

## Combined Fairbank Community Center Facilities Questions

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### Shelter

#### **Qualitative (or quantitative) assessment of current shelter space and capabilities (Emergency Response Team)**

The current shelter operations are located in a 1958 elementary school that was converted to a Senior Center/Recreation Center.

The current overnight sleeping capacity in the gymnasium is 75 people.

The current facility can accommodate an additional 20-25 people during daytime hours using the Senior Center meeting rooms.

The accommodation for sheltering domestic pets is currently limited to only one small room adjacent to the gymnasium which is not designed for this type of function.

All shelter supplies are currently stored on a basement lower level in a damp and musty boiler-room.

This area is prone to water leaks and other mechanical failures.

Shelter volunteers have a difficult time accessing equipment in this area due to stairs.

Due to the poor storage situation, setting up shelter operations is difficult at best.

Often times needed resources must be sent to assist.

The current facility has limited backup power for lighting.

Power for medical equipment and charging is extremely limited.

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#### **Desired changes and improvements in a new shelter space (Emergency Response Team)**

Will allow for increased capacity, from 75 to 199 residents in a single location. This is 1% of the population, as recommended by the Fire Chief.

Will have complete back-up emergency power.

Having dedicated proper sized shelter storage adjacent to the shelter space will allow for rapid setup and breakdown of shelter operations.

Additional storage capacity for dry-goods and refrigeration for perishable food storage in times of emergency.

A properly sized and designed room to be utilized as a pet shelter that will also have floor drains for the required cleaning and disinfecting.

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## Challenges

### List of maintenance and other issues faced in recent years

Continuous roof repairs and maintenance. The majority of the existing roof has exceeded its useful life and presents regular issues regarding leaks and water damage.

The flat portion of the roof has worn in many areas to the point of the rubber membrane having disintegrated to very thin remaining material. This creates a widespread area of leaks, further exacerbated by any walking on the area to repair known leaks.

The roof is most susceptible to leaking when exposed to periods of wet snow and melting snow. Hard rain tends to run off, a period of wet snow allows water to infiltrate many small holes in the deteriorated worn areas causing leaks in occupied areas. Areas within finished have suffered repeated water damage.

Building heating boilers and pumps. The building heating boiler and associated pumps have experienced a fairly continuous need for repair in the last several years.

Pump failures and boiler issues have required numerous fixes and repair. The two heating boilers recently required new gas valves and burner repair. Many of the circulator pumps and motors have been out of service for a period as they or associated backup pumps have been repaired.

Pool water heating boilers. The two pool boilers that serve the lap pool and dive well have been a source of continuous and costly repair and maintenance. The associated pool filter room systems and equipment also require regular repair.

The rooftop system that controls air within the pool itself has required several costly repairs.

The existing energy management system is limited in its ability to control temperatures in the building. A more updated and comprehensive system would provide finer control, affecting occupant comfort and providing greater ability to affect energy consumption.

Inefficient operation and frequent repair of these systems contribute to increased energy consumption.

The fire alarm system horn/strobes have been replaced to ensure proper coverage in the building. Replacement parts for much of the older equipment is difficult and expensive to obtain.

Plumbing system. The existing plumbing is original to the buildings and is a source of continued repair. Shower valves, faucets, water bubblers and toilets require even more repair as they age.

Pipes have failed due to age and many shutoffs and valves have failed as well. This further complicates repairs and often require a full shutdown of water in the building to remove and replace these valves.

Locker rooms. The existing locker rooms are well worn and original to the 1987 pool addition. They serve men and women but do not provide family changing areas. Accessibility is limited. Plumbing failures have been frequent and many repairs require shutting off water to a large portion of the building. Tile finishes are worn off the surface of many areas completely making cleaning and maintenance difficult. Tile in the pool, bathrooms, shower and locker areas begun to fail in many areas and become loose.

Ventilation within the locker rooms needs to be improved.

Bathrooms are original to the 1958 school and the 1989 Senior Center addition. Plumbing repairs and issues are frequent and often require a large portion of the buildings water supply be shut down for repair.

