 70 roof fans replaced (2008,2009), Gym floor replaced (2005), Six Overhead classroom unit ventilators replaced (2007), Cooling tower replaced (2007), tri-generation system installed and operational (2007), New generator installed (2004), one third of Parking lot renovated, resurfaced and lined (2009), Emergency septic system repairs (2006), Masonry brickwork repointing and sealing (2005). In 2012, a boiler was replaced with the financial assistance of the MSBA. These are just some of the projects that have been accomplished since 2003 adhering to our capital plan. No debt was assumed outside the operating budget for these initiatives. In recent years, our budget has not allowed for such ambitious projects such as those listed above.

Priority 5

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

The school, commissioned in 1975, has a forty year history of dedication to the maintenance of the school as well as a strong schedule of preventative maintenance. Being a regional school district, Cape Cod Tech, is unique in that all capital projects and building improvements must be financed solely through the operating budget. Further complicating capital improvement and the financing of such projects is the large geographic area of the district's member towns. Cape Cod Tech is truly one of the most "regional" of Massachusetts's school districts, with a membership of twelve towns. Further complicating the district relationship is its geographic isolation within the State. It is also worth noting that Cape Cod Tech serves as an emergency shelter operated by the Red Cross during times of emergency.

Roof

The original roof, constructed in 1975 was a built-up roof on 1 ½ rigid insulation. This original technology was replaced in 2005 with a modified bitumen roofing system. (Worth noting is that this major improvement was done primarily through private donation, without taxpayer or state financing.) Although a majority of the roofing material was replaced, much of the roofing system remains original, including drains, ducts, flashing and brickwork. There is significant evidence that the roofing system is failing in areas such as the roof peaks as well as where the roof meets the penthouses. In these areas, there is significant evidence of water infiltration, resulting in numerous classroom and office leaks on both the third and second floor.

Areas of ponding are significant on all main flat roof areas due to a lack of positive drainage to the roof drains. The routine ponding of water in these areas has resulted in significant water infiltration in the spaces below these areas. A considerable amount of water can be observed flowing down columns in these areas following heavy snow or rain, often resulting in significant leaks, ruined ceiling tiles and flooring as well as eventual allergen issues. Of particular note are the offices within guidance (currently most offices are equipped with above ceiling water collecting "bladder" systems), Graphic Arts and Cosmetology. Also of significant concern are 3-4 third floor academic classroom/office spaces, that consistently experience issues of water infiltration. Also worth further notation is the history of numerous failed attempts to correct the water infiltration through routine roof inspections, maintenance and significant improvements to roof-top balcony systems.

Windows and Doors

The existing windows are generally original to the building. Windows are 2'' aluminum frame construction with double pane and tinted glazing. The windows are losing efficiency as window sealants have begun to fail. There are numerous areas of the building where the sealants are missing and backer rod has

been stuffed into gaps surrounding the frame opening. Further complicating removal and replacement is the knowledge of asbestos within both the caulking and window glazing. The existence of known asbestos has significantly increased the cost of routine window repair and replacement. Causing further damage to the building envelope is the improper pitch of the window sills, causing water to collect around the frame, contributing to further deterioration.

The building's door system is a combination of original and replacement, all in various stages of disrepair. Over the years, pass doors on the exterior of the building have been replaced, as well as some overhead shop doors. However, most lack insulation, areas of air leakage and damaged seals. The motors that operate the overhead doors are also nearing their useful life; however, as we have begun to replace and repair, we have found some areas to also contain asbestos, further complicating the repairs.

The door system of greatest concern is the current main entrance system. This system is both lacking in security and structural integrity. During the replacement of the concrete walkway leading to the double door system, it was discovered that the entire

door system had been constructed upon the entrance walk, rather than the building foundation. Ultimately, this caused the near collapse of the entire system and necessitated a significant amount of work to restore it to its previously compromised state.

Many of the window and door systems are the source of natural light to the building. However, these systems lack the energy efficiency characteristics available in modern systems. For example, the block windows that feed natural light to the main hallway leak every rain storm.

Exterior Envelope

The building walls, mostly brick, are in various states of disrepair. Portions of the building underwent masonry restoration as part of the roof replacement project of 2005, with some brick replacement, re-pointing and joint work. Although the walls were reported to be in “satisfactory” condition, there is a persistent problem with the face of the brick; the brick is spalling and significantly deteriorated. The North side of the building is showing significant evidence of bowing – pulling away from the building wall.

Occurring at all elevations are various levels of deterioration of existing masonry joints and sealants. Locations of loose and missing mortar joints as well as the presence of efflorescence were noted. Expansion joint caulking is original and exhibiting signs of deterioration. Missing or degraded joints are a serious concern for the integrity of the exterior wall due to additional water infiltration. Many of the structural columns on the North side of the building have experienced significant damage, expansion joints appear to have been cut out, creating a considerable gap and allowing water to infiltrate the column enclosure. It has been recommended to repair these areas soon to prevent more serious damage to the columns.

Over the last four years, the district has addressed significant structural issues to the two major areas of egress, replacing the “original main entrance” stairs, library roof deck and stairs as well as the buildings current main entrance. Still an area of major concern is the emergency egress stair #13 off the dining commons. This area is exhibiting signs of deterioration with exposed rebar, crumbling at concrete nosing’s and treads as well as deterioration of the brick sidewalls, spalling and joint deterioration.

Interior Structure

The school was designed and constructed in an era that found merit in an “open concept” approach to learning. The third floor academic classrooms, as well as the construction cluster on the first floor were constructed utilizing this open concept. Over the years, numerous partitions, walls and offices have been erected considerably decreasing the amount of useable space. In attempts to provide vital spaces for 21st century learning, a “carving up” of the space has compromised other building systems such as building HVAC.

There are several different types of flooring throughout the building. Among the types are concrete slab with hardener, carpeting, quarry tile, and resilient flooring. Floors tend to be worn and in some locations cracking. The hardener on the concrete floors in the Kitchen and Athletic Locker Rooms and the quarry tile in the Mall show the most evidence of failing, causing maintenance to repair using epoxy to prevent tripping hazards. The resilient tile in many shop spaces; Health Technologies and Dental as well as first floor classrooms is severely cracked. At the third floor, the carpeting is stained and worn and in areas does not lay flat. The main Mall is roughly 100,000 sq. feet of quarry tile that is in failing condition and the district has been unsuccessful in finding replacement tiling to remedy the issue.

The buildings ceilings are mostly 2x2 tiles which have been addressed; however, the ceilings of the shop spaces have not been addressed. Shops and service areas are mostly gypsum board ceilings, original to the school. Specific areas such as the gymnasium and auto technology shop have high vaulted industrial ceilings which are in need of significant repair. The interior stairs between levels are of steel pan and concrete construction. The anti-slip protection at the stair treads is worn and, at some locations, has been painted over with yellow caution paint.

Due to the age of the building and year of construction, many areas of our building lack the proper AAB requirements. While the building guard rails meet requirements for minimum height, baluster spacing does not meet current code. Many of the buildings

door and hallway clearances are insufficient for maneuvering, and door hardware is not handicap accessible. Although the building has an elevator that serves all three floors, there is a lack of accessibility to significant portions of the building. Specifically, the building's greenhouse/head house lacks accessibility. Furthermore, students who need access to one of the four construction shops (construction cluster) must wind through a hallway of obstacles and "cut through" numerous shop spaces to be able to access the area.

Also worth mentioning is the building's lack of lavatories for students, specifically ladies rooms. The building currently has # bathrooms available for # students.

Septic Issues

The district's septic system is original to the school. In 2005, the system experienced a collapse of the main clay piping line, which has been replaced. A major concern for the district is a major failure of the system which would necessitate a complete upgrade to a water/sewage treatment plant.