Many of the interior and exterior finishes are very worn and in need of replacement. Carpets, ceramic tile, vinyl tile, walls and ceilings are quite old or original and have outlived their useful lives.

Windows are single glazed and are prone to leaks and cold transmission.

The generator is 30 years old and undersized for the facility. It carries only the building heating and fire alarm systems and a minimal amount of lighting and power.

The parking areas and pedestrian walkways are very worn and in need of replacement. Drainage, heaving and settling issues are compounded in winter.

The building has no loading area to receive pool and building operational supplies and materials.

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**General Questions about user group contributions for Sudbury Public Schools (SPS) Administration toward Fairbank Center operation and upkeep.**

**Is there any contribution for the use of the Fairbank building (maintenance, insurance, utilities, security, plowing, or other ongoing costs) and, if so, how much?**

Sudbury Public Schools pays \$12,000 per year for outsourced janitorial service within the school wing.

Costs for furniture fixtures and equipment and IT infrastructure as well as associated work are paid by SPS.

Snow plowing of all Town property is performed by or contracted through DPW and is contained within the Town snow removal budget. All Town building sidewalks are cleared by Town Facilities.

Insurance is paid through the Town's overall insurance cost.

Security and utilities costs associated with the SPS wing are paid through Town Facilities.

The majority of building maintenance within the Sudbury Public Schools wing is paid through Town Facilities.

SPS contributes 50% of the salaries of the Facilities Director and the Facilities Administrative Assistant and 66% of the Town-wide electrician, all of which contribute to the operation and upkeep of the Fairbank building.

**Assuming the cost of maintaining the building breaks down proportionally, what fraction of the Fairbank is occupied by SPS Administration for (a) the current and (b) the proposed facility?**

The existing building is 40908 sq. ft. Sudbury Public Schools currently occupies 6639 sq. ft.,  
or 16.23%

The proposed facility would be 42575 sq. ft. Sudbury Public Schools would occupy 7713 sq. ft.,  
or 18.11%.

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**Please estimate the annual operational cost savings (energy savings, *net of increase* in projected cost of insurance, janitorial services, security, plowing and other costs) of the proposed facility.**

The most recent 12 months expenses for electricity, gas and water utilities total 99.2K.  
The proposed facility could reduce the current expenses by as much as 40 - 50%.  
This is an estimate based on the proposed facility and current information.

Snow plowing of all Town property is performed by or contracted through DPW and is contained within the Town snow removal budget. All Town building sidewalks are cleared by Town Facilities staff.

Outsourced janitorial costs for the Fairbank building are \$12,000 per year for the SPS wing paid for by SPS, and \$35,124 for the remainder of the building paid by Town Facilities.  
The existing building is 40908 sq. ft., the proposed facility would be 42575 sq. ft.  
Any cost increase due to size would most likely be offset by improved conditions.

**Please include, if possible, estimated savings from not having the boiler fail, not doing leak cleanup, and not coping with other problems with the building.**

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**Concerning the Town Emergency Shelter facility:**

**How many people can currently be accommodated?**

The current overnight sleeping capacity is 75 people in the gymnasium.

The current facility can accommodate approximately 20-25 additional people during daytime hours with use of the meeting rooms located in the Senior Center.

The accommodation for sheltering domestic pets at the current facility is limited to only one small interior room adjacent to the gymnasium. That room is not designed for sheltering pets.

**How many people can be accommodated in the proposed facility?**

The new shelter facility would have the capacity to sleep 199 people total - 124 people in the gymnasium plus 75 in the multipurpose room.

This would equal 1% of our population as recommended by the Fire Chief.

**Specific improvements for the emergency shelter (e.g., pet accommodations) which would improve the safety or usefulness of the proposed facility as a shelter.**

Currently all shelter supplies are stored in a damp, musty basement boiler-room and not readily or easily accessible.

This space is improper for storage of items that need to be accessed and used by the public during emergencies.