Plumbing and Fire Protection Systems

Most fixtures are original to the building although some upgrades have been made in an attempt to update, however a majority of the fixtures do not meet accessibility codes as well as conservation requirements. Although all shop areas are equipped with stainless steel wash basins, the vents are not connected to the sanitary vent system and lack temperature controls. The water connected to the science classrooms are not protected by a backflow devices, lack temperature controls and emergency showers.

HVAC Systems

The boiler plant consists three boilers; two original boilers are HB Smith 450 Mils, 21 section boilers with a hot water capacity of 6200 MBH output. These boilers were accessed in 2010 and noted to be in fair condition; however they are nearing the end of their expected service life. The third boiler which had been removed from operation due to its failed condition was replaced in 2012 with partial funding through the MSBA. The boiler breaching is routed to the outdoors to a free standing steel chimney which is also original to the building. The pumps that circulate both cold and hot water are stated to be in good condition, but original and have exceeded their expected service life. The York chiller was installed in 1988 and appears to be in good condition.

The administrative areas of the building are serviced with overhead air distribution systems and perimeter fin tube radiation. The majority of the overhead air systems are in good working order, however the fin tube radiation is in poor condition and is not properly zoned. The overhead systems in the auditorium and cafeteria are stated to be in fair to poor condition as well. Typically the systems that service the third floor of the building are difficult to control due to a history of changes to classroom areas while attempting to remedy the "open concept" approach to learning. Classrooms frequently experience temperature control issues. In addition, the ventilation is substandard on hot days due to a plenum rather than dedicated duct work. The kitchen is heated and ventilated by an indoor hot water heating and ventilation unit which is original and in fair condition.

A majority of the vocational areas experience significant issues with heating and ventilation;

* The welding shop's "Plymovent" fume exhaust duct-work capture system is in fair to poor condition and the shop experiences significant ventilation issues.

* The auto repair shop is heated and ventilated by a ceiling mounted heating and ventilation air handling unit. The unit is original and in fair to poor condition, providing minimal heating capacity. The shop appears to be under positive pressure in relationship to the interior corridor zone.

* The auto collision shop's air handling unit is also original and in fair condition. However it appears that additional exhaust grilles

are needed, the paint storage area lacks ventilation and paint fume exhaust air is often re-entrained to the intake louver.

* The marine shop is positively pressurized in relationship to the interior corridor, subsequently sending noxious fumes from the shop to adjacent classrooms and hall. The units appear to be in fair condition, but are original and past useful life and leaking. This shop also experiences issues with positive air pressure.

* **HEALTH AND SAFETY ISSUE** - the classrooms on the bottom floor of the building, closest to the construction cluster, have been a constant source of employee health complaints. One room in particular has received two requests for room re-locations due to health and respiratory issues, one of which occurred on April 10, 2014. The most recent complaint about these areas has been substantiated by the Barnstable County Health Department.

Electrical and Fire Alarm Systems

Currently, the district is working with architect/engineers Garcia, Galuska and DeSouza of Dartmouth, Ma, to produce schematic design and bid documents to replace our main switch-gear. This switchgear, original to construction, was manufactured by Federal Pacific. The district felt that this project, although incredibly expensive to fund, was vital to the continued operation of the district and the safety of the students. In the 2010 facility study, the equipment was deemed to be obsolete and in poor condition. Because of this, the district hopes to complete an upgrade to the main switchboard (only) no later than August 29th, 2014 at an estimated approximate cost of \$350,000 - \$500,000.

Unfortunately, not included in the scope of the project, due to the limited availability of funds, are upgrades to the electrical sub-panels located throughout the facility. These panels are circuit breaker type and obsolete, the panels were manufactured by FPE and some have live bussing, posing a life safety risk. Also worth noting is that kitchen receptacles are not ground fault type and lack emergency push button shut offs. The fire alarm panel has been replaced approximately 20 years ago. The panel is Faraday Model MPC 2000. The system is not ADA compliant, lacks proper heat detector sensors, and is obsolete.

Priority 5***Question 2: Please describe the measures the district has already taken to mitigate the problem/issues described in Question 1 above.***

It is without a doubt that the district has a long standing history of dedication to the maintenance and upkeep to the building and its major systems. The district regularly reviews and revises its capital improvement schedule. Over many years, major renovations and equipment upgrades have been accomplished using funds dedicated to capital within the operating budget. Over the past ten years numerous projects have been carried out; replacement of an original boiler, elevator, unit ventilators, roof fans, gym floor, and cooling tower. Both major entrances have been reconstructed, a partial parking lot resurfacing project, tennis court reconstruction and track replacement. The most notable project is the complete roof replacement of the building in 2005, which was financed mostly through a private donor and grant funding.

However, because of the twelve-town regional agreement and process for acquiring debt, the district has never sought funding outside its yearly operating budget, ultimately limiting the scope of the building's projects. This year, Cape Cod Tech has sought approval from its 12 member towns to adopt M.G.L. Chapter 71, section 16G1/2, allowing for the establishment of a revolving fund for the initial schematic design and feasibility study costs, assuming that the districts statement of interest is approved and we are invited into the MSBA eligibility period.

The district has a long history of ensuring that building maintenance is a priority. In addition, Cape Cod Tech has made a conscious effort to increase energy efficiency in an attempt to divert funds from utility costs to building maintenance. The following energy conservation measures have helped in this effort;

Installation of a 2.5 kilowatt residential wind turbine as well as being in the feasibility study stages for a larger turbine on campus.

Installation of a photovoltaic awning over a classroom

Installation of solar thermal hot water systems for our plumbing shop

Completed a renewable energy building dedicated to training and education on renewable technologies

School-wide recycling initiative

Installation of a first in the US pre-packaged tri-generation system

Complete retrofit of our lighting systems

Installed energy management system overlay

Installed Energy efficient thermostats on our refrigerators in school lunch

Installed waterless urinals and other water conserving measures in a variety of bathrooms

By reducing energy costs we have been able to incrementally increase the building improvement section of our operating budget. This commitment to building maintenance is detailed in the General Description section of this statement of interest under maintenance and capital repairs.

In 2010 we contracted with Civitects (Wareham, Ma.) in an effort to confirm and prioritize our areas of concern. The study has been beneficial in highlighting the areas we can address but also reaffirms the need to partner with the MSBA and our Towns for a major renovation. With this submission, Cape Cod Tech has now submitted four "Statements of Interest." Without collaboration and assistance with funding, it is a nearly insurmountable task to garner support from our twelve sending towns on a "project by project" basis. To issue debt, Cape Cod Tech must conform to M.G.L. Ch. 71 s. 16n, which necessitates a district wide vote. In concert with this most recent SOI, the district administration has been actively seeking input from our member towns while alerting them of this submission. We will include our town informational presentation as supplementary information (via mail).

Priority 5

Question 3: Please provide a detailed explanation of the impact of the problem/issues described in Question 1 above on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

The most common complaint heard throughout the building by faculty and staff is our insufficient ventilation system, which is primarily original equipment. On the third floor, which houses a majority of our academic offerings, the lack of dedicated duct work and failing air handlers, the ventilation is haphazard at best. In the shoulder seasons, temperature fluctuations often necessitate teachers seeking alternative spaces for instruction. This space was originally designed as an open space. The partitioning of this space has only exacerbated the ventilation issues. The ventilation issues are not exclusive to the third floor, the bottom floor experiences significant issues as well. As noted above, some classrooms are adversely affected by air quality issues caused by neighboring technical areas. For example, when plumbing is soldering pipe, the Barnstable County Health Dept. has noted significant increases in airborne particulates. The lack of natural light to a significant amount of our classrooms is a major concern. For example 15 of the 26 third floor classrooms lack any access to natural light.