Access to the shelter storage area is difficult for many of our CERT/MRC shelter operation volunteers as there are difficult stairs to access the area and supplies.

The ability to open the shelter is hampered by the lack of access to shelter supplies, currently needed resources would need to be diverted to help assist to setup shelter operations.

Shelter storage needs to be adjacent to the shelter area for fast efficient setup in times of emergency. The new facility would have the ability to use the dedicated art space for use as a pet shelter and would be equipped with floor drains.

This would provide a suitable area that also allows for the required cleaning and disinfecting.

Access to an exterior door would be close by for pet walking and pet drop off and pickup.

**Do we know of *other towns where these features are available?***

The Town of Stow's shelter supplies are stored in dedicated space on site in the Community Center, their shelter location, and in a mobile trailer.

The Town of Concord's shelter supplies are stored in dedicated space on site in the Community Center, their shelter location, and in a mobile trailer.

The Town of Wayland's shelter supplies are stored in mobile trailer.

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**With respect to this \$28M plan, two things I'm very interested in getting:**

**Idea of what current annual utilities bills are, and how much lower the annual utilities bills would be with this new green construction.**

**Is it \$15K/yr. savings? or \$100K/yr. savings? I have no idea.**

The most recent 12 months expenses for electricity, gas and water utilities total 99.2K.

The proposed facility could reduce the current expenses by as much as 40 - 50%.

This is an estimate based on the proposed facility and current information.

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**A not-to-exceed \$15M option (another way Icon said project could be approached).**

**Cost estimate of a 10,000sqft new structure next to Atkinson pool for dedicated Senior space and a multipurpose room.**

**\$515/sq. ft. x 10,000sqft + 30% multiplier for soft costs = \$6,695,000? (using Icon assumptions).**

Yes, that cost is applicable but you would need to add an escalator and it should be considered in context.

With this approach the Mass Architectural Access Board, Building, Plumbing, Electrical and Energy Codes, Fire Protection requirements and abatement will be the main drivers.

That would leave a repair, but with very selective renovation. The vast majority of the existing building would get only updated finishes.

This will trigger additional code requirements. It is almost guarantee that the plumbing code will require additional toilet fixtures. MAAB will require reconfiguring the existing toilet rooms.

In turn, this will reduce the amount of space to host programs.

This option would result in a couple of very focused spatial changes, with a very tight budget for repair and selective renovation.

Would require a very wide contingency for design and construction. Budget limitations may affect existing deferred maintenance issues needing to be addressed.

This option adopts a very high level of uncertainty regarding the final product.

This option would not address structural issues within the existing elementary school wing.

This also does not include costs of phasing and displacement of programs which will need to be funded.

It will be a project that will bring the building up to code, but it may not be enough to address all building issue and meet all end-user needs.

A renovation option presents a high number of unknowns and can be considered open ended regarding the required scope of work, and hence funding.

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**A breakdown of what went into \$6M cost estimate former Town Manager Melissa Rodrigues provided on this slide Feb 27, 2019 to update existing Fairbanks, (she stated it would include new locker rooms.)**

*Fairbank Building Repair Assessment - 2/25/19*

*As context, it must be kept in mind that the 1958 portion of the building has significant inherent roof and wall load limitations. This, along with age and water infiltration issues make any repair and renovation of this portion problematic and difficult to estimate. Any item below that affects walls and roof within that area has a significant impact on that loading, and hence cost.*

*Architectural and Engineering - \$520,000*

*This represents architectural and engineering investigatory work, scope and design development, any construction administration and commissioning costs associated with project design and construction.*

*Site - \$220,00*

*Parking lots and associated walkways need repair and regrading. This would also include drainage.*

*Accessibility - \$75,000*

*Many existing interior doors, bathrooms, locker rooms and some passages within the existing building need to be modified to meet ADA standards. It is unknown if pool accessibility needs will need to be addressed as well.*