Our outdated and antiquated Fire Protection Systems are in need of replacement as well. In recent years, the outdated system has experienced major issues, necessitating a fire watch in order for school to remain open. Our current electrical system is antiquated and dangerous and has significant impacts on our welding, culinary arts, dental assisting, graphic arts and automotive technologies programs. Although the district has plans to upgrade the major switch-gear for the system, the sub-panels and distribution systems will remain original due to the limitations of our operating budget.

The lack of adequate storage space and bathroom facilities is significant and worth noting. The locker systems throughout the building and in the district locker-rooms, are original equipment to the building. They are inefficient in size and mostly in a state of disrepair. The building also has a severe need for more bathroom facilities.

The inefficient and original building envelope leads to clouded and leaking windows on a regular basis. The energy inefficiency of these systems also has impacts on regulating classroom temperatures that were previously noted.

Many of our vocational shops do not have adequate space to house their programs which is a subject of our priority seven question as well. This issue creates the inability to service the amount of students that apply to certain programs. The foreseeable outlook for health careers in our region is exceptional and an addition for this program would allow for adequate space for labs and equipment to expand offerings and meet the demands of the local job market. As the District ventures into more curriculum and programs centered on STEM careers, the need for space for our new Engineering Technology program and for renovation of existing science labs is obvious.

Priority 5

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

The replacement of our outdated plumbing, electrical, fire protection, mechanical and HVAC systems will be a tremendous improvement to our facility but it will not address the need to retool and redesign a facility that was built for the economic climate in 1975. Cape Cod Tech needs the MSBA's assistance to renovate our inadequate educational spaces and add to the facility where appropriate for high demand programs, the useful life of the building should be extended 50 years as is customary when partnering with the MSBA. The educational climate on Cape Cod is highly competitive with many of the facilities that surround us already addressed by MSBA projects. It is imperative that we partner with you to offer the highest quality vocational technical education in a 21st century facility. I would ask that you additionally refer to priority # 7 in this SOI for further clarification.

Please also provide the following:

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

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

Civitects of Wareham, Ma. has issued a Comprehensive Investigation of the Existing Conditions of our school. As we stated last year, we issued an RFP for this service. The report will accompany this SOI along with any cost estimates.

The date of the inspection:: 8/30/2010

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

The information is a summary of the findings of the study by Civitects. We have previously furnished this study to the MSBA however it is becoming outdated since it was completed in 2010.

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.

Our current facility limits expansion to include potentially new programs as well as the expansion to existing, popular programs based upon enrollment and labor market demand. The existing and potential programs Cape Cod Tech could enhance or offer given adequate space would be the following:

1. In our Marine Service Technology program, one boat fills the educational work space for our students. Marine is our second most popular technical area with strong regional labor market demand. Expanding into Marine Electronics and fiberglass work which would make graduates more marketable to employers is out of the question due to space constraints. Marine Service Technology operates in a 2,878 square foot space for approximately twenty students where the minimum set by state standard is 3,500 square feet for fifteen students (225 sq.ft./student)
2. Our most popular program, Health Technologies enjoys exceedingly strong regional labor market demand. The current program operates in three separate typical academic style classrooms. This space bears no resemblance to a medical facility and has no laboratory equipment or infrastructure. Forty students a cycle work in a 2,419 square foot space where the minimum set by state standard is 1,875 for fifteen students! (125 sq. ft./student) With appropriate space, we would envision a life sciences "wing" to our school. We are currently training the staff in Project Lead the Way (PLTW) which offers a series of four courses in Bio-medical Sciences. The current space is inadequate to offer this curriculum because of the lack of a laboratory. The regional and national labor market demand in bio-medical sciences is limitless and our space is a severe impediment to preparing and inspiring our best students in this program towards this lucrative career market. Additional potential programmatic offerings in this "wing" could include medical assisting, medical laboratory technician, operating room technician and licensed practical nursing (post-secondary).
3. In 2012, we started an Engineering Technology program to address the strong need for Science Technology, Engineering & Mathematics (STEM) education. We have infused this program with PLTW courses (currently three): Introduction to Engineering Design, Principles of Engineering and Digital Electronics (includes robotics) with Computer Integrated Manufacturing in the pipeline. These offerings cover and supplement the Chapter 74 Engineering frameworks. This program currently has two and a half separate academic style classrooms as technical space. The program has sixteen students with only ninth and tenth graders enrolled at this point. As the popularity of this program grows due to the tremendous regional and national labor market demand, this space will be out grown and is even now inadequate. Sixteen students operate in a divided space of 1,175 where the minimum set by state standard is 2,200 square feet for twenty students (110 sq. ft./student). Currently, we do NOT have a place to relocate this program when this program has 9-12 grade students enrolled. A potential for expanded offerings in addition to housing this highly desirable program would be Robotics and Automation Technology.
4. Another popular program is our Welding/Metal Fabrication technical area. Although the space is adequate for the current student enrollment of approximately sixteen students per cycle, expansion possibilities are not feasible. With appropriate additional space and major equipment investment, programs in Machining and Advanced Manufacturing could be offered to secondary and post-secondary students.
5. Our Information Support Services and Networking program is also very popular. Although the space for students is minimal. In this program, a theory/computer lab divides up the 2,048 square foot space with workstations consuming much of the square footage for students. The state standard is 2,200 square feet for twenty students (110 sq. ft./student). The space is inadequate and leaves no room for expansion for offerings such as programming, web development and/or video game design for instance.
6. Our Horticulture program resides in a hallway and a garage with a greenhouse attached. It is a disjointed educational space. The theory space is in the basement and extremely small. Another deficiency of note in this area is ventilation. When machines are started outside on the perimeter of the building (i.e lawn mowers, tractors etc...) the fumes are pulled back into educational spaces and this problem happens in the back of our building as well. Although agricultural education is popular statewide, we could not offer programming such as agricultural mechanics, animal science or environmental science and technology programs. Our current Greenhouse is in failing condition, its glass unsafe and

technology outdated.

7. Our construction cluster, consisting of Carpentry, Plumbing, Electrical and Heating Ventilation and Air Conditioning (HVAC), was designed with the open concept popular in 1975. In the intervening years, this area has been walled off to create separate spaces for these programs. The theory rooms for all of these programs are woefully inadequate. The biggest theory room is HVAC's which the district built. This room is 435 square feet where the state standard calls for 750 sq.ft. The cluster area does not allow for technology to provide computer aided design (CAD) to these disciplines. In addition, the square footage for each program is far below the state standard. For example, Electrical is 3,008 square feet where the state standard is 3500 sq.feet. The lack of space for this program would preclude the addition of any new electrical curriculum such as: Telecommunications-FiberOptics or photovoltaic installation, for example. The Plumbing and HVAC spaces are smaller than Electrical. The spaces are inferior for training in these high demand fields that fuel our economy.
8. The academic third floor of our building was designed with the open concept as well and the space was subsequently partitioned into separate classes. Virtually every regular and special needs classroom falls below the state standard of 750 square feet. These small learning spaces make it difficult for teachers to circulate around the room and for students to collaborate. Two of our four undersized Science rooms are mere classrooms with limited plumbing and utilities which makes laboratory experiments and student collaboration impossible.
9. Our school lacks the appropriate amount of office and meeting space to provide confidentiality and privacy for IEP, counseling and other sensitive meetings. As well as appropriate instructional and meeting space for the guidance department.
10. The school was built with a "cafetorium" which is a cafeteria, small meeting space and stage. Each individual space is inferior. We don't possess a permanent cafeteria because it is often converted into a meeting space. We don't possess a true auditorium to offer the Arts properly. Finally, we don't have a permanent meeting space that will accommodate the entire student body.
11. The gymnasium does not provide enough space for practice during the winter season. Physical education has no separate classroom space to provide health and wellness instruction. Finally, the district has carved out space for a weight room and cardiovascular fitness but the spaces are exceedingly small. The cardiovascular fitness room, constructed by the district, took space from the men's locker room.
12. Our school does not have a track so we are unable to provide this extracurricular activity and we do not possess enough field space during the fall sports season.
13. We could offer additional secondary and post-secondary programming in dental assisting and affiliated careers but the space can only accommodate eight students at a time. This room doubles as the hands-on and classroom space for this program. They do not have a dedicated changing area or lavatory. I have included teacher comments regarding this space in question four - in an effort to demonstrate the staff feedback on our facility.
14. Our Early Childhood Education program is overcrowded. In two small spaces, the program houses three staff members, 12-20 high school students and operates a full preschool program for fifteen 3-5 year old children. A conservative estimate for the amount of people in these small spaces, one of which doubles as a theory room, is 27-30 people. The theory classroom is 384 square feet, far below the 750 sq. ft. minimum, and the preschool space is 1,024 square feet also far below the 1500 sq. foot requirement for 20 people!