### *Building Envelope - \$2,000,000*

*Much of the roof is deficient as related to load. Portions are designed to the 1958 minimum snow load. Any roofing will require extensive and costly retrofit and upgrading. This includes walls and roof structure. The scope of repair and renovation will trigger new code requirements.*

*Masonry walls are of minimal construction and some need complete repair or replacement. It was previously recommended that the exterior insulation finishing system be replaced. Wall work will affect structural considerations as mentioned above.*

*Approximately 20K square feet are in immediate need of replacement. Most remaining areas are compromised in one way or another and require extensive repair. Moisture damaged roof decking will need to be replaced. Roofing work will affect structural considerations as mentioned above.*

*Most windows and doors are in poor condition and lack proper thermal properties. This is the cause of a considerable amount of heat loss and condensation which have led to moisture issues. All but the pool and Senior Center windows should be replaced.*

*Insulation is minimal or nonexistent in original areas of the building. Any roof work will require additional insulation, for thermal value and to provide pitch for draining using tapered rigid insulation. The scope of repair and renovation will trigger new code requirements.*

*Given these issues serious consideration should be given to demolition of the school wing in its entirety.*

### *Mechanical Electrical Plumbing - \$1,350,000*

*Plumbing work needed includes replacement of original gate valves and deteriorating pipes. Many of these valves do not operate properly and some original fittings are beginning to fail. Plumbing fixtures need to be relocated or replaced to meet current codes.*

*The electrical system within most of the building is original and much needs to be reconfigured. The electrical switch gear needs to be separated from the boiler room with a concrete block wall and fire door. Several smaller electrical panels need to be replaced.*

*The HVAC energy management system needs to be upgraded to provide the intended control for energy conservation, occupant comfort and reliability.*

*The entire fire alarm system needs to be replaced with a fully addressable type system with voice evacuation capability.*

*The pool is the only sprinklered area within the building. If the sprinkler system is not extended fire doors, walls and proper fire separation will need to be upgraded. Structural issues as mentioned may make installation of a full sprinkler system the best option. That may require a larger water service. Sprinkler work will affect structural considerations as mentioned above.*

*The generator load needs to be divided into normal and emergency loads.*

*IT infrastructure within the building should be upgraded as repairs are undertaken.*

### *Pools and Locker Rooms - \$555,000*

*The pools gutter skimmer system needs to be addressed as many large heavy tile panels are uneven creating a safety issue. The pool deck tile needs a fair amount of repair as well.*

*The pool heaters have been a source of continued maintenance and service and some repair is needed.*

*The pool filters are nearing the end of their useful life. Newer more effective filters should be installed.*

*The locker rooms lack family changing areas and modern shower facilities and locker storage.*

*Gym \$75,000*

*Remove stage to create storage and add safety pads along perimeter. The floor should be fully sanded and refinished.*

*Interior Finishes -\$325,000*

*Wall finishes are all in need of paint. Many floor finishes are worn and should be replaced with newer more appropriate finishes.*

*Kitchen -\$85,000*

*The kitchen equipment needs to be reconfigured to meet current use. Storage areas should be created within the space with reconfiguration.*

*Shelter Space Provisions -\$20,000*

*Emergency power needs to be extended to areas that serve as shelter space. Some point of use storage should be included.*

*Contingencies - \$550,000*

*The total for above is \$5,225,000*

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**In addition, we have the following questions about the pool:**

**When was the Atkinson Pool constructed?**

1987

**What is at is the generally accepted useful life the Atkinson pool, as designed/constructed?**

Per industry standards the life expectancy of pool concrete shells is expected to be over 40 years.

Per industry standards the life expectancy of swimming pool tile is expected to be 15-20 years.

Per industry standards the pool filtration and chemical systems are expected to last 15 years.

These estimated useful lifespans assume proper and timely maintenance and repair over the life of the pool.

**Without major repairs, when should the Town plan on replacing the Atkinson Pool?**

**What level of repairs (cost estimate) is necessary to extend the useful life of the Atkinson Pool to 20 years from now (2040)?**