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.

The district has made due with space and retrofitted other space routinely. For example,

1. We closed our Hospitality program and retrofitted the space for engineering. As stated above the space is inferior but allowed us to begin the program.
2. We built a theory room for our HVAC program because they did not have one. This room was built by the students and carved out of the space previously occupied by our building maintenance area. We also built a theory room for electrical and plumbing in this manner
3. In the construction cluster, we built two offices to try to provide additional office and meeting space. However, the Carpentry area is in significant need of a theory classroom space as their current classroom is less than 200 sq. ft. for an average of 10 students.
4. We built a renewable energy center behind our school in an attempt to provide additional programming for the construction cluster. However, the space does not currently have include bathrooms because of the costs associated with tapping into our septic system. This prevents consistent use of the space.
5. We converted our former Masonry program into our building maintenance space to alleviate over crowding in the Horticulture program (mentioned above).
6. We added a florist shop onto our greenhouse to supplement the floriculture curriculum. We removed the building maintenance equipment from this area to provide more space.
7. We took back space from an LPN program being run in our building for rent to enlarge the space for health technologies, which caused a significant loss of facility rental income for the district.
8. We have a non-profit Dental clinic operating adjacent to the Dental assisting program which allows for a hands-on clinical experience on a limited basis.
9. We changed our former Electronics program into our current Information Technologies space.
10. In our Marine program we did construct a suitable theory room but this came at the expense of shop square footage.

As it currently stands, the square footage of our building is being used to its fullest capacity. The district is financially unable to address the remaining issues within its operating budget.

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.

In preparation of this submission, we surveyed our faculty on the impediments to education that they experience due to the state of our facility. As an example, our dental assisting department responded with the following feedback on its current space;

Dental Assisting Facility Physical Plant

Here is a list of issues that was produced by my Advisory Board at our April 4, 2104 meeting.....

Cabinetry

- | *Additional cabinetry is recommended to address storage and safety concerns within the classroom. While we now have a storage closet, additional storage space is still necessary. Expensive equipment and supplies are not being stored securely. Items have "disappeared" because there are just not enough cabinets in which to lock supplies. Items such as needles, sharp instruments, and even many dental materials should only be distributed and utilized under strict supervision by an instructor.*
- | *Cabinetry should be stain resistant surfaces that can be more readily cleaned than the existing wooden cabinets.*

Operatory Area/Pre- clinical Area

- | *Ideally an "assistant's mobile cart" (ex Alabama or North Carolina style) should be purchased for each unit so that we can get rid of the plastic bins.*
- | *The goal is to add cabinets to the right of the newer chair to simulate operatory conditions.*
- | *A computer station should be integrated for charting.*
- | *There should be a dedicated sink in the operatory area.*
- | *Operatory area should be separate from the lab for infection control purposes*

Lab Area

- | *Separate work- space for lab procedures is recommended.*
- | *Currently there is inadequate space for lab procedures.*
- | *There is lots of wait time as only a limited number of students can do lab procedures without presenting a potentially dangerous situation due to over- crowding.*
- | *There are multiple CDC/Board of Registration in Dentistry) violations regarding infection control. (234 CMR: BOARD OF REGISTRATION IN DENTISTRY/CDC Guidelines for Dentistry)*
- | *The sink should have a sensor or be foot activated.*
- | *There should be more than one sink in the lab area.*
- | *There should be a dirty side and a clean side of the "sterilization area".*

Electrical Hazards

- | *There is inadequate electrical circuitry to accommodate appliances. If the autoclave is on, you cannot use any other equipment without tripping the circuit breaker.*

Ventilation

- | *There is **inadequate ventilation**, which is a safety (health) issue for students and teachers.*
- | *There are many caustic chemicals we use routinely that should be used in only a well ventilated area.*
- | *Because of respiratory safety concerns, we cannot use certain chemicals and this prevents us from teaching procedures using those chemicals. (Like custom acrylic crowns)*

Classroom

- | *Class space should be separate from clinical and lab areas.*
- | *Mandatory training for such things as CPR cannot take place due to size limitations.*

Walls

- | *Should not be textured due to infection control issues. Washable impervious surface.*

Storage closet

- | *Inadequate in size.*
- | *Advisory board deemed the storage area **unsanitary**.*
- | *Committee was appalled as to size, space, and sanitary conditions of the storage closet.*
- | *Most dental materials say "Store in a cool dry place."*
- | *Shower drain in storage closet may be harboring harmful bacteria as it emits strong septic odor.*
- | *Use of materials stored in that room on student "patients" poses a potential liability issue.*
- | *There is questionable compliance with Department of Public Health regulations.*

Bathroom and Changing Facilities

- | *The shop should have its own bathroom.*
- | *Dental assisting is the only shop in which students must leave their shop area to go to the bathroom in the main hallway. This entails writing a pass and loss of class time for the instructor and student alike.*
- | *The alternative is the Ellen Jones bathroom that is often unsanitary (this is putting it nicely).*
- | *A secure changing area./locker room is recommended*
- | *Student must change into and out of their clinical attire out in the open classroom. This presents serious privacy issues. There is a glass window on the door to the clinic that may allow outsiders (like electrical students on a ladder) to look in as the students change. Additionally there has been more than one occasion in which male staff with keys have walked into the classroom while the students are changing (even though the door was locked).*
- | *The students need and deserve a secure changing area.*
- | *Student lockers should be in the classroom.*
- | *Again, there are storage issues. Students need a place to store uniforms and shoes where they can be hung. Current student locker area is shared with the staff in the Ellen Jones Dental Center. In order for students to access uniforms and materials from their lockers, they must leave the classroom and go into the clinic.*

Laundry

- | *Laundry area is shared with Ellen Jones. The DA program should have its own laundry facility.*
- | *The Dental Assisting shop classroom is used by students in both the day and night programs. Expanding and/or improving the physical plant will not only benefit the current student population, but also allow for the program to grow.*

Plumbing

- | *Piping is old and in need of replacement.*
- | *There is inadequate drainage in the single existing sink.*

Radiology Area

- | *Radiology area is shared with Ellen Jones. There is inadequate room to share with the facility. Radiology processing equipment is in the laundry room. There are unsafe lighting issues that cause non- diagnostic radiographs (a condition called "film fog").*

Size of Facility

- | *Chapter 74 regulations require 1800 square feet of space for dental assisting program*

facilities.

- | *Our lab comes in just over 600 square feet.*

We feel that this feedback is indicative of the majority of our technical areas that have been detailed previously in this priority.

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
Robert P. Sanborn III	Paul P. Sullivan	Robert P. Sanborn III
Superintendent of Schools		
(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